RESERVE BANK OF INDIA

ANNUAL REPORT

2021-22

Report of the Central Board of Directors on the working of the Reserve Bank of India for the year ended March 31, 2022 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 2021-22

आज़ादी का अमृत महोत्सव

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

Azadi Ka Amrit Mahotsav

गवर्नर
GOVERNOR

LETTER OF TRANSMITTAL

Ref.No.SECD.BRDS.209/02.16.001/2022-23

May 26, 2022
Jyeshtha 5, 1944 (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 March 31, 2022 certified by the Bank's Auditors and signed by the Chief General Manager, 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 March 31, 2022.

Sincerely,

Shaktikanta Das

केन्द्रीय कार्यालय भवन, शहीद भगतसिंह मार्ग, मुम्बई - 400 001, भारत
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हिंदी आसान है, इसका प्रयोग बढ़ाइए

CENTRAL BOARD / LOCAL BOARDS

GOVERNOR

Shaktikanta Das

DEPUTY GOVERNORS

Mahesh Kumar Jain

Michael Debabrata Patra

M. Rajeshwar Rao

T. Rabi Sankar

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

Revathy Iyer

Sachin Chaturvedi

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

Satish Kashinath Marathe

Swaminathan Gurumurthy

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

Ajay Seth

Sanjay Malhotra

MEMBERS OF LOCAL BOARDS

WESTERN AREA

EASTERN AREA

Sachin Chaturvedi

NORTHERN AREA

Revathy Iyer

Raghvendra Narayan Dubey

SOUTHERN AREA

(Position as on May 24, 2022)

PRINCIPAL OFFICERS

(As on May 24, 2022)

EXECUTIVE DIRECTORS	Anil K. Sharma
	S. C. Murmu
	O. P. Mall
	Saurav Sinha
	Vivek Deep
	Jayant Kumar Dash
	R. Subramanian
	Rohit Jain
	R. S. Ratho
	Jose J. Kattoor
	Ajay Kumar
	Ajay K. Choudhary
	Deepak Kumar
	Rajiv Ranjan
	Sitikantha Pattanaik
	Sudha Balakrishnan (Chief Financial Officer)
CENTRAL OFFICE	
Central Vigilance Cell	Sadhana Varma, Chief General Manager & CVO
Consumer Education and Protection Department	Anupam Sonal, Chief General Manager
Corporate Strategy and Budget Department	Rajani Prasad, Chief General Manager
Department of Regulation	R. Lakshmi Kanth Rao, Chief General Manager-in-Charge
Department of Supervision	A. K. Chowdhury, Chief General Manager-in-Charge
Department of Communication	Yogesh K. Dayal, Chief General Manager
Department of Currency Management	Suman Ray, Chief General Manager-in-Charge
Department of Economic and Policy Research	D. P. Rath, Officer-in-Charge
Department of External Investments and Operations	Aditya Gaiha, Chief General Manager-in-Charge
Department of Government and Bank Accounts	Charulatha S. Kar, Chief General Manager-in-Charge
Department of Information Technology	Arun Kumar Singh, Chief General Manager
Department of Payment and Settlement Systems	P. Vasudevan, Chief General Manager
Department of Statistics and Information Management	A. R. Joshi, Principal Adviser
Enforcement Department	H. N. Iyer, Chief General Manager-in-Charge
Financial Inclusion and Development Department	Sonali Sengupta, Chief General Manager-in-Charge
Financial Markets Operations Department	Seshsayee G., Chief General Manager
Financial Markets Regulation Department	Dimple Bhandia, Chief General Manager
FinTech Department	Suvendu Pati, Chief General Manager
Foreign Exchange Department	Ajay Kumar Misra, Chief General Manager-in-Charge
Financial Stability Unit	Kaya Tripathi, Chief General Manager
Human Resource Management Department	Subrata Das, Chief General Manager-in-Charge
Inspection Department	G. P. Borah, Chief General Manager
Internal Debt Management Department	Rakesh Tripathy, Chief General Manager
International Department	Mohua Roy, Adviser-in-Charge
Legal Department	A. Unnikrishnan, Legal Adviser-in-Charge
Monetary Policy Department	Muneesh Kapur, Adviser-in-Charge
Premises Department	Mala Sinha, Chief General Manager
Rajbhasha Department	Sadhana Varma, Chief General Manager
Risk Monitoring Department	Manoranjan Dash, Chief General Manager
Secretary's Department	Aviral Jain, Chief General Manager-in-Charge & Secretary
COLLEGES	**PRINCIPALS**
College of Agricultural Banking, Pune	V. G. Sekar
Reserve Bank Staff College, Chennai	K. Babuji
OFFICES	**REGIONAL DIRECTORS**
Chennai	S. M. Narasimha Swamy
Kolkata	R. Kesavan
Mumbai	Ajay Michyari
New Delhi	Vivek Aggarwal
BRANCHES	
Ahmedabad	Rajesh Kumar
Bengaluru	R. Gurumurthy
Bhopal	Neeraj Nigam
Bhubaneswar	H. N. Panda
Chandigarh	M. K. Mall
Dehradun	Latha Vishwanath
Guwahati	Sanjeev Singha
Hyderabad	K. Nikhila
Jaipur	Rohit P. Das
Jammu	K. P. Patnaik
Kanpur	Ishan Shukla
Lucknow	Balu Kenchappa
Nagpur	Sangeeta Lalwani
Panaji	Smita Chandramani
Patna	Sanjiv Dayal
Raipur	Reeny Ajith
Shimla	R. S. Amar
Thiruvananthapuram	Thomas Mathew
	OFFICERS-IN-CHARGE
Agartala	Satwant Singh Sahota, General Manager (O-i-C)
Aizawl	P. Shimrah, General Manager (O-i-C)
Belapur	Jaikish, Chief General Manager
Gangtok	Kishore Pariyar, General Manager (O-i-C)
Imphal	Mary Lawm Ngaih Ching Gwite, General Manager (O-i-C)
Kochi	V. K. Nayak, General Manager, (O-i-C)
Ranchi	Sanjiv Sinha, General Manager (O-i-C)
Shillong	Paoboi Gangte, General Manager (O-i-C)
Srinagar	Ruchir Sonkar, Assistant General Manager

CONTENTS

CONTENTS

CONTENTS

CONTENTS

Page No.

BOXES

CONTENTS

Page No.

APPENDIX TABLES

The accounting year for the Reserve Bank was changed to April-March (earlier July-June) from the financial year 2020-21 onwards.

SELECT ABBREVIATIONS

AAC	-	Academic Advisory Council
AACS	-	As Applicable to Cooperative Societies
ACU	-	Asian Clearing Union
AD	-	Authorised Dealer
ADF	-	Asset Development Fund
ADs	-	Aggregate Deposits
AD Cat-I	-	Authorised Dealer Category-I
ADSCR	-	Average Debt Service Coverage Ratio
AEs	-	Advanced Economies
AePS	-	Aadhaar Enabled Payment System
AI	-	Artificial Intelligence
AID	-	All-Inclusive Directions
AIDC	-	Agriculture Infrastructure and Development Cess
AIFs	-	Alternative Investment Funds
AIFIs	-	All India Financial Institutions
AML	-	Anti-Money Laundering
ANBC	-	Adjusted Net Bank Credit
AP	-	Authorised Person
APBS	-	Aadhaar Payment Bridge System
API	-	Application Programming Interface
APLMA	-	Asia Pacific Loan Markets Association
ARCs	-	Asset Reconstruction Companies
AREAER	-	Annual Report on Exchange Arrangements and Exchange Restrictions
ARMS	-	Audit and Risk Management Sub-Committee
ARR	-	Alternative Reference Rate
ASEAN	-	Association of Southeast Asian Nations
ASISO	-	Automated Sweep-In and Sweep-Out
ASM	-	Asia Small and Medium-Sized Enterprise Monitor
ATBs	-	Auction Treasury Bills
ATM	-	Automated Teller Machines
AUM	-	Assets Under Management
BBPOUs	-	Bharat Bill Payment Operating Units
BBPS	-	Bharat Bill Payment System
BCs	-	Business Correspondents
BCBS	-	Basel Committee of Banking Supervision
BC-ICT	-	Business Correspondents - Information and Communication Technology
BCM	-	Business Continuity Management
BCP	-	Business Continuity Plan
BD	-	Banking Department
BE	-	Budget Estimates
BFS	-	Board for Financial Supervision
BFSI	-	Banking, Financial Services and Insurance
BIS	-	Bank for International Settlements
BoJ	-	Bank of Japan
bps	-	Basis Points
BPSS	-	Board for Regulation and Supervision of Payment and Settlement Systems
BQR	-	Bharat Quick Response
BRBNMPL	-	Bharatiya Reserve Bank Note Mudran Private Limited
BRICS	-	Brazil, Russia, India, China and South Africa
B-SC	-	Building Sub-Committee
BTFP	-	BRICS Task Force on Payments
BUs	-	Business Units
CA	-	Concurrent Audit
CAFRAL	-	Centre for Advanced Financial Research and Learning
CAGR	-	Compound Annual Growth Rate
CBDC	-	Central Bank Digital Currency
CBDT	-	Central Board of Direct Taxes
CBIC	-	Central Board of Indirect Taxes and Customs
CC	-	Cash Credit
CCB	-	Committee of the Central Board

SELECT ABBREVIATIONS

CCBs	-	Central Cooperative Banks
CCIL	-	Clearing Corporation of India Limited
CCO	-	Chief Compliance Officer
CCP	-	Central Counterparty
CDES	-	Currency Distribution and Exchange Scheme
CDs	-	Certificates of Deposit
CDS	-	Credit Default Swaps
CEOBE	-	Credit Equivalent of Off-Balance Sheet Exposure
CEPCs	-	Consumer Education and Protection Cells
CEPD	-	Consumer Education and Protection Department
CF	-	Contingency Fund
CFLs	-	Centres for Financial Literacy
CFR	-	Central Fraud Registry
CFSL	-	Centrum Financial Services Limited
CGA	-	Controller General of Accounts
CGD	-	Comprehensive Guidelines on Derivatives
CGFS	-	Committee on the Global Financial System
CGRA	-	Currency and Gold Revaluation Account
CICs	-	Credit Information Companies
CiC	-	Currency in Circulation
CIMS	-	Centralised Information Management System
CIRP	-	Corporate Insolvency Resolution Process
CIT	-	Cash in Transit
CLS	-	Continuous Linked Settlement
CMBs	-	Cash Management Bills
CMGs	-	Crisis Management Groups
CMIE	-	Centre for Monitoring Indian Economy
CMS	-	Complaint Management System
CMT	-	Crisis Management Team
CO	-	Central Office
CoC	-	Committee of Creditors
CODs	-	Central Office Departments
CoFT	-	Card-on-File Tokenisation
ConPI	-	Customer Protection Index
CoS	-	College of Supervisors
CP	-	Consumer Pyramid
CPFIR	-	Central Payments Fraud Information Registry
CPI	-	Consumer Price Index
CPI-AL	-	CPI for Agricultural Labourers
CPI-IW	-	CPI for Industrial Workers
CPI-RL	-	CPI for Rural Labourers
CPMI-IOSCO	-	Committee on Payments and Market Infrastructures-International Organisation of Securities Commissions
CPs	-	Commercial Papers
CPS	-	Centralised Payment System
CPWD	-	Central Public Works Department
CP-NBFCs	-	Commercial Paper Issuances by Non-Banking Financial Companies
CRILC	-	Central Repository of Information on Large Credits
CRM	-	Credit Risk Mitigation
CRPC	-	Centralised Receipt and Processing Centre
CRR	-	Cash Reserve Ratio
CSAA	-	Control Self-Assessment Audit
CSBD	-	Corporate Strategy and Budget Department
CSF	-	Consolidated Sinking Fund
CSGL	-	Centralised Subsidiary General Ledger
CSII	-	Colour Shift Intaglio Ink
CwP	-	Currency with the Public
DAP	-	Di Ammonium Phosphate
DBIE	-	Database on Indian Economy

SELECT ABBREVIATIONS

DBT	-	Direct Benefit Transfer
DCCBs	-	District Central Cooperative Banks
DDs	-	Demand Drafts
DEA	-	Depositor Education and Awareness
DEIO	-	Department of External Investments and Operations
DEPR	-	Department of Economic and Policy Research
DGBA	-	Department of Government and Bank Accounts
DHFL	-	Dewan Housing Finance Ltd.
DICGC	-	Deposit Insurance and Credit Guarantee Corporation
DIF	-	Deposit Insurance Fund
DIT	-	Department of Information Technology
DMS	-	Document Management Software
DoC	-	Department of Communication
DoR	-	Department of Regulation
DoS	-	Department of Supervision
DoT	-	Department of Telecommunications
DPI	-	Digital Payments Index
DPSS	-	Department of Payment and Settlement Systems
DR	-	Disaster Recovery
DSCR	-	Debt Service Coverage Ratio
DSIM	-	Department of Statistics and Information Management
e-BAAT	-	Electronic Banking Awareness and Training
EBITDA	-	Earnings Before Interest, Taxes, Depreciation and Amortisation
EBR	-	Element-Based Repository
ECB	-	External Commercial Borrowings
ECCS	-	Express Cheque Clearing System
ECLGS	-	Emergency Credit Line Guarantee Scheme
ECS	-	Electronic Clearing Service
EDC	-	Executive Directors' Committee
EDSP	-	Electronic Data Submission Portal
EFD	-	Enforcement Department
EFI	-	External Funded Institutions
EIAD	-	Employee Interface and Analytics Division
EMDEs	-	Emerging Market and Developing Economies
EMEs	-	Emerging Market Economies
eNWRs	-	Electronic Negotiable Warehouse Receipts
EoI	-	Expression of Interest
EPFO	-	Employees' Provident Fund Organisation
ERM	-	Enterprise-wide Risk Management
ESIC	-	Employees' State Insurance Corporation
ETCD	-	Exchange Traded Currency Derivatives
ETR	-	Effective Corporate Tax Rate
EWI	-	Early Warning Indicator
EWS	-	Early Warning Signals
EXIM	-	Export Import Bank of India
FAQs	-	Frequently Asked Questions
FAR	-	Fully Accessible Route
FASAL	-	Forecasting Agricultural Output using Space, Agro-Meteorology and Land-based Observations
FATF	-	Financial Action Task Force
FBIL	-	Financial Benchmark India Pvt. Ltd
FCA	-	Foreign Currency Asset
FCBD	-	Finance and Central Bank Deputies
FCBs	-	Foreign Central Bank
FCNR(B)	-	Foreign Currency Non-Resident Account (Bank)
FCS-OIS	-	Foreign Currency Settled Overnight Indexed Swap
FCVA	-	Foreign Exchange Forward Contracts Valuation Account

SELECT ABBREVIATIONS

FC-XV - 15th Finance Commission
FCY ECB - Foreign Currency External Commercial Borrowings
FDI - Foreign Direct Investment
FE - Final Estimate
FED - Foreign Exchange Department
FEMA - Foreign Exchange Management Act
FFMCs - Full-Fledged Money Changers
FER - Foreign Exchange Reserves
FETERS - Foreign Exchange Transactions Electronic Reporting System
FIs - Financial Institutions
FICNs - Fake Indian Currency Notes
FIDD - Financial Inclusion and Development Department
FIF - Financial Inclusion Fund
FI-Index - Financial Inclusion Index
FinTech - Financial Technology
FIPs - Financial Inclusion Plans
FLA - Foreign Liabilities and Assets
FLCs - Financial Literacy Centres
FLW - Financial Literacy Week
FMCBG - Finance Ministers and Central Bank Governors
FMCG - Fast Moving Consumer Goods
FMOD - Financial Markets Operations Department
FMRD - Financial Markets Regulation Department
FPI - Foreign Portfolio Investment
FPOs - Follow-on Public Offers
FRB - Floating Rate Bonds
FRSB - Floating Rate Savings Bonds
FSB - Financial Stability Board
FSDC - Financial Stability and Development Council
FSDC-SC - Financial Stability and Development Council - Sub-Committee
FSR - Financial Stability Report
FSU - Financial Stability Unit
G-20 - Group of Twenty
GC - Governing Council
GCCs - General Credit Cards
GCF - Gross Capital Formation
GDAL - Granular Data Access Lab
GDP - Gross Domestic Product
GFC - Global Financial Crisis
GFCF - Gross Fixed Capital Formation
GFD - Gross Fiscal Deficit
GFSN - Global Financial Safety Net
GML - Gold (Metal) Loans
GMS - Gold Monetisation Scheme
GNDI - Gross National Disposable Income
GNPA - Gross Non-Performing Asset
GoI - Government of India
GRF - Guarantee Redemption Fund
GRIHA - Green Rating for Integrated Habitat Assessment
GRQ - General Review of Quotas
G-SAP - G-sec Acquisition Programme
GSCDCI - Global Supply Chain Disruption Cost Index
GSDP - Gross State Domestic Product
G-sec - Government Securities
GSLBM - Government Security Lending and Borrowing Mechanism
GST - Goods and Services Taxes
GUARD - Governance Oversight, Utile Technology Investment, Appropriate Regulation and Supervision, Robust Collaboration, and Developing necessary IT, cyber security skills set
GVA - Gross Value Added
GVCs - Global Value Chains

SELECT ABBREVIATIONS

HFCs	-	Housing Finance Companies
HO	-	Head Office
HRMD	-	Human Resource Management Department
HRM-SC	-	Human Resource Management Sub-Committee
IADI	-	International Association of Deposit Insurers
IAMs	-	Integrated Assessment Models
IBA	-	Indian Banks' Association
IBS	-	International Banking Statistics
ICAI	-	Institute of Chartered Accountants of India
ICAR	-	Indian Council of Agricultural Research
ICEGATE	-	Indian Customs Electronic Gateway
ICT	-	Information and Communication Technology
ID	-	International Department
IDMD	-	Internal Debt Management Department
IEO	-	Independent Evaluation Office
IESH	-	Inflation Expectation Survey of Households
IFA	-	International Financial Architecture
IFA WG	-	International Financial Architecture Working Group
IFSC	-	Indian Financial System Code
IFSCs	-	International Financial Services Centres
IFTAS	-	Indian Financial Technologies and Allied Services
IGBC	-	Indian Green Building Council
IGIDR	-	Indira Gandhi Institute of Development Research
IIASA	-	International Institute for Applied Systems Analysis
IIBM	-	Indian Institute of Bank Management
IIFC	-	India Infrastructure Finance Company
IIP	-	Index of Industrial Production
IMF	-	International Monetary Fund
IMFC	-	International Monetary and Financial Committee
IMPS	-	Immediate Payment Service
Ind-AS	-	Indian Accounting Standards
InvITS	-	Infrastructure Investment Trusts
IO	-	Internal Ombudsman
IOS	-	Industrial Outlook Survey
IoT	-	Internet of Things
IPL	-	Indian Premier League
IPO	-	Initial Public Offering
IPP	-	Intellectual Property Products
IRA	-	Investment Revaluation Accounts
IRACP	-	Income Recognition, Asset Classification and Provisioning
IRA-FS	-	Investment Revaluation Account-Foreign Securities
IRA-RS	-	Investment Revaluation Account-Rupee Securities
IRD	-	Interest Rate Derivatives
IRIS	-	Integrated Risk Monitoring and Incident Reporting System
IRRS	-	Integrated Rajbhasha Reporting System
ISDA	-	International Swaps and Derivatives Association
IT	-	Information Technology
ITES	-	Information Technology-Enabled Services
IT-SC	-	Information Technology Sub-Committee
ITBs	-	Intermediate Treasury Bills
IVR	-	Inter-active Voice Response
IWG	-	Infrastructure Working Group
IWG	-	Internal Working Group

SELECT ABBREVIATIONS

JTCC	-	Joint Technical Coordination Committee
KBC	-	Kaun Banega Crorepati
KLEMS	-	Capital(K), Labour(L), Energy(E), Material(M) and Services(S)
KCC	-	Kisan Credit Card
KPI	-	Key Performance Indicators
KRIs	-	Key Risk Indicators
kWp	-	Kilowatts Peak
KYC	-	Know Your Customer
LAB	-	Local Area Banks
LAF	-	Liquidity Adjustment Facility
LAI	-	Leaf Area Index
LBMA	-	London Bullion Market Association
LEF	-	Large Exposure Framework
LEI	-	Legal Entity Identifier
LEIL	-	Legal Entity Identifier India Ltd.
LEs	-	Legal Entities
LIBOR	-	London Inter-Bank Offered Rate
LMS	-	Learning Management System
LPA	-	Long Period Average
LPG	-	Liquefied Petroleum Gas
LRS	-	Liberalised Remittance Scheme
M_3	-	Money Supply
MAF	-	Medical Assistance Fund
MANI	-	Mobile Aided Note Identifier
MAS	-	Monetary Authority of Singapore
MA-SAAR	-	Moving Average of Seasonally Adjusted Annualised Growth Rate
MCLR	-	Marginal Cost of Funds-based Lending Rate
MD	-	Managing Director
MEM	-	Marginal Effect at Means
MFIs	-	Microfinance Institutions
MI	-	Market Intelligence
MIFOR	-	Mumbai Interbank Forward Outright Rate
MIS	-	Management Information System
ML	-	Machine Learning
MLTGD	-	Medium- and Long-Term Government Deposit
MoE	-	Memorandum of Error
MoF	-	Ministry of Finance
MoSPI	-	Ministry of Statistics and Programme Implementation
MoU	-	Memorandum of Understanding
MPC	-	Monetary Policy Committee
MPOR	-	Margin Period of Risk
MSEs	-	Micro and Small Enterprises
MSF	-	Marginal Standing Facility
MSPs	-	Minimum Support Prices
MTDS	-	Medium-Term Debt Management Strategy
MTF	-	Medium Term Framework
MTSS	-	Money Transfer Service Schemes
NABARD	-	National Bank for Agriculture and Rural Development
NACH	-	National Automated Clearing House
NAFCUB	-	National Federation of Urban Cooperative Banks and Credit Societies Ltd.
NARCL	-	National Asset Reconstruction Company
NBFC	-	Non-Banking Financial Company
NBFC-D	-	Deposit taking NBFCs
NBFC-MFIs	-	Non-Banking Financial Company-Microfinance Institutions
NBFC-ND	-	Non-Deposit taking NBFCs
NBFI	-	Non-Banking Financial Institutions
NCCDs	-	Non-Centrally Cleared Derivatives
NCDs	-	Non-Convertible Debentures
NCFE	-	National Centre for Financial Education
NCLT	-	National Company Law Tribunal
NDA	-	Net Domestic Assets

SELECT ABBREVIATIONS

NDCs	-	Nationally Determined Contributions
NDF	-	Non-Deliverable Forward
NDI	-	Non-Debt Instrument
NDTL	-	Net Demand and Time Liabilities
NDS-OM	-	Negotiated Dealing System-Order Matching
NDVI	-	Normalised Difference Vegetation Index
NEER	-	Nominal Effective Exchange Rate
NEFT	-	National Electronic Funds Transfer
NEM	-	North-east Monsoon
NeTC	-	National Electronic Toll Collection
NETS	-	Network for Electronic Transfers
NFA	-	Net Foreign Assets
NFC	-	Non-Food Credit
NFC	-	Near Field Communication
NFS	-	National Financial Switch
NFSA	-	National Food Security Act
NGFS	-	Network for Greening of the Financial System
NHB	-	National Housing Bank
NIBM	-	National Institute of Bank Management
NIM	-	Net Interest Margin
NIPL	-	NPCI International Private Limited
NOF	-	Net Owned Funds
NPA	-	Note Purchase Agreement
NPA	-	Non-Performing Assets
NPCI	-	National Payments Corporation of India
NPS	-	National Pension Scheme
NSFE	-	National Strategy for Financial Education
NSFI	-	National Strategy for Financial Inclusion
NSSF	-	National Small Savings Fund
NSO	-	National Statistical Office
NWRs	-	Negotiable Warehouse Receipts
OBC	-	Other Backward Classes
OBICUS	-	Order Books, Inventories and Capacity Utilisation Survey
OD	-	Overdraft
ODI	-	Overseas Direct Investment
OECD	-	Organisation for Economic Co-operation and Development
OFC	-	Optical Fibre Cable
OLIC	-	Official Language Implementation Committee
OLS	-	Ordinary Least Squares
OMBs	-	Open Market Borrowings
OMOs	-	Open Market Operations
OPEC	-	Organisation of Petroleum Exporting Countries
OPEC+	-	Organisation of Petroleum Exporting Countries and allies
ORBIOs	-	Offices of the Reserve Bank of India Ombudsmen
OT	-	Operation Twist
OTC	-	Over the Counter
PA	-	Provisional Accounts
PADO	-	Public Administration, Defence and Other Services
PAT	-	Profit After Tax
PBs	-	Payments Banks
PBDIT	-	Profit Before Depreciation, Interest and Tax
PCA	-	Prompt Corrective Action
PDs	-	Primary Dealers
PDL	-	Polynomial Distributed Lag
PDS	-	Public Distribution System
PFCE	-	Private Final Consumption Expenditure
PFCVA	-	Provision for Forward Contracts Valuation Account

SELECT ABBREVIATIONS

PFMIs	-	Principles for Financial Market Infrastructure
PFMS	-	Public Financial Management System
PIDF	-	Payments Infrastructure Development Fund
PIRP	-	Pre-Packaged Insolvency Resolution Process
PLFS	-	Periodic Labour Force Survey
PLI	-	Production-Linked Incentive
PMC	-	Punjab and Maharashtra Cooperative Bank
PMGKAY	-	Pradhan Mantri Garib Kalyan Anna Yojana
PMI	-	Purchasing Managers' Index
PML	-	Prevention of Money Laundering
PM SVANidhi	-	Prime Minister Street Vendor's AatmaNirbhar Nidhi
PPAC	-	Petroleum Planning and Analysis Cell
PO	-	Project Office
POs	-	Payment Orders
POS	-	Point of Sale
PPIs	-	Prepaid Payment Instruments
PRAKALP	-	Pratayaksh Kar Lekhankan Pranali
PSBs	-	Public Sector Banks
PSL	-	Priority Sector Lending
PSLCs	-	Priority Sector Lending Certificates
PSOs	-	Payment System Operators
PSPs	-	Payment Service Providers
PSS	-	Payment and Settlement Systems
PSUs	-	Public Sector Undertakings
PWBD	-	Persons with Benchmark Disabilities
QAD	-	Quality Assurance Division
QIP	-	Qualified Institutional Placement
QPM	-	Quarterly Projection Model
QR	-	Quick Response
RAM-OR	-	Risk Assessment Methodology for Operational Risk
RBA	-	Risk-Based Approach
RBI	-	Reserve Bank of India
RBIA	-	Risk Based Internal Audit
RBIEPF	-	Reserve Bank of India Employees Provident Fund
RBIH	-	Reserve Bank Innovation Hub
RB-IOS	-	Reserve Bank-Integrated Ombudsman Scheme
RBI-RD	-	Reserve Bank of India-Retail Direct
RBP	-	Risk Based Premium
RBR	-	Return-Based Repository
RBS	-	Risk-Based Supervision
RCA	-	Root Cause Analysis
RCG-Asia	-	Regional Consultative Group, Asia
RCL	-	Reliance Capital Ltd
RDG	-	Retail Direct Gilt
RE	-	Revised Estimates
ReBIT	-	Reserve Bank Information Technology Private Limited
RECO	-	Revenue Expenditure to Capital Outlay
REER	-	Real Effective Exchange Rate
REIT	-	Real Estate Investment Trusts
REs	-	Regulated Entities
RFCA	-	Revaluation of Forward Contracts Account
RFID	-	Radio Frequency Identification
RIDF	-	Rural Infrastructure Development Fund
RM	-	Reserve Money
RMC	-	Risk Monitoring Committee
RMD	-	Risk Monitoring Department
ROs	-	Regional Offices
RPA	-	Robotic Process Automation
RRBs	-	Regional Rural Banks
RTGS	-	Real Time Gross Settlement
RTI	-	Right to Information
RTL	-	Risk Tolerance Limits

SELECT ABBREVIATIONS

RTO	-	Recovery Time Objective
RTP	-	Reserve Tranche Position
RT-PCR	-	Reverse Transcription - Polymerase Chain Reaction
SAA	-	Swap Amortisation Account
SAP	-	Systems Applications and Products
SAs	-	Statutory Auditors
SAAR	-	Seasonally Adjusted Annualised Growth Rate
SAARC	-	South Asian Association of Regional Cooperation
SARFAESI Act	-	Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest Act
SARTTAC	-	South Asian Regional Training and Technical Assistance Centre
SBR	-	Scale-Based Regulation
SBS	-	Shredding and Briquetting Systems
SCAs	-	Statutory Central Auditors
SCBs	-	Scheduled Commercial Banks
SDF	-	Special Drawing Facility
SDG	-	Sustainable Development Goals
SDLs	-	State Development Loans
SDMX	-	Statistical Data and Metadata Exchange
SDRs	-	Special Drawing Rights
SEs	-	Supervised Entities
SEACEN	-	South East Asian Central Banks
SEBI	-	Securities and Exchange Board of India
SEFL	-	SREI Equipment Finance Limited
SEZ	-	Special Economic Zone
SFBs	-	Small Finance Banks
SFG	-	Sustainable Finance Group
SFMS	-	Structured Financial Messaging System
SGB	-	Sovereign Gold Bond
SGL	-	Subsidiary General Ledger
SHGs	-	Self-Help Groups
SIDBI	-	Small Industries Development Bank of India
SIFL	-	SREI Infrastructure Finance Limited
SIOS	-	Services and Infrastructure Outlook Survey
SIP	-	Systematic Investment Plan
SLBC	-	State Level Bankers Committee
SLCCs	-	State Level Coordination Committees
SLD	-	Senior Level Dialogue
SLR	-	Statutory Liquidity Ratio
SLTRO	-	Special Long Term Repo Operation
SMA	-	Special Mention Account
SMEs	-	Small and Medium Enterprises
SOFR	-	Secured Overnight Financing Rate
SONIA	-	Sterling Overnight Index Average
SOP	-	Standard Operating Procedure
SPARSH	-	System of Pension Administration (Raksha)
SPDs	-	Standalone Primary Dealers
SPECTRA	-	Software Platform for External Commercial Borrowings and Trade Credits Reporting and Approval
SPMCIL	-	Security Printing and Minting Corporation of India Limited
SRO	-	Self-Regulatory Organisation
SRS	-	System Requirement Study
S-SC	-	Strategy Sub-Committee
SSCI	-	Services Sector Composite Index
StCBs	-	State Cooperative Banks
STRIPS	-	Separate Trading of Registered Interest and Principal Securities
SWIFT	-	Society for Worldwide Interbank Financial Telecommunication
SWM	-	South-West Monsoon
TACS	-	Technical Advisory Committee in Surveys
T-Bills	-	Treasury Bills
TCs	-	Trade Credits

SELECT ABBREVIATIONS

TEs	-	Training Establishments
TIN	-	Tax Information System
TLTROs	-	Targeted Long Term Repo Operations
TOL/ATNW Ratio	-	Total Outside Liabilities-Adjusted Tangible Net Worth Ratio
TOP	-	Tomatoes, Onions and Potatoes
TReDS	-	Trade Receivables Discounting System
TSA	-	Treasury Single Account
TSCAs	-	Time-Sensitive Critical Activities
UAM	-	Udyog Aadhaar Memorandum
UAT	-	User Acceptance Testing
UCBs	-	Urban Cooperative Banks
UDAY	-	Ujwal DISCOM Assurance Yojana
UN	-	United Nations
UO	-	Umbrella Organisation
UPI	-	Unified Payment Interface
USFB	-	Unity Small Finance Bank Limited
UTs	-	Union Territories
UTI	-	Unique Transaction Identifier
VaR/ES	-	Value at Risk/Expected Shortfall
VAT	-	Value Added Tax
V-CIP	-	Video-based Customer Identification Process
VFT	-	Value Free Transfer
VIR	-	Visually Impaired Respondents
VM	-	Variation Margin
VRR	-	Voluntary Retention Route
VRRR	-	Variable Rate Reverse Repo
VTAs	-	Voluntary Trading Arrangements
WACR	-	Weighted Average Call Rate
WAM	-	Weighted Average Maturity
WAS	-	Weighted Average Spread
WAY	-	Weighted Average Yield
WLA	-	White Label ATM
WMA	-	Ways and Means Advances
WPI	-	Wholesale Price Index
WTD	-	Whole-Time Director
WTO	-	World Trade Organisation
WWF	-	World-Wide Fund for Nature
XBRL	-	eXtensible Business Reporting Language
ZCYC	-	Zero Coupon Yield Curve
ZTCs	-	Zonal Training Centres

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PART ONE: THE ECONOMY - REVIEW AND PROSPECTS

I ASSESSMENT AND PROSPECTS

I.1 The escalation of geopolitical tensions into war from late February 2022 has delivered a brutal blow to the world economy, battered as it has been through 2021 by multiple waves of the pandemic, supply chain and logistics disruptions, elevated inflation and bouts of financial market turbulence, triggered by diverging paths of monetary policy normalisation. The global macroeconomic outlook is overcast with the economic costs of the war and sanctions.

I.2 Emerging market and developing economies (EMDEs) are bearing the brunt of global spillovers, despite being bystanders. Capital outflows and sizeable currency depreciations have tightened external funding costs, pushed up debt levels and put their hesitant and incomplete recoveries in danger.

I.3 Turning to the domestic economy, the immediate impact of geopolitical aftershocks is on inflation, with close to three-fourth of the consumer price index at risk. The elevation in international prices of crude, metals, and fertilisers has translated into a terms of trade shock that has widened trade and current account deficits. High frequency indicators already point to some loss of momentum in the recovery that has been gaining traction from the second quarter of 2021-22, with 86.8 per cent of the adult population fully vaccinated and 3.5 per cent having received booster doses.[1] Furthermore, steadfast policy support put a floor underneath aggregate demand and economic activity. Fiscal policy focused on mitigating the hardships and loss of livelihood imposed by the pandemic, even as an impetus to growth was unleashed through reprioritising fiscal spending. Monetary policy remained accommodative and fostered congenial financial conditions for the recovery to take root, while being vigilant that inflation remains within the target going forward. Thus, the experience of 2021-22 has yielded valuable lessons that will illuminate the path of the Indian economy in the year ahead.

Lessons from the 2021-22 Experience

I.4 Over the first half of 2021, an uneven and divergent global recovery began to take shape with the ebbing of the "Delta" variant-driven infections[2]

* The accounting year for the Reserve Bank of India was changed to April-March (earlier July-June) from the financial year 2020-21 onwards. Where available, this chapter has been updated beyond March 2022.

[1] The vaccination programme, which commenced on January 16, 2021 for health care workers and frontline workers as the first priority, progressed impressively, with around 96.4 per cent of the adult population (above 18 years of age, assuming around 95 crore people) inoculated with the first dose as on May 24, 2022, while 86.8 per cent received both the first and the second dose. So far, 5.9 crore people have been administered with the first dose in the 15-18 year age group and 3.3 crore in the age group of 12-14 years. As on May 24, 2022, around 3.2 crore people in the 60 plus age group and frontline workers have been inoculated with a precaution dose over and above two doses.

[2] There were multiple peaks at the global level in terms of daily confirmed new cases. First peak was on January 7, 2021 (8.7 lakh cases), followed by another peak on April 23, 2021 (9.1 lakh cases), and yet another on August 13, 2021 (8.0 lakh cases). The highest per day spike was registered on January 19, 2022 with 40.9 lakh daily cases, led by the Omicron variant. As on May 24, 2022, the daily new cases were at 6.1 lakh. Total mortalities due to COVID-19 were around 63 lakh (52.7 crore confirmed infections) [Source: Ourworldindata.com].

and the gathering pace and scale of vaccination. In its April 2021 World Economic Outlook (WEO), the IMF estimated world GDP to grow by 6.0 per cent in 2021 and world trade by 8.4 per cent.[3] Emerging market and developing economies (EMDEs) were seen as lagging in view of limited space for maintaining policy stimulus and uneven access to vaccines.[4]

I.5 In the second half of 2021, the global recovery became hostage to the "Omicron" variant. This wave turned out to be short-lived and global trade recovered amidst supply and logistics bottlenecks to grow by 10.1 per cent over the year as a whole. Underpinning this upturn, global manufacturing accelerated to 9.4 per cent in 2021 from 4.2 per cent a year ago. The IMF's April 2022 WEO has placed global GDP growth for the year at 6.1 per cent, a shade higher than its projection made a year ago. This experience reflects the innate resilience that has built up in the global economy as it contended with the pandemic, the shortages, and supply chain disruptions that unravelled in its wake.

I.6 Globally, inflation broadened and acquired persistence during 2021 under the impact of repetitive shocks which severely constrained the supply response to the release of pent-up demand and pushed up costs and prices. It is estimated that supply chain pressures by themselves contributed 1.0 percentage points to global core inflation in 2021.[5] Emerging markets were hit hard by inflationary pressures, including from rising global commodity prices, shipping costs and shortages of key intermediates. Hence, they embarked upon withdrawal of policy support[6] and tightening of monetary policy ahead of advanced economies (AEs). As AEs joined them and systemically important central banks began signalling intent to normalise policy stances in response to surging inflation, emerging market economies (EMEs) had to brace up to tighter financial conditions as financial markets turned volatile in anticipation. The second half of 2021 saw many policy rate hikes globally.

I.7 Global equity markets remained bullish during 2021 as strong earnings expectations lifted sentiments in spite of sporadic bouts of volatility and brief sell-offs. Bond markets, on the other hand, turned bearish during the year, with treasuries delivering losses, but spreads between government and corporate bonds narrowed. Commodities markets sizzled as surging energy and food prices crossed multi-year highs. The US dollar rallied strongly, supported by an improving US economy as well as flights to safe haven and a hawkish pivot by the US Fed. Most EME currencies depreciated, barring a few.

I.8 In India, first the Delta-driven and then the Omicron-induced waves of the pandemic

[3] In October 2021, the IMF adjusted these forecasts to 5.9 per cent and 9.7 per cent, respectively. In April 2022, these forecasts were revised upwards to 6.1 per cent and 10.1 per cent, respectively.

[4] While 74.8 per cent of the population in high income economies are fully vaccinated and 49.7 per cent have received booster shots (May 23, 2022); only 12.8 per cent of the population in low-income countries got fully vaccinated (May 15, 2022).

[5] WEO, IMF, January 2022.

[6] Since January 2020, fiscal measures in response to COVID-19 pandemic (including additional spending, foregone revenues and liquidity support) amount to US$16.9 trillion or 16.4 per cent of world GDP. The large fiscal packages announced or approved by the European Union and the United States could add a cumulative US$ 4.6 trillion to global GDP between 2021 and 2026. Global government debt is expected to remain at record-high levels - close to, but below, 100 per cent of GDP - in 2021 and to decrease slightly through 2026 (Fiscal Monitor, October 2021, IMF).

unsettled the recovery in domestic economic activity. That the third wave turned out to be shorter-lived and less debilitating in terms of impact on economic activity than the first two waves attests to the efficacy of the nationwide vaccination drive and no less to learning and adaptation. The success in navigating two waves of the pandemic owes a lot to the coordinated efforts with central and state governments and third tiers of administration, running multiple awareness campaigns to quell vaccination hesitancy and the selfless, courageous and determined efforts of various stakeholders which imparted speed to the vaccination drive. In spite of the severity of the second wave, the loss of output in Q1:2021-22 was about one-third of what was suffered during Q1:2020-21 when measured from the level of GDP recorded in Q1:2019-20 (pre-pandemic). This resilience and the underlying strengthening of the impulses of growth were evident in the recommencement of the recovery from Q2:2021-22 onwards. In fact, the third wave[7] starting end-December 2021 was flattened in a month's time, with infections back to levels seen at the start of the pandemic. The National Statistical Office (NSO) has placed real GDP growth at 8.9 per cent in 2021-22, surpassing its pre-pandemic level (of 2019-20) by 1.8 per cent. Fiscal reprioritisation of expenditure towards infrastructure, robust crop production, ebullient export growth in the face of hostile international conditions, and congenial monetary and financial conditions engendered by the Reserve Bank underpinned this macroeconomic performance. Nevertheless, private final consumption expenditure (PFCE) and gross fixed capital formation (GFCF) remain work in progress, having barely exceeded their pre-pandemic levels.

I.9 From the supply side, agriculture exhibited pandemic-proofing and benefited from exemption from containment measures. Foodgrains production surged to new highs as did buffer stocks of rice and wheat. Various initiatives, including *Krishi Udan* 2.0, launch of 35 climate resilient and nutrient rich crop varieties, cluster-based Horticulture Cluster Development Programme and National Mission on Edible Oils - Oil Palm (NMEO-OP), boosted agricultural productivity. The distribution of free essential food items through the *Pradhan Mantri Garib Kalyan Anna Yojana* (PMGKAY) was extended in phases to ensure food security of poor households in both urban and rural areas, besides increase in the outlay of the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS).

I.10 In the industrial sector, manufacturing showed an uptick despite headwinds from persisting global supply bottlenecks and muted discretionary consumption and investment spending. Within services, the recovery was heterogeneous, with financial, real estate and professional services and public administration, defence and other services gaining traction, whereas construction and trade, hotels, transport, communication and services related to broadcasting remained sluggish, being largely contact-intensive in nature. Even though labour market conditions have started normalising along with the return of the migrant labour force, labour participation remains incomplete and reskilling assumes priority.

[7] India's first wave peak, in terms of daily confirmed new cases of COVID-19, occurred on September 16, 2020 with 97,894 infections. During the second wave, the daily spike reached the peak of 4.1 lakh infections on May 6, 2021. In the Omicron-led third wave, the peak was on January 20, 2022 with 3.5 lakh cases. Since then, the daily cases have fallen significantly and currently stand at 2,124 as on May 24, 2022. Total mortalities due to COVID-19 were 5.2 lakh (around 4.3 crore confirmed infections).

I.11 An important takeaway from the experience of 2021-22 is India's tryst with inflation. Supply shocks impacted food inflation intermittently, exacerbated by imported price pressures, especially from global edible oil prices. Crude oil prices pushed up core inflation later in the year. This experience also highlighted the important role of supply-side measures by the government in relieving price pressures in the case of edible oils and pulses, and in softening the pass-through of the sharp increase in global crude oil prices to domestic pump prices of petrol and diesel through timely reductions in excise duties and state-level value added taxes (VATs). Furthermore, the presence of considerable slack in the economy tempered the pass-through of input cost pressures into firms' selling prices. The resurgence in global commodity prices (prices of energy increased by 102.1 per cent; metals and minerals by 28.2 per cent; precious metals by 10.3 per cent; and agricultural commodities by 28.0 per cent year-on-year in March 2022) renewed supply chain pressures and heightened financial market volatility in Q4:2021-22, shifted the trajectory of inflation sharply to the upside. Overall, headline inflation averaged 5.5 per cent in 2021-22 as against 6.2 per cent a year ago. Headline inflation breached the upper tolerance band in Q4:2021-22 and rendered the conduct of monetary policy challenging.

I.12 The monetary policy committee (MPC) decided to look through the supply shocks and maintained *status quo* on the policy repo rate, persevering with an accommodative stance to revive and sustain growth on a durable basis while ensuring that inflation remains within the target going forward. Forward guidance gained prominence in 2021-22 as the MPC shifted away from explicit time-contingent to state-contingent guidance since the start of the year. In keeping with this guidance, congenial financial conditions were maintained for sustaining the recovery. Ample liquidity bolstered market sentiment. The Reserve Bank also continued with targeted measures to meet sectoral credit needs, including special refinance facilities for all-India financial institutions (AIFIs); a term liquidity facility to support COVID-related healthcare infrastructure and services; special long-term repo operations (SLTRO) for small finance banks (SFBs); and an on-tap liquidity window to mitigate the adverse impact of the pandemic on certain contact-intensive sectors.

I.13 In H2:2021-22, the Reserve Bank refrained from providing any additional liquidity and focused on management of the liquidity overhang by rebalancing absorption under the overnight fixed rate reverse repo window towards variable rate reverse repo (VRRRs) auctions of varying maturities. By end-March 2022, VRRR auctions absorbed 70 per cent of the overhang. These shifts were reflected in the effective reverse repo rate (ERRR)[8] moving closer to the policy repo rate and pulling up money market rates from pandemic lows. During the year, an amount of ₹2.2 lakh crore was also withdrawn from the system through restoration of cash reserve ratio (CRR) to pre-pandemic levels, repayment of targeted long term repo operations (TLTRO) and open market operations (OMO) sales. A collateral benefit of these liquidity operations and the external benchmark system was a significant improvement

[8] The weighted average of the fixed rate reverse repo rate and the VRRR auctions of varying maturities with the weights being the amounts absorbed under the respective windows.

in monetary transmission to the credit market during the year.

I.14 The gross fiscal deficit (GFD) for the central government declined by 2.5 percentage points of GDP in 2021-22 (revised estimates) in response to a calibrated withdrawal of pandemic related fiscal stimulus and robust tax and non-tax collections. Despite the consolidation, the net fiscal impulse remained positive with a focus on capital expenditure and welfare measures[9] to mitigate the second wave of the pandemic. Under the disinvestment programme, the privatisation of Air India was an important milestone. States' revenue and capital receipts posted strong recoveries and central tax devolution exceeded the Centre's budget estimates. Notably, the surge in states' capital expenditure improved the quality of spending. Key sub-national deficit indicators also showed improvement during the year.

I.15 In spite of formidable headwinds, India's merchandise exports touched a record of US$ 421.9 billion during 2021-22, with a volume expansion of 16.6 per cent over pre-pandemic level. Increasingly, hi-tech goods such as electronics provided the cutting edge to India's export performance, reflecting the strengthening of domestic manufacturing capabilities. Labour-intensive exports as well as agricultural items imparted vigour to the export drive. Furthermore, a diversified export portfolio in terms of products and destinations imparted resilience, reflecting conscious policy initiatives. A noteworthy feature of India's export performance in 2021-22 was the robust growth of services sector exports, with software exports scaling new highs on the back of strong revenues of major information technology (IT) exporters.

I.16 These distinctive features of the experience of 2021-22 endowed the Indian economy with external viability. Consequently, even though a massive increase in imports swung the current account from a surplus in the first quarter to deficits in subsequent quarters, the current account deficit remained modest at 1.2 per cent of GDP during April-December 2021-22. This was comfortably financed alongside a sizeable accretion to international reserves. Furthermore, low external debt turned out to be a mitigant against external sector risks.

I.17 The banking sector was cushioned against the disruptions caused by the pandemic by adequate liquidity support and various regulatory dispensations provided by the Reserve Bank. Banks bolstered their capital to augment risk absorbing capacity, aided by recapitalisation[10] by the government in case of public sector banks (PSBs) along with capital raising from the market and retention of profits by both PSBs and private sector banks. The gross non-performing assets (GNPA) ratio of all scheduled commercial banks (SCBs) moderated to its lowest level in six years, aided by due efforts towards recoveries and technical write-offs. Bank credit growth has begun to pick up to track nominal GDP growth and banks are regaining bottom lines.

[9] Central government announced a fiscal package amounting to ₹6.3 lakh crore during Q1:2021-22 (second wave), which included, *inter alia*, extension of the *Pradhan Mantri Garib Kalyan Anna Yojana*, measures to strengthen public health, extension of the *AatmaNirbhar Bharat Rozgar Yojana*, loan guarantee scheme for COVID-19 affected sectors, provision of broadband connectivity to villages and boost for project exports through the National Export Insurance Account.

[10] The Government has infused ₹2.9 lakh crore in the last five years in PSBs, including the recapitalisation of ₹4,600 crore in 2021-22.

I.18 The balance sheet of non-banking financial companies (NBFCs) expanded in 2021-22 (up to December 2021) but asset quality in the sector deteriorated. Nevertheless, capital cushions showed an improvement. Given the growing interconnectedness of NBFCs with other segments of the financial system, the Reserve Bank has issued guidelines on scale based regulations for NBFCs on October 22, 2021. The Reserve Bank has also issued guidelines on December 14, 2021 to extend the prompt corrective action (PCA) framework to NBFCs. The framework will be applicable to all non-government NBFCs in the middle, upper and top layers excluding primary dealers, housing finance companies and those NBFCs which are not accepting public funds. These measures will strengthen the financial health of the NBFCs.

I.19 Review of regulation of the microfinance sector also engaged the Reserve Bank's attention in 2021-22. Directions issued on March 14, 2022 were aimed at enhancing customer protection for microfinance borrowers and harmonising the regulation of microfinance loans provided by different regulated entities like commercial banks, NBFC-microfinance institutions (NBFC-MFIs) and other NBFCs. The Reserve Bank also directed these entities to put in place Board-approved policies for assessment of household income, limits on loan repayment obligations of a household as a percentage of household income, and pricing of microfinance loans. Details of major policy measures for banks and NBFCs announced by the Reserve Bank during the year are covered in Annex I and II of this Report.

I.20 A noteworthy development during the year was the establishment of a quantifiable metric to evaluate the efficacy of efforts towards financial inclusion. The Reserve Bank's Financial Inclusion Index (FI-Index)[11] draws on 97 indicators, reflecting ease of access, availability and usage of services, and quality of services. By end-March 2021, the value of the index reached 53.9 (43.4 at end-March 2017), indicating the road traversed so far and the miles to go.

I.21 On the technological front, the focus during the year was on leveraging technology to facilitate digital penetration, innovative payment options and consumer orientation towards a "less cash" dependent society. The Digital Payments Index (DPI), constructed to capture the extent of digitisation of payments across the country, indicated rising growth in adoption and deepening of the digital payments. The UPI system was leveraged to introduce UPI123Pay to facilitate digital enablement of over 40 crore feature phone users in the country. The operationalisation of the Payments Infrastructure Development Fund (PIDF) helped expand the digital payment acceptance footprint across the country, with over 85 lakh payment touch points deployed in 2021 alone. Round the clock availability of Centralised Payment Systems (CPS), introduction of additional settlement cycles, extension of cut-off timings for some segments operated by the Clearing Corporation of India Limited (CCIL) and operationalisation of the National Automated Clearing House (NACH) on all days helped reduce credit and settlement risks in the payment space.

I.22 In response to the expanding horizon of FinTech, the Reserve Bank set up a full-fledged FinTech Department effective January 4, 2022. The Reserve Bank Innovation Hub (RBIH) was

[11] The FI-Index will be published annually in July every year.

also set up during the year to build an ecosystem for development of prototypes, patents and proofs of concept while promoting cross-thinking spanning regulatory domains and national boundaries.

I.23 In order to build public confidence in the financial system and also to protect the interests of customers of regulated entities by making the alternate dispute redress mechanism simpler, more efficient and responsive, the Reserve Bank rolled out an Integrated Ombudsman Scheme, 2021 by adopting a 'One Nation One Ombudsman' approach in November 2021. The Reserve Bank set up a Centralised Receipt and Processing Centre (CRPC) for initial processing of physical and e-mail complaints. Furthermore, the Reserve Bank set up the first ever Contact Centre to provide information/assistance to complainants on its alternate grievance redress mechanism. The Internal Ombudsman mechanism was extended to eligible NBFCs.

I.24 In a landmark legislation in pursuance of the announcement made in the Union Budget 2021-22, the Deposit Insurance and Credit Guarantee Corporation (DICGC) Act 1961 was amended on August 13, 2021. The amendments, which came into force on September 1, 2021 empowered the DICGC to make payment to depositors up to the amount insured, in the case of banks with restrictions on withdrawal of deposits imposed by the Reserve Bank, within 90 days from the date of imposition of such directions. Such up-front payment to depositors is not observed in the cross-country experience. As of March 31, 2022, the DICGC sanctioned claims amounting to ₹3,457.4 crore to 2,64,142 depositors in respect of 22 urban co-operative banks placed under all-inclusive directions by the Reserve Bank.

Looking Ahead to 2022-23

I.25 The geopolitical conflict in Europe which started in February 2022 has imparted a strong shock that threatens to overwhelm the global economy and its constituents. Negative externalities are already rippling through financial and commodity markets, the international trade and financial systems, supply chains and the global geopolitical order. Surging food and fuel prices, in particular, and shortages of essential items are impacting the disadvantaged adversely. These forces are superimposed upon tightening financial conditions as countries across the world adopt more hawkish monetary policy stances in response to elevated and diffused inflationary pressures. As pointed out earlier, EMDEs are likely to bear the brunt of this vortex of factors: their fragile recoveries at risk, their populations enfeebled by high prices and supply bottlenecks, their currencies under downward pressures and exodus of capital, and their debt profiles rendered vulnerable. Scarring effects are larger for EMDEs due to human capital and investment losses which may keep economic activity and employment below pre-pandemic trends right up to 2023. The near-term outlook is fluid, rapidly evolving and extremely uncertain. It will likely have a bearing on longer-term prospects, including by exacerbating the scars of the pandemic, by deglobalisation, financial fragmentation and by setting back the initiatives towards climate change.

I.26 The global recovery is expected to suffer a significant loss of momentum in 2022. Risks are large and to the downside - war escalation; shortages; resurgence of the pandemic; slowdown in China; and climate stress overshooting the Paris agreement goals. In its April 2022 WEO, the IMF has marked down global growth for the year sharply to 3.6 per cent from 6.1 per cent in

2021. AEs may decelerate to 3.3 per cent from 5.2 per cent a year ago and EMDEs to 3.8 per cent from 6.8 per cent. Both groups are expected to experience inflation that is higher by 2.6 and 2.8 percentage points, respectively. The expansion of global trade volume is expected to halve from 10.1 per cent in 2021, mainly because of moderation in merchandise trade as services are expected to remain subdued, and slow even further in 2023.

I.27 The persistence of high inflation is forcing countervailing monetary policy action at a time when supporting the economic recovery should have been assigned priority. During 2022 so far (up to May 24, 2022), more than 40 central banks across AEs and EMEs have raised policy interest rates and/or scaled back liquidity. Policy trade-offs are becoming increasingly complex going forward and tail risks, including stagflation, loom large in several countries.

I.28 Nervous financial markets are already reflecting these strains. In the first quarter of 2022, major stock benchmarks suffered losses. Expectations of faster and larger than earlier anticipated monetary tightening contributed to a rally in the US dollar - with associated depreciation in emerging market currencies - and hardening of benchmark bonds yields. Yield spreads are compressing and even turning negative, with the yield curve inverting in segments. In fact, the first quarter of 2022 has already seen an episode of yield curve inversion in the US. With growing anticipation of sharp monetary tightening in the US, bond yields have hardened further along with strengthening of the US dollar in Q2:2022 so far. Equity indices in major economies have corrected further as uncertainties around geopolitical tensions, inflationary pressures emanating from continued volatility in commodity prices and fresh COVID-19 related restrictions in China have dampened investors' sentiments.

I.29 In response to the evolving challenges, the following policy priorities at the global level will condition the way forward: (a) calibrate monetary policy to fight inflation while safeguarding economic recovery; (b) prioritise fiscal support to the most vulnerable within the consolidation envelope; (c) tighten macroprudential policy in step with monetary policy; (d) focus on health and structural reforms (*viz.,* digitalisation, reskilling workers, reconfiguring supply chains, climate resilience, debt resolution, and trade cooperation), and (e) prevent economic fragmentation and support the poorest countries through coordinated actions of the international institutions. These priorities call for country specific as well as multilateral actions.

I.30 Amidst these adverse international developments, the Indian economy is relatively better placed to strengthen the recovery that is underway and improve macroeconomic prospects going forward. In recognition of the knock-on effects from geopolitical spillovers, the MPC revised downwards real GDP growth for 2022-23 to 7.2 per cent in its April resolution - a decline of 60 basis points from its pre-war projection, mainly due to higher oil prices weighing on private consumption and higher imports reducing net exports. Inflation was projected higher by 120 basis points at 5.7 per cent in April 2022. Monetary policy remains accommodative but focused on withdrawal of accommodation. Priority has been assigned to containing inflation within the target going forward, while supporting growth.

I.31 The prospects for agriculture and allied activities are brightening at this juncture on the prediction of a normal monsoon [at 99 per cent ±5 per cent of long period average (LPA)], with terms of trade gains anticipated from exports. The government has set the target for total foodgrains production at 328 million tonnes for 2022-23. The launch of nano-urea in liquid form augurs well for the upcoming *kharif* season. Raising farm productivity remains a key concern, however. It should be driven by agricultural research and development, next-generation technological advancements and an atmosphere of innovation and entrepreneurship for agri-tech start-ups to thrive.

I.32 Early indicators point to revival of economic activity across other sectors that needs to be assiduously nurtured in order to boost consumer and business confidence and private investment. Capacity utilisation in several industries is moving closer to normal levels, although rising input costs and persisting supply bottlenecks, as for instance in semiconductors for the automobile sector, may impede or delay a fuller recovery. With the lessons of the experience of 2021-22, contact-intensive sectors are expected to rebound over the year ahead, with positive implications for the workforce and for consumption demand. The thrust given to infrastructure and investment in the Union Budget 2022-23 will play a major role in shaping the post COVID-19 recovery. The *Pradhan Mantri Gati Shakti,* which brings together infrastructure plans under various ministries under a common digital platform, is expected to improve efficiency in execution and reduce logistic costs. Similarly, policy support for the digital economy, FinTech, and climate transition would enable India to participate and benefit from the fourth industrial revolution.

I.33 The inflation trajectory going forward is subject to considerable uncertainty and would primarily depend on the evolving geopolitical situation. Sharp movements in global commodity prices are having a significant bearing on food inflation dynamics in India. Though record foodgrains production and forecast of a normal south-west monsoon augurs well for food inflation, heightened uncertainty around global food prices arising from geopolitical risks might offset these positive domestic impulses, especially *via* elevated prices of wheat, edible oil, feed costs and key agriculture inputs like fertilisers. Moreover, volatility in the prices of international crude oil and key raw materials and intermediates, together with global supply chain disruptions, may push up input cost pressures. In particular, a scenario in which crude prices persist above US$ 100/barrel poses a major upside risk in terms of re-igniting second-round effects across manufacturing and services prices. Supply side policy interventions such as removing customs duty on import of raw cotton, prohibiting wheat exports, reducing road and infrastructure cess (RIC) on petrol by ₹8 per litre and diesel by ₹6 per litre, increasing exports duty on certain steel products, reducing imports duty on certain raw materials for steel and plastic manufacturing, restricting sugar exports, removing customs duty and agriculture infrastructure and development cess (AIDC) on import of 20 lakh tonnes of crude sunflower oil and crude soybean oil per financial year till March 31, 2024 and other measures as may be taken could, however, provide some offset. A faster resolution of the geopolitical conflict and no further severe COVID-19 waves could subdue and even reverse these pressures and help contain core inflation.

I.34 Against the background of the risks to the near-term inflation outlook rapidly materialising as reflected in the inflation print for March and the developments thereafter, the MPC held an off-cycle meeting on May 2 and 4, 2022. While noting that domestic economic activity is navigating the vortex of forces confronting the world with resilience on the strength of underlying fundamentals and buffers, the MPC expected inflation to rule at elevated levels, warranting resolute and calibrated steps to anchor inflation expectations and contain second round effects. Accordingly, the MPC decided to increase the policy repo rate by 40 basis points to 4.40 per cent. Concomitantly, the standing deposit facility (SDF) rate and the marginal standing facility (MSF) rate stood adjusted at 4.15 per cent and 4.65 per cent, respectively. Furthermore, in keeping with the stance of withdrawal of accommodation and in line with the earlier announcement of gradual withdrawal of liquidity over a multi-year time frame, the Reserve Bank decided to increase the cash reserve ratio (CRR) by 50 bps to 4.50 per cent, effective the fortnight beginning May 21, 2022, which would withdraw liquidity to the tune of ₹87,000 crore from the banking system. The Reserve Bank will continue to follow a nuanced and nimble footed approach to liquidity management while maintaining adequate liquidity in the system to meet the credit needs of the productive sectors of the economy. The introduction of the SDF in April 2022 as an uncollateralised facility at 25 basis points below the repo rate to provide a new floor for the liquidity adjustment facility (LAF), and two-way operations of absorbing liquidity through VRRR auctions of varying maturities and variable rate repo (VRR) auctions to meet transient liquidity shortages, will help to ensure this objective in a non-disruptive manner.

I.35 In 2022-23 (BE), the central government has sought to prioritise capital spending while maintaining fiscal prudence. A reduction in GFD-GDP ratio by 0.3 percentage points is envisaged in line with the target of achieving a GFD-GDP ratio below 4.5 per cent by 2025-26. Fiscal consolidation is sought to be achieved by reining in revenue spending even as capital expenditure is budgeted to increase to 2.9 per cent of GDP as against a decadal average of 1.8 per cent of GDP. The ratio of revenue expenditure to capital outlay is set to improve for the second consecutive year to 5.2 in 2022-23 (BE), distinctly lower than the average of 7.8 during 2010-11 to 2019-20. The strategy of building in of buffers at various levels and a realistic disinvestment target of ₹65,000 crore (close to the average realisation in the past 5 years) provides headroom to deal with future shocks. Transparency in accounting practices imparts credibility to the fiscal arithmetic. States' capex is expected to receive a strong push in 2022-23 on account of enhanced allocation under the 'Scheme for Financial Assistance to States for Capital Investment' from ₹15,000 crore in 2021-22 (RE) to ₹1 lakh crore in 2022-23 (BE).

I.36 If geopolitical tensions ease, ongoing global supply disruptions could dissipate and enable world trade to regain momentum. This could enhance India's growing agricultural exports. Efforts are also being made to boost India's defence exports. The recently announced Green Hydrogen/Green Ammonia Policy would secure India's energy security in an environmentally sustainable way and cut down dependence on fossil-based imports.

I.37 India's Comprehensive Economic Partnership Agreement (CEPA) with the United Arab Emirates (UAE) could boost prospects of trade with Africa and Asia. Furthermore, the signing of the India-Australia Economic Cooperation and Trade Agreement (ECTA) will open up preferential access to Australian markets for India. Trade agreements with various other nations/blocks like the UK, Canada, and Gulf Cooperation Council (GCC) are in the making and will likely galvanise India's export market diversification strategy. The Foreign Trade Policy (FTP) 2021-26 is expected to provide a medium-term path for achieving merchandise exports of US$ 1 trillion by 2030. States, on their part, are focusing on creating the enabling infrastructure, e-market strategies and export-oriented policies to complement the Government of India's initiatives such as 'One District One Product'. The PLI scheme for sectors such as electronics, pharmaceuticals, textiles, steel, and automotives are expected to enhance India's global value chain (GVC) participation and reduce import dependency in critical sectors. Furthermore, the rationalisation of customs duties aims to empower *AatmaNirbhar Bharat* goals through increasing value-added manufacturing, which will further strengthen India's GVC participation.

I.38 At the same time, longer-than-expected supply chain bottlenecks, elevated freight rates and the upsurge in global inflation amidst escalating geopolitical tensions pose significant risks. Although direct trade and finance exposures in the context of the ongoing conflict are limited, elevated crude oil prices can widen the current account deficit while foreign portfolio investors may remain risk averse towards EMEs, including India. Nevertheless, robust reserve buffers, a strong FDI pipeline and proactive policy measures towards supporting merchandise exports and participation in GVCs should help the economy withstand adverse global spillovers.

I.39 The banking sector has witnessed improved financial parameters despite the COVID-19 pandemic. There is, however, a need to be watchful of the credit behaviour of the restructured advances and possibility of increased slippages arising from sectors that were relatively more exposed to the pandemic. With the unwinding of support measures, some of the restructured accounts might face solvency concerns, with the impact on banks' balance sheets becoming clearer in the upcoming quarters. Prudence warrants proactive recognition of any non-viable accounts to activate timely resolution. Going forward, as the economy recovers and credit demand rises, banks will need to focus on supporting credit growth while being vigilant of the evolving risks. Care needs to be taken to ensure that fresh slippages are arrested, and banks' balance sheets are strengthened to avoid future build-up of stress.

I.40 The setting up of the National Asset Reconstruction Company Ltd. (NARCL) is a step forward for resolution of large value legacy stressed assets and is likely to serve as a time-efficient mechanism for reviving investor interest in primary and secondary markets for stressed assets. Going forward, continued commitment, professionalism and transparency in operation will help in making the exercise cost- and time-effective. The setting up of the National Bank for Financing Infrastructure and Development (NABFID) is expected to shift the burden of long-term financing away from banks. The NABFID can also play an active role in the development of bond and derivatives markets that are necessary for infrastructure financing.

I.41 NBFCs and urban cooperative banks (UCBs) will have to be mindful of frailties, wherever they exist, in their balance sheets and ensure robust asset-liability management, apart from improving the quality of their credit portfolios. Considering the significant share of funding absorbed by NBFCs at the system level, continued attention to their financial health is warranted from the viewpoint of financial stability. In order to further strengthen the regulatory and supervisory framework, several measures are expected to be put in place for banks and NBFCs during 2022-23, as covered in Chapter VI of this Report.

I.42 In the payments space, going forward, the focus would be on enhancing awareness about digital payments and extending the outreach of payment systems across India and beyond. Implementation of the geo-tagging framework will provide precise locations of existing payment touch points and facilitate implementation of targeted literacy programmes and intervention strategies. The possibility of linking India's payment systems to other jurisdictions, including the ongoing initiative of interlinking India's fast payment system - UPI - with similar systems in other jurisdictions, will enhance cross-border payment arrangements, including remittances.

I.43 The Reserve Bank is engaged in the introduction of a central bank digital currency (CBDC) in India. The design of CBDC needs to be in conformity with the stated objectives of monetary policy, financial stability and efficient operations of currency and payment systems. The Reserve Bank proposes to adopt a graded approach to introduction of CBDC, going step by step through stages of Proof of Concept[12], pilots and the launch.

I.44 In the FinTech space, the Reserve Bank will facilitate setting up of 75 Digital Banking Units in 75 districts of the country during 2022-23. It will also work towards ensuring execution of key projects of importance through the Reserve Bank Innovation Hub (RBIH) during the year while finalising its vision, mission and strategy documents and a policy framework for digital banking and FinTechs. Testing and evaluation of entities under the third and fourth cohorts of the Regulatory Sandbox on "MSME Lending" and "Prevention and Mitigation of Financial Frauds" as also the outcomes from the hackathon HARBINGER 2021 are expected to provide innovative solutions for the financial sector.

I.45 The Reserve Bank will continue its efforts towards improving the regulatory ecosystem for customer protection, upgrading and providing easy and quick access to the grievance redress mechanism, and also percolating customer awareness and financial education to the excluded sections of the population as also to remote areas of the country. Looking ahead, the implementation of the various milestones under the National Strategy for Financial Inclusion (NSFI) and the National Strategy for Financial Education (NSFE) would sustain the momentum of financial inclusion in the country.

I.46 To sum up, the year gone by brought many challenges, but a recovery is underway in spite of headwinds. The future path of growth will be conditioned by addressing supply-side bottlenecks, calibrating monetary policy to bring inflation within the target while supporting growth and targeted fiscal policy support to aggregate demand, especially by boosting capital spending. Undertaking structural reforms to improve India's medium term growth potential holds the key to secure sustained, balanced and inclusive growth, especially by helping workers adapt to the after-effects of the pandemic by reskilling and enabling them to adopt new technologies for raising productivity.

[12] It is an exercise in which work is focused on determining whether an idea can be turned into a reality or to verify, if the idea will function as envisioned.

II ECONOMIC REVIEW

The Indian economy renewed its tryst with the recovery from the pandemic in 2021-22, albeit interrupted by a virulent second wave of infections and a relatively milder third wave. Headline inflation spiked on repetitive supply shocks during the year, though reversion to the target was also evident as shocks receded. Monetary and credit conditions evolved in sync with the accommodative monetary policy stance, although global spillovers towards the close of the year led to some tightening in financial conditions and heightened volatility in financial markets. The intensification and materialisation of geopolitical risks in early 2022 overcast the global outlook, with EMEs including India, being the most vulnerable to spillovers. A robust recovery in tax revenues helped contain the gross fiscal deficit close to budgetary targets. The sustained strength of exports and revival in inbound remittances underpinned the viability of the balance of payments, with net capital flows also contributing to the accretion to foreign exchange reserves.

II.1 THE REAL ECONOMY

Global Economy[1]

II.1.1 Omicron, rising food prices and sticky inflation, the US Fed's much anticipated lift-off, and escalation of geopolitical tensions towards the end of the year flaring up into conflict in early 2022 defined the macroeconomic and financial landscape during this Annual Report's period under review. Over the first half of 2021, an uneven and divergent recovery had lifted the global economy out of the deep contraction imposed by the pandemic in the preceding year. According to the International Monetary Fund (IMF) in its World Economic Outlook of April 2022, world GDP expanded by 6.1 per cent in 2021 as against a contraction of 3.1 per cent in the previous year. After a sharp setback due to the virulent Delta variant of the coronavirus in the early part of 2021, the global recovery had regained some traction even as paths of growth were widely differentiated across jurisdictions by the size and durability of monetary and fiscal stimuli, and access to vaccines. Global growth lost pace in the second half of the year, beset by the highly transmissible but milder variant of COVID-19 – Omicron. Despite these waves superimposed on global supply chain and logistics disruptions, global trade recovered in the second half of the year and grew by 10.1 per cent in 2021. Underpinning this upturn, global manufacturing accelerated to 9.4 per cent in 2021 from 4.2 per cent in 2020.[2]

II.1.2 Even as the release of pent-up spending supported aggregate demand, persisting supply disruptions fuelled inflation which increased markedly in the US, the Euro area and a number of emerging market economies (EMEs). Commodity prices increased sharply in 2021 from their lows a year ago as the nascent recovery in demand collided with supply bottlenecks. While

[1] Global developments relating to prices, financial markets, fiscal, and external sectors are also covered in the respective sections of this chapter.

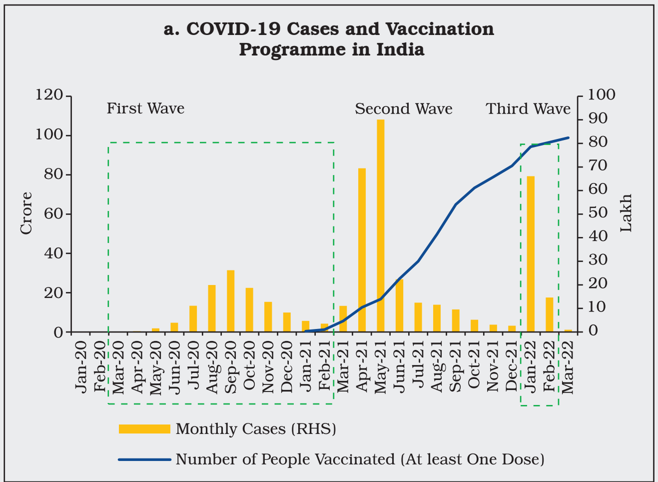
[2] United Nations Industrial Development Organisation (UNIDO).

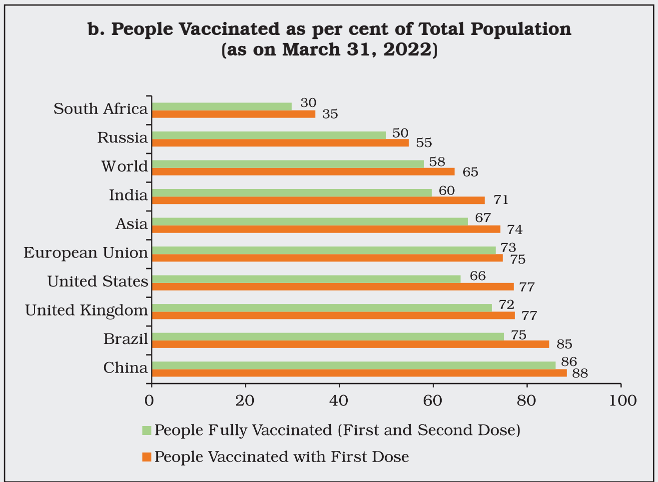
fiscal and monetary policies remained largely accommodative, inflation ruling above targets forced several EMEs to tighten monetary policy, with advanced economy (AE) central banks following in their train. Tapers of pandemic-induced liquidity overhangs but without tantrums tightened financial conditions. In the financial markets, risk-off sentiment drove equity markets into correction. Bearish government bond market experienced hardening of real yields across AEs. As shorter-term yields began to reflect the shift in the monetary policy stance, the consequent flattening of the yield curve pointed to global growth momentum losing steam towards the close of 2021 and in early 2022. As risk aversion set in with geopolitical conflict, there was considerable re-pricing of financial assets. Consequently, gold prices have surged, also buoyed by stagflation concerns and rate hike expectations. Investors face a very different dynamic as fiscal and monetary policy support fades in the face of elevated levels of public debt[3] with higher and persisting inflationary pressures across AEs and EMEs alike.

Domestic Economy

II.1.3 In 2021-22, India renewed its tryst with the recovery that had commenced in the second half of 2020-21 with the abatement of the first wave. The second wave took a grievous toll, however, pushing the nation into arguably the worst health crisis the country had ever faced (Chart II.1.1). Supported by continuing fiscal measures and congenial financial conditions engendered by monetary, regulatory and liquidity initiatives undertaken by the Reserve Bank, including some unconventional ones, the real GDP bounced back in Q2:2021-22 and grew at 1.3 per cent over Q2:2019-20. The recovery was further entrenched in Q3:2021-22 with GDP exceeding the corresponding pre-pandemic quarter by 6.2 per cent. In Q4, however, the third wave of the pandemic driven by the Omicron variant and more recently, geopolitical conflict has caused a loss of pace in the recovery and darkened the outlook.

Chart II.1.1: COVID-19 Cases and Vaccination Status





Source: Ourworldindata.org.

[3] Refer to footnote 6 of Chapter I.

II.1.4 Unlike in the first wave, the economic impact of the second wave of the pandemic was contained due to the localised nature of lockdowns and better adaptability to pandemic protocols. Growth impulses, rejuvenated by the receding of the second wave from June 2021, were fortified by the pace and scale of inoculation.[4]

II.1.5 Turning to financial conditions, money markets were flush with abundant liquidity, with short-term interest rates aligned to the floor of the Reserve Bank's liquidity adjustment facility (LAF), although they did firm up in the second half of the year as a result of rebalancing of liquidity towards auctions and away from the fixed rate reverse repo, a cessation of large liquidity injections through secondary market asset purchases and the lapsing of some extraordinary measures on due dates. In the debt markets, yields hardened in the second half of the year and spreads widened as market sentiment turned bearish on large issuances by governments (centre and states) and the recurring incidence of global spillovers as monetary policy stances diverged across the world. The Indian rupee (INR) traded range-bound, displaying strong mean reversion after every bout of volatility from global developments. The INR was also buoyed by sustained capital inflows in the form of foreign direct investment and portfolio flows attracted by a spate of initial public offerings (IPOs). Domestic equity indices outperformed the peer country indices in 2021. After two years of large gains, however, valuations of Indian equities were stretched by most conventional yardsticks.

II.1.6 The Omicron-led third wave hit India at the end of December 2021. It, however, turned out to be short-lived. The spike in infections with high transmissibility was followed by a steep fall - daily infections peaked on January 20, 2022 with 3.47 lakh new cases and total 20.1 lakh active cases but began to subside thereafter. The mortality rate remained much below that of the second wave. High frequency indicators of economic activity suggest that the impact of third wave on the economy will likely be muted in comparison with the first two waves.

II.1.7 Against this backdrop, an analysis of aggregate demand in the following sub-section is followed by an assessment of aggregate supply conditions. Sub-section 4 presents a drill-down into employment and labour market developments. The concluding sub-section provides some policy perspectives.

2. Aggregate Demand

II.1.8 The second advance estimates (SAE) that were released by the National Statistical Office (NSO) on February 28, 2022 indicated that aggregate demand, measured by real GDP, registered a growth of 8.9 per cent in 2021-22, up from a contraction of 6.6 per cent in the previous year (Table II.1.1 and Appendix Table 1). Consequently, the GDP level surpassed the pre-pandemic level of 2019-20 by 1.8 per cent.

II.1.9 In the first half of 2021-22, real GDP registered double-digit growth which tapered in the second half due to the gradual waning of base effects. The underlying momentum remained strong, however, as evident in a sharp rebound in the seasonally adjusted annualised growth rate (SAAR) in Q2:2021-22 that appears to have been sustained in subsequent quarters (Chart II.1.2 and Appendix Table 2).

[4] Refer to footnote 1 of Chapter I.

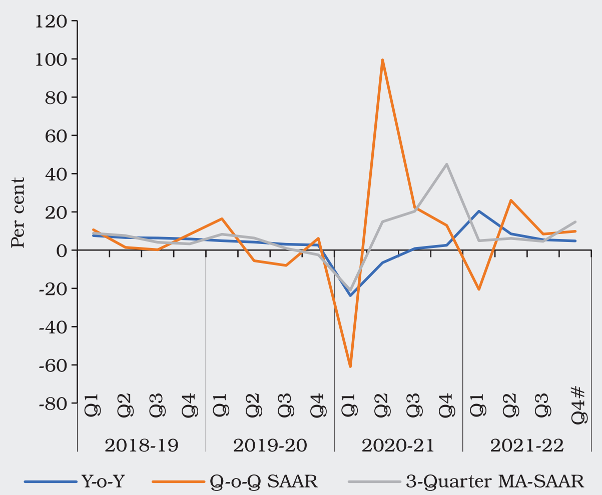
Table II.1.1. Real GDP Growth

Component	Growth (per cent)				
	2017-18	2018-19	2019-20	2020-21	2021-22
1	2	3	4	5	6
I. Total Consumption Expenditure	**7.1**	**7.0**	**4.9**	**-4.5**	**7.2**
Private	6.2	7.1	5.2	-6.0	7.6
Government	11.9	6.7	3.4	3.6	4.8
II. Gross Capital Formation	**14.5**	**6.2**	**-5.2**	**-13.8**	**21.5**
Gross Fixed Capital Formation	7.8	11.2	1.6	-10.4	14.6
Change in Stocks	68.3	27.3	-58.8	-110.7	-1,723.9
Valuables	40.2	-9.7	-14.2	26.4	63.0
III. Net Exports					
Exports	4.6	11.9	-3.4	-9.2	21.1
Imports	17.4	8.8	-0.8	-13.8	29.9
IV. GDP	**6.8**	**6.5**	**3.7**	**-6.6**	**8.9**

Source: NSO.

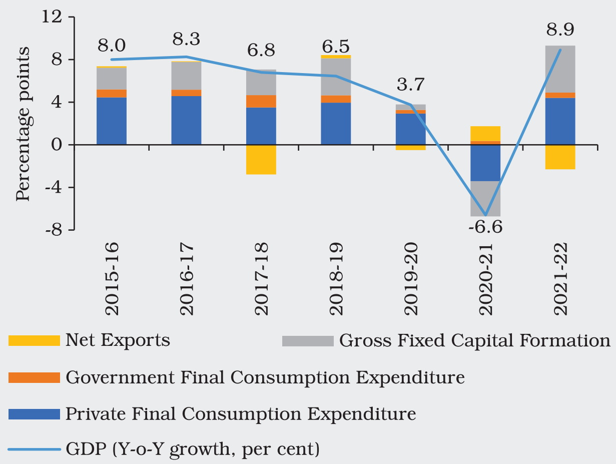
II.1.10 Within this turnaround during the year, there was a compositional shift among constituents of aggregate demand (Chart II.1.3). Private final consumption expenditure (PFCE) remained weak by historical standards although it managed to surpass its pre-pandemic level by 1.2 per cent. With contact-intensive activity yet to normalise fully, discretionary consumption spending lacked traction. Government consumption expenditure accelerated in 2021-22, providing an upward thrust to aggregate demand. Gross fixed capital formation (GFCF) rebounded sharply, primarily backed by public investment as government prioritised capital expenditure. Exports recovered strongly in spite of hostile international environment and entered into positive growth territory from Q4 of 2020-21. Propelled by surging import demand and rising international commodity prices, especially of crude, the current account shifted from a surplus to modest deficits from Q2:2021-22.

Chart II.1.2: GDP Growth: Y-o-Y and 3-Quarter MA-SAAR



#: Implicit growth.
Source: National Statistical Office (NSO) and RBI staff estimates.

Chart II.1.3: Weighted Contribution to GDP Growth



Note: Component-wise contributions do not add up to the growth rate as change in stocks, valuables and statistical discrepancies are not included.
Source: NSO.

Consumption

II.1.11 Private consumption - the mainstay of aggregate demand in India - partially recuperated with the gradual relaxation of restrictions on mobility and the accelerated pace of vaccination, both enabling a restoration of consumer confidence. Spending on consumer durables improved on a y-o-y basis and discretionary expenditure mainly took the form of revenge spending. A combination of factors, *viz.*, robust growth in agriculture and allied activities, support from the government in the form of cut in excise duty on petrol and diesel, and continuation of direct benefit transfer (DBT) schemes helped shore up confidence and boost consumption spending.

II.1.12 With the second wave's intensity, private consumption sank below its pre-pandemic level in Q1:2021-22 and consumer confidence plummeted to an all-time low. The wave peaked during the month of May 2021 and thereafter, conditions started to improve. In the subsequent rounds, the Reserve Bank's consumer confidence survey exhibited gradual improvement in consumer perceptions pertaining to both the current situation and future expectations except a dip in the January 2022 round at the peak of Omicron variant impact of COVID-19. PFCE rebounded in Q2 and Q3 of 2021-22, with an uptick in y-o-y terms as well as on a sequential basis (in level terms). The release of pent-up demand coupled with an upbeat festival season sentiment was partially offset by supply-side disruptions in the form of shortages of supply of coal, electricity and, particularly, semiconductor chips. This was manifested in moderation in growth in sales of passenger vehicles, motorcycles, and two-wheelers during the second half of the year. On the other hand, an encouraging development was the gradual pick-up in bank credit, especially in the personal loans segment. Credit growth also accelerated in respect of agriculture, MSMEs and select services.

II.1.13 Indicators of rural demand reveal a slackness, *vis-a-vis* urban demand despite resilience in agriculture and allied activities during the first half of the year. Furthermore, a bountiful monsoon, adequate soil moisture and replenished reservoir levels brightened its prospects for the rest of the year. However, the last quarter reflected signs of demand slowdown as firms increasingly passed on cost pressures to end use customers.

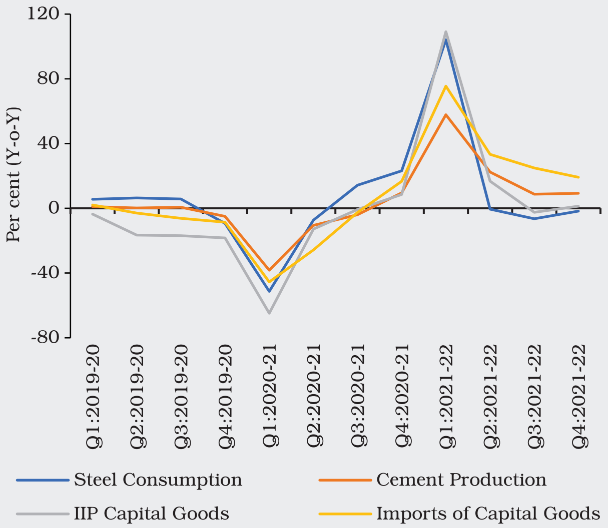
Investment and Saving

II.1.14 The rate of gross domestic investment in the Indian economy, measured by the ratio of gross capital formation (GCF) to GDP at current prices, nosedived to 27.3 per cent in 2020-21 from 30.7 per cent in the preceding year. Although data on GCF are not yet available for 2021-22, movements in its constituents suggest an uptick led by government spending on infrastructure. The ratio of real GFCF to GDP surged to 32.0 per cent in 2021-22 from 30.5 per cent in 2020-21, reflecting a revival of investment sentiments. GFCF registered an acceleration of 14.6 per cent in 2021-22, on the back of a favourable base effect.

II.1.15 Among the components of GFCF, recovery in the construction sector was facilitated by the focus of the central government on infrastructure, in addition to an uptick in the housing segment on favourable interest rates and attractive offers by developers. This resurgence is evident in its proximate coincident indicator – cement production (Chart II.1.4). A similar recovery became evident in investment in machinery and equipment. Both its proximate coincident indicators - imports and production of capital goods - registered sharp expansion in 2021-22.

II.1.16 As per the order books, inventories and capacity utilisation survey (OBICUS) of the Reserve Bank, capacity utilisation in manufacturing recovered to 68.3 per cent in

Chart II.1.4: Indicators of Investment Demand



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

Q2 and further to 72.4 per cent in Q3:2021-22 after a drop to 60.0 per cent in Q1:2021-22 in the wake of the second wave of the COVID-19. The inventory to sales ratio increased in Q1:2021-22, reflecting the containment measures under which the economy was operating. With the subsequent improvement in sales and stable levels of inventories maintained by manufacturing companies, the inventory to sales ratio declined sequentially in Q2 and Q3:2021-22. The respondents of the 97th round of the Industrial Outlook Survey (IOS) assessed that there was improvement in demand conditions in terms of production, order books and employment situation in Q4:2021-22, *albeit* at a slower pace than Q3:2021-22. Capacity utilisation and the overall financial situation are expected to improve further in Q1:2022-23 while business expectations remained high, though optimism has moderated from the previous quarter. Respondents expressed higher optimism for growth in selling prices, indicating more pricing power combined with input cost pressures in Q1:2022-23.

II.1.17 The rate of gross domestic saving had dropped to 27.8 per cent of gross national disposable income (GNDI) in 2020-21 from 29.4 per cent a year ago due to dissaving of the general government sector and a fall in saving of the non-financial corporations. The financial saving of the household sector – the most important source of funds – surged by 3.6 percentage points to 11.5 per cent of GNDI in 2020-21, the highest in over two decades (Table II.1.2 and

Table II.1.2: Financial Saving of the Household Sector

(Per cent of GNDI)

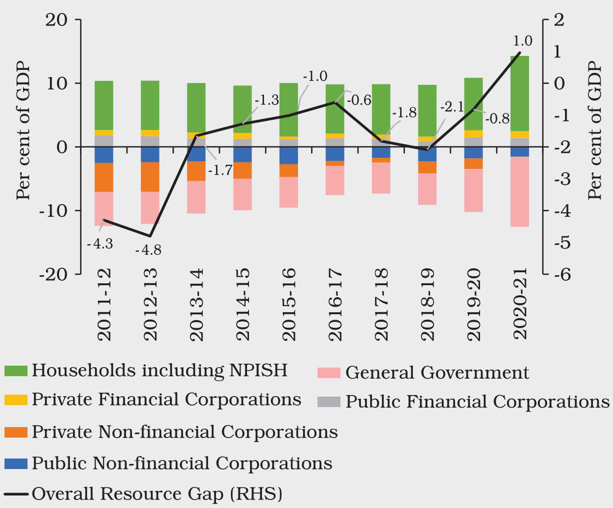
Item	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
1	2	3	4	5	6	7	8	9	10
A. Gross Financial Saving	**10.5**	**10.4**	**9.9**	**10.7**	**10.4**	**11.9**	**11.8**	**11.7**	**15.5**
of which:									
1. Currency	1.1	0.9	1.0	1.4	-2.1	2.8	1.4	1.4	1.9
2. Deposits	6.0	5.8	4.8	4.6	6.3	3.0	4.2	4.2	6.3
3. Shares and Debentures	0.2	0.2	0.2	0.2	1.1	1.0	0.4	0.4	0.5
4. Claims on Government	-0.1	0.2	0.0	0.5	0.7	0.9	1.1	1.3	1.6
5. Insurance Funds	1.8	1.8	2.4	1.9	2.3	2.0	2.0	1.8	2.6
6. Provident and Pension Funds	1.5	1.5	1.5	2.1	2.1	2.1	2.1	2.2	2.5
B. Financial Liabilities	**3.2**	**3.1**	**3.0**	**2.7**	**3.0**	**4.3**	**4.0**	**3.9**	**4.0**
C. Net Financial Saving (A-B)	**7.2**	**7.2**	**6.9**	**7.9**	**7.3**	**7.5**	**7.8**	**7.9**	**11.5**

GNDI: Gross National Disposable Income.
Note: Figures may not add up to total due to rounding off.
Source: NSO.

Appendix Table 3). The reduction in discretionary spending amidst the pandemic and the associated forced saving as well as a surge in precautionary saving on concerns relating to income flows in the near-term boosted saving by households.

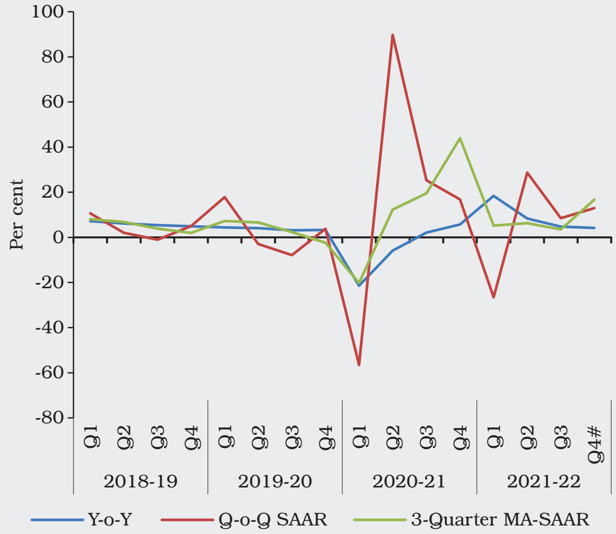
II.1.18 In 2020-21, saving had exceeded investment for the first time since 2004-05. The surplus from the household sector amounted to 11.8 per cent of GDP in 2020-21. The resource gap of private non-financial corporations closed in 2020-21, due to a curtailment in investment amidst the pandemic. As alluded to earlier, the drawdown on saving by the general government sector increased due to increase in spending to ameliorate the impact of the pandemic (Chart II.1.5).

Chart II.1.5: Sectoral Resource Gap



NPISH: Non-profit Institutions Serving Households.
Source: NSO.

Chart II.1.6: GVA Growth: Y-o-Y and 3-Quarter MA-SAAR



#: Implicit growth.
Sources: NSO and RBI staff estimates.

3. Aggregate Supply

II.1.19 Aggregate supply, measured by gross value added (GVA) at basic prices, expanded by 8.3 per cent in 2021-22 after registering a contraction of 4.8 per cent in 2020-21. With the gradual unshackling of the economy from pandemic-related restrictions, the three-quarter moving average of seasonally adjusted annualised growth rate (MA-SAAR) exhibited an upturn in Q2:2021-22 and remained resilient in Q3:2021-22 (Chart II.1.6).

II.1.20 The acceleration in GVA growth was facilitated by a sustained recovery in the industrial and the services sectors, *albeit* on a favourable base. The agricultural sector provided a cushion to the economy, staying resilient throughout the year (Table II.1.3).

Table II.1.3: Real GVA Growth

(Per cent)

Sector	2017-18	2018-19	2019-20	2020-21	2021- 22
1	2	3	4	5	6
I. Agriculture, Forestry and Fishing	**6.6**	**2.1**	**5.5**	**3.3**	**3.3**
II. Industry	**6.1**	**4.9**	**-2.2**	**-1.8**	**10.4**
II.1 Mining and Quarrying	-5.6	-0.8	-1.5	-8.6	12.6
II.2 Manufacturing	7.5	5.4	-2.9	-0.6	10.5
II.3 Electricity, Gas, Water Supply and Other Utility Services	10.6	7.9	2.2	-3.6	7.8
III. Services	**6.2**	**7.1**	**5.7**	**-7.8**	**8.8**
III.1 Construction	5.2	6.5	1.2	-7.3	10.0
III.2 Trade, Hotels, Transport, Communication and Services related to Broadcasting	10.3	7.2	5.9	-20.2	11.6
III.3 Financial, Real Estate and Professional Services	1.8	7.0	6.7	2.2	4.3
III.4 Public Administration, Defence and Other Services	8.3	7.5	6.3	-5.5	12.5
IV. GVA at Basic Prices	**6.2**	**5.8**	**3.8**	**-4.8**	**8.3**

Source: NSO.

II.1.21 Globally, COVID-19 induced shutdowns caused output losses in the manufacturing sector and overall GDP. In the case of India, the sharp contraction in Q1:2020-21 during the stringent nationwide lockdown was followed by a rebound in profits of the corporate non-financial sector (Box II.1.1).

Box II.1.1
Corporate Performance during the Pandemic: The Role of Corporate Tax Rate Cut

Indian corporates were shielded from the pandemic by the rationalisation in conduct of business that focused on cost-saving and a corporate tax rate cut in September 2019[5] (RBI, 2021). This tax cut was in league with other countries as observed across the Organisation for Economic Cooperation and Development (OECD) countries, the average corporate income tax rate declined from 32.5 per cent in 2000 to 23.9 per cent in 2018, and similar measures were undertaken in the US and the UK (Kopp *et al.*, 2019). Before the tax rate cut, the effective rate for the manufacturing sector was 27.8 per cent, while for the non-manufacturing sector, it was higher at 30.5 per cent on an average, impinging upon the competitiveness of Indian exports (Tables 1a and 1b).

Table 1a: Effective Tax Rate for Manufacturing

Industry Group	Share in Industrial GVA*	Effective Tax Rate Before Tax Cut	Tax Benefit (percentage points)
1	2	3	4
Food Beverages and Tobacco	11.1	32.8	7.6
Textiles	7.0	27.7	2.5
Metal Products	15.4	27.4	2.2
Machinery and Equipment	28.1	26.8	1.7
Transport Equipment	13.6	30.9	5.8
Refined Petroleum	6.7	21.6	0.0
Pharmaceuticals	7.4	25.4	0.2
Rubber and Plastic	4.6	29.5	4.3

*: Shares in GVA are calculated based on annual figures for 2019-20 from National Account Statistics 2022.

Source: Union Budget documents.

Table 1b: Effective Tax Rate for Non-Manufacturing

Sector	Share in Services GVA	Effective Tax Rate Before Tax Cut	Tax Benefit (percentage points)
1	2	3	4
Wholesale and Retail Trade	20.0	31.4	6.2
Transport and Logistics	7.7	29.5	4.3
Real Estate	1.2	26.8	1.6
Financial Services	9.5	37.0	11.8
IT and Related Services	8.5	29.0	3.9

Source: Union Budget documents.

(Contd.)

5 The Union Government announced a sharp cut in corporate tax rates from 30 per cent to 22 per cent. Inclusive of all surcharges and cess, effective corporate tax rate (ETR) has come down to 25.2 per cent, provided the companies do not avail any other tax incentives or benefits. Apart from this, for new manufacturing companies, effective tax rate would be 17.0 per cent, thereby increasing the incentives for fresh investment.

A difference-in-difference (DID) panel regression to assess the differential impact of the tax rate cut attempts to test the hypothesis that firms in sectors which benefitted from the tax rate cut in terms of lower effective corporate tax rate (ETR) registered higher net profit[6] margin (NPM) during the post-tax cut period than in the pre-tax cut period. The reduction in the corporate tax rate would only increase profit after tax (PAT), with profit before depreciation, interest and tax (PBDIT) remaining unchanged. As the ETR at a firm level is not directly available, it is computed for each firm as the ratio of corporate tax paid to total taxable income (Guha, 2007). Firms enjoying a reduction by at least five percentage points compared to the pre-tax cut period average constitute the treatment group and the rest form the control group. The period considered is from Q1:2018-19 to Q4:2020-21. The pre-tax cut period covers the period Q1:2018-19 to Q1:2019-20, while the period Q2:2019-20 to Q4:2020-21 represents the post-tax cut period.[7]

Net profit margin (NPM) turns out to be significantly higher for firms in the treatment group in both manufacturing and non-manufacturing sectors. Net profit margin improves significantly in the post-tax cut period (Table 2). Furthermore, the impact of the tax rate cut on profitability is stronger for the non-manufacturing sector than for the manufacturing sector.

Table 2: Empirical Results

Dependent Variable	NPM Manufacturing (Before Tax)	NPM Manufacturing (After Tax)	NPM Non-manufacturing (Before Tax)	NPM Non-manufacturing (After Tax)
1	2	3	4	5
Intercept	26.69*	6.4648***	27.13*	15.8048***
	(11.43)	(0.3125)	(11.29)	(0.4786)
Time (τ)	-13.58	2.3482***	-13.81	2.1562**
	(22.28)	(0.5951)	(22.05)	(0.9299)
Treatment (θ)	37.45**	2.4190***	36.69**	3.8319***
	(13.92)	(0.3830)	(13.75)	(0.5813)
Interaction (δ)	26.12	0.5631	25.66	0.7052
	(27.09)	(0.7262)	(26.77)	(1.1268)
No. of Observations	8269	8269	5934	5934
F	27.64	2.764	2.716	20.04
Prob>F	0.0000	0.04044	0.04315	0.0000

***: Significant at 1 per cent level. **: Significant at 5 per cent level.
*: Significant at 10 per cent level.
Note: Figures in the parentheses denote the standard errors.
Source: RBI staff estimates.

References:

1. Guha, Atulan (2007), ‘Company Size and Effective Corporate Tax Rate Study on Indian Private Manufacturing Companies’, *Economic and Political Weekly*, Vol. 42, Issue 20, Pages 1869-1874.
2. Kopp, E., L. Daniel, M. Susanna (2019), ‘U.S. Investment Since the Tax Cuts and Jobs Act of 2017’, Working Paper No. 19/120, *International Monetary Fund*, Washington, D.C.
3. RBI (2021), ‘Contours of Economic Recovery’, Inaugural Address by Shri Shaktikanta Das, Governor, Reserve Bank of India at 8th SBI Banking & Economics Conclave, November 16, Mumbai.

Agriculture and Allied Activities

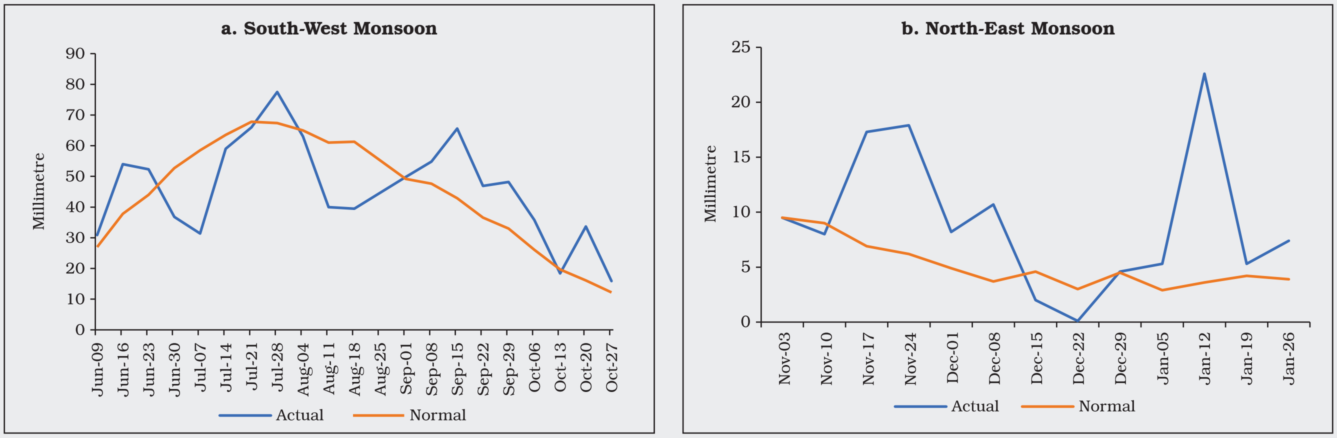
II.1.22 Agriculture and allied activities posted a robust performance in 2021-22, even though the second wave of the pandemic affected rural areas on a larger scale than during the first wave. The sector registered a growth of 3.3 per cent in 2021-22, with record production in foodgrains. The strong growth was aided by a sharp catch-up in south-west monsoon (SWM) and *kharif* sowing in the month of September 2021. Except for rice and wheat, the prospects for *rabi* production was good with robust sowing, coupled with adequate soil moisture and replenished reservoir levels. The buoyancy in the agriculture sector was mirrored in sales of tractors and fertilisers, which consistently outstripped pre-pandemic levels for the major part of 2021-22.

[6] Net profit margin is calculated as the proportion of net profit to net sales. In case of profit before tax, the ratio of PBDIT to net sales has been used. Corporate data at firm level are obtained from the Centre for Monitoring Indian Economy (CMIE) prowess IQ database for computing the profitability indicators.

[7] The estimated model is formulated as: $\pi_{ijt}=\gamma_t+\tau\times1_{t=P}+\theta\times1_{(i=T)}+\delta\times1_{(t=p)}\times1_{(i=T)}+\epsilon_{ijt}$

where, π_{ijt} is the profitability indicator for i^{th} firm in industry j at t^{th} quarter. τ is the coefficient for time variable which assumes a value 1, if the observation is in the post tax-cut period and 0, otherwise. θ is the coefficient for the reduction in ETR which takes a value 1 if the observation falls in the treatment group and 0 otherwise. δ denotes the coefficient for the interaction term.

Chart II.1.7: Weekly Rainfall 2021-22



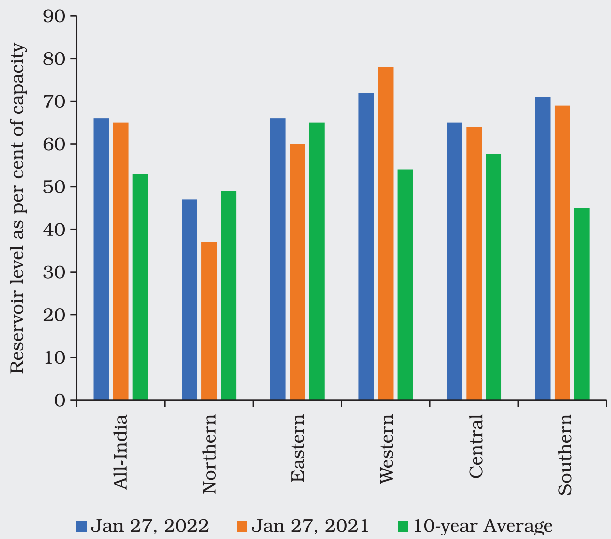
Note: North-east monsoon rains withdrew on January 22, 2022.
Source: India Meteorological Department (IMD), GoI.

II.1.23 In 2021, the SWM made its onset on June 3, but lost momentum during end-June to mid-July and again in August, with uneven distribution of rainfall across states (Chart II.1.7a). Notwithstanding these two weak spells of rainfall during the critical sowing months of July and August, rainfall revived subsequently and ended on a positive note for the season, *i.e.*, 'normal', with a deficit of 1 per cent from the long period average (LPA) as on September 30, 2021. *Kharif* sowing which stalled in July and August, subsequently, caught up and surpassed the previous year's sowing levels by 0.2 per cent and 5-year average levels by 4.1 per cent as on September 30, 2021.

II.1.24 Subsequently, the delayed withdrawal of the SWM and simultaneous start of the north-east monsoon (NEM) on October 25, 2021 created congenial soil moisture conditions and raised reservoir levels (Chart II.1.7b). As on January 27, 2022, the reservoir level stood at 66 per cent of full reservoir capacity as compared with the decadal average of 53 per cent (Chart II.1.8).

II.1.25 The jump in *rabi* acreage this year was mainly driven by higher sowing of oilseeds, especially mustard and rapeseed, and gram and lentils, offsetting the lower sowing of wheat. Consequently, total foodgrain production in 2021-22 is placed at 3,145.1 lakh tonnes, in the third advance estimates (3rd AE), 1.2 per cent higher than 2020-21 final estimates (FE) [Table II.1.4]. The downward revision of foodgrain production estimate by 0.5 per cent (3rd AE over

Chart II.1.8: Reservoir Level



Source: Central Water Commission, GoI.

Table II.1.4: Agricultural Production 2021-22

(Lakh tonnes)

Crop	Season	2020-21		2021-22		2021-22 (3rd AE) Variation (Per cent)		
		3rd AE	Final	Target	3rd AE	Over 2020-21		Over 2021-22
						3rd AE	FE	Target
1	2	3	4	5	6	7	8	9
Foodgrains	*Kharif*	1,483.6	1,505.8	1,514.3	1,549.3	4.4	2.9	2.3
	Rabi	1,570.8	1,601.7	1,558.8	1,595.9	1.6	-0.4	2.4
	Total	**3,054.4**	**3,107.4**	**3,073.1**	**3,145.1**	**3.0**	**1.2**	**2.3**
Rice	*Kharif*	1,043.0	1,052.1	1,043.0	1,110.4	6.5	5.5	6.5
	Rabi	171.6	191.6	168.0	186.2	8.5	-2.8	10.8
	Total	1,214.6	1,243.7	1,211.0	1,296.6	6.8	4.3	7.1
Wheat	*Rabi*	1,087.5	1,095.9	1,100.0	1,064.1	-2.2	-2.9	-3.3
Coarse Cereals	*Kharif*	355.7	367.5	373.1	356.4	0.2	-3.0	-4.5
	Rabi	140.9	145.7	139.0	150.6	6.9	3.4	8.3
	Total	496.6	513.2	512.1	507.0	2.1	-1.2	-1.0
Pulses	*Kharif*	84.9	86.2	98.2	82.5	-2.8	-4.3	-16.0
	Rabi	170.9	168.4	151.8	195.0	14.1	15.8	28.5
	Total	**255.8**	**254.6**	**250.0**	**277.5**	**8.5**	**9.0**	**11.0**
Oilseeds (total)	*Kharif*	245.5	237.2	260.0	247.1	0.6	4.1	-5.0
	Rabi	120.1	122.2	124	137.9	14.8	12.8	11.2
	Total	**365.7**	**359.5**	**384.01**	**385.0**	**5.3**	**7.1**	**0.3**
Sugarcane	**Total**	**3,928.0**	**4,054.0**	**3,970.0**	**4,305.0**	**9.6**	**6.2**	**8.4**
Cotton #	**Total**	**364.9**	**352.5**	**370.0**	**315.4**	**-13.6**	**-10.5**	**-14.7**
Jute & Mesta ##	**Total**	**96.2**	**93.5**	**106.0**	**102.2**	**6.3**	**9.3**	**-3.6**

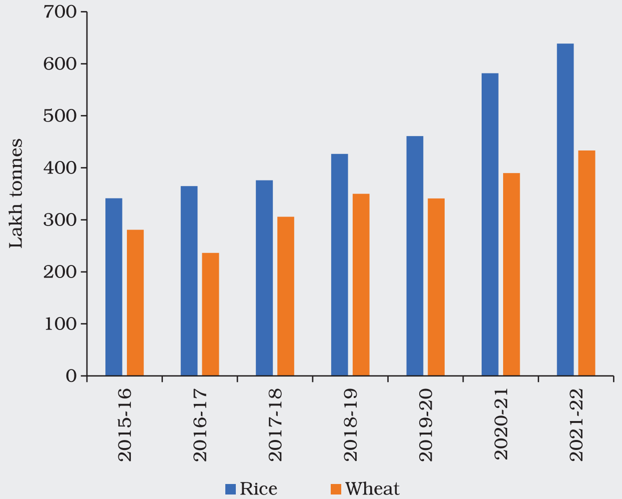
#: Lakh bales of 170 kg each. ##:Lakh bales of 180 kg each. AE: Advance Estimates. FE: Final Estimates.
Source: Ministry of Agriculture and Farmers Welfare, GoI.

2nd AE) is mainly on account of yield loss in wheat due to persistent heatwaves in 2022 (March and April). Horticulture crops logged a production at 3,332.5 lakh tonnes (1st AE) during 2021-22, 0.4 per cent lower than 2020-21 FE due to lower output of tomato, other vegetables, spices, flowers, aromatics and medicinal plants, while the output of total fruits and onion have registered an increase.

II.1.26 In line with the approach adopted in recent years, the minimum support prices (MSPs) announced in 2021-22 for both *rabi* and *kharif* crops ensured a minimum return of 50 per cent over the cost of production.[8] The prices were raised in the range of 1.1 - 8.6 per cent across crops. The procurement level at 503.42 lakh tonnes for rice as on March 31, 2022, during the *kharif* marketing season of 2021-22, was 8.2 per cent higher than the corresponding period of last year (Chart II.1.9). The stock of cereals remained comfortable at 7.2 and 1.4 times the quarterly buffer norms for rice and wheat, respectively, as on March 31, 2022 (Chart II.1.10).

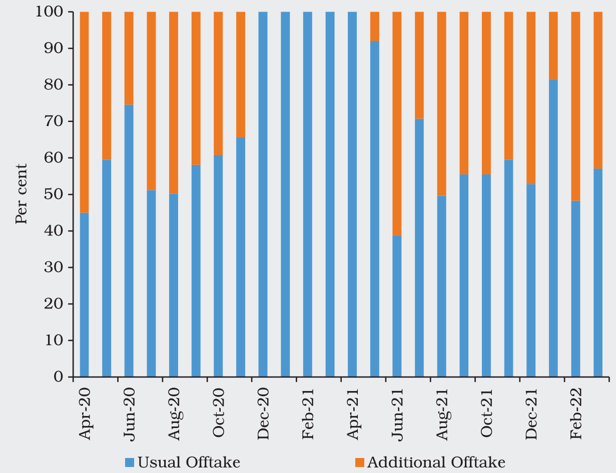
[8] Actual paid out cost *plus* imputed value of family labour (A2 + FL).

Chart II.1.9: Annual Procurement of Rice and Wheat (April to March)



Source: Ministry of Consumer Affairs, Food and Public Distribution, GoI.

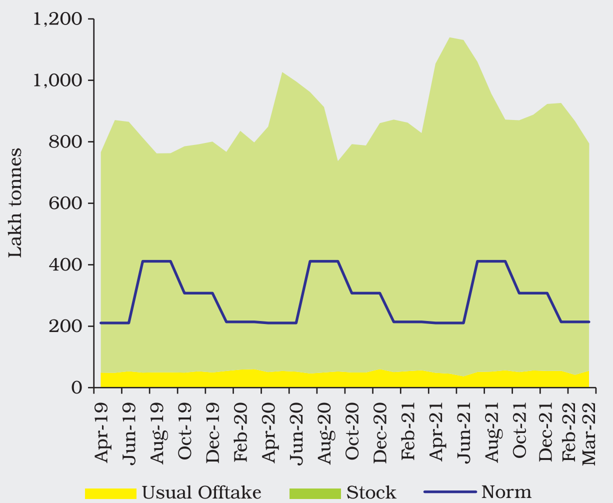
Chart II.1.11: Distribution of Foodgrains



Note: Additional offtake includes PM-GKAY, *AatmaNirbhar Bharat* Package (Migrants) and Non-NFSA (COVID-19).
Source: Ministry of Consumer Affairs, Food and Public Distribution, GoI.

II.1.27 Stock levels of cereals were maintained despite the additional free distribution of foodgrains over and above the normal National Food Security Act (NFSA) entitlements of 5 kilogram/person/month to all NFSA beneficiaries under the *Pradhan Mantri Garib Kalyan Anna Yojana* (PM-GKAY) to alleviate the impact of the pandemic (Chart II.1.11).

Chart II.1.10: Monthly Position of Stock and Buffer Norm



Source: Ministry of Consumer Affairs, Food and Public Distribution, GoI.

II.1.28 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 for agriculture and in turn, for overall economic performance. In this regard, central banks are being drawn into climate risk management because of the implications of extreme weather for business cycles, and monetary policy. Physical and transition risks for the financial sector have raised financial stability concerns among central banks (Box II.1.2).

Box II.1.2
Role of Central Banks in Climate Change

Central banks across the world are gearing up to manage climate risks to macroeconomic and financial stability (Issing, 2021; RBI, 2021; NGFS, 2020), [Table 1].

Using two types of methodologies, *i.e.*, the Integrated Assessment Models (IAMs) by the International Institute for Applied Systems Analysis (IIASA) [modelling primarily transition risk] and Network for Greening the Financial System-Climate Analytics (NGFS-CA) [modelling primarily physical risk], the implications for inflation and economic growth for India are assessed under the following scenarios: (a) Net zero 2050 (target of achieving net zero CO_2 emissions around 2050); (b) limiting global warming to below 2°C (though estimates suggest that a target of 1.5 °C may be needed for the net zero target); (c) divergent net zero (achieving net zero as above but with divergent policies across sectors, such as with faster phase out of oil use entailing higher costs); (d) delayed transition (policies which are consistent with 2°C target but under which adjustment is backloaded as a result of which annual emissions do not decrease till 2030); (e) nationally determined contributions (NDCs) [under which policies are pledged by nations even if not implemented]; and (f) current policies (only currently committed policies are implemented, leading to least emission reduction and high physical risks).

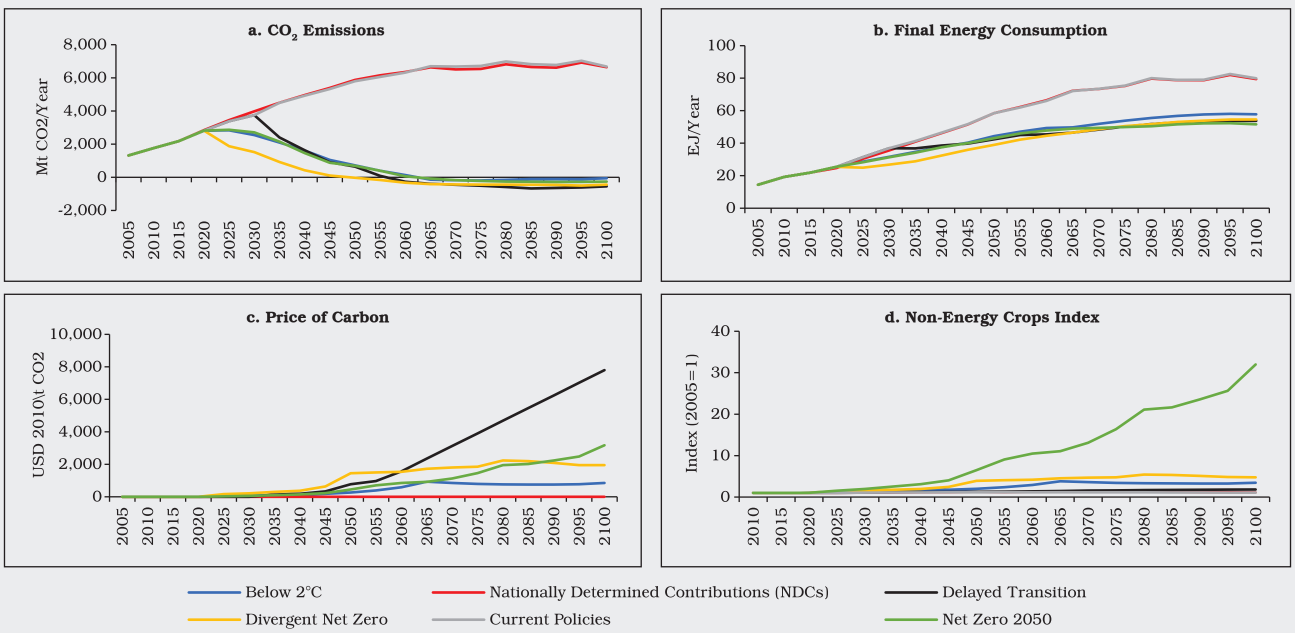
Table 1: Commitments by Select Central Banks on Climate Change

Central bank	Explicit Commitment
European Central Bank	*"Climate change can affect price stability. Therefore, we will do our part within our mandate to tackle it."*
Bank of England	*"We are not here to "solve" climate change or drive the transition…But central banks do have a role to play, and an important one at that."*
Federal Reserve Board, USA	*"While the primary responsibility for addressing climate change itself rests with elected officials, the Federal Reserve is committed to working within our existing mandates and authorities to address the implications of climate change, particularly the regulation and supervision of financial institutions and the stability of the broader financial system."*
Reserve Bank of India (RBI)	*"… the Reserve Bank, keeping in view our national commitments, priorities and complexity of our financial system, commits to: (a) exploring how climate scenario exercises can be used to identify vulnerabilities in the Reserve Bank supervised entities' balance sheets, business models and gaps in their capabilities for measuring and managing climate-related financial risks; (b) integrating climate-related risks into financial stability monitoring; and (c) building awareness about climate-related risks among regulated financial institutions and spreading knowledge about issues relating to climate change and methods to deal with them accordingly".*

Source: Central bank websites and RBI (2021).

Energy consumption and CO_2 emissions are significantly reduced under the scenarios involving global coordination to control temperature rise (Chart 1). However, they are

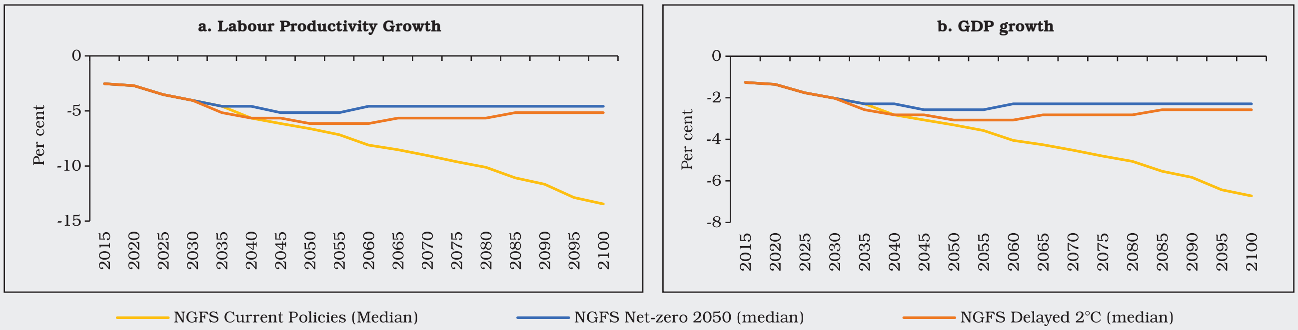
Chart 1: Implication of Climate Change under Various Scenarios for India



MT CO_2: Metric tonnes of CO_2. tCO_2: Tonnes of CO_2. EJ: Exajoule – one quintillion (10^8) joules.
Source: NGFS, IIASA.

(Contd.)

Chart 2: Impact of Climate Change on the Indian Economy



Source: NGFS CA, KLEMS database [capital (K), labour (L), energy (E), material (M) and services (S)], and RBI staff calculations.

associated with a significant rise in commodity and carbon prices. Higher carbon prices can feed into inflation following higher input costs. By contrast, the 'NDCs' and 'current policies' scenarios are not inflationary, but they may come with a higher long-run physical risk.

The NGFS-CA model is employed to assess how physical risk can affect India's economic growth. Interestingly, the ambitious plans for emission reduction, although inflationary, may cause limited loss in output growth than the scenario of 'current policies' which may result in a substantial loss in output and productivity over time (Chart 2).

In sum, the physical and transition risks either individually or together may be high for India under the 'current policies' scenario. A successful implementation of emission reduction for India carries inflationary risks, which will need to be managed through carefully crafted transition plans. The output losses associated with the transition may be limited.

References:

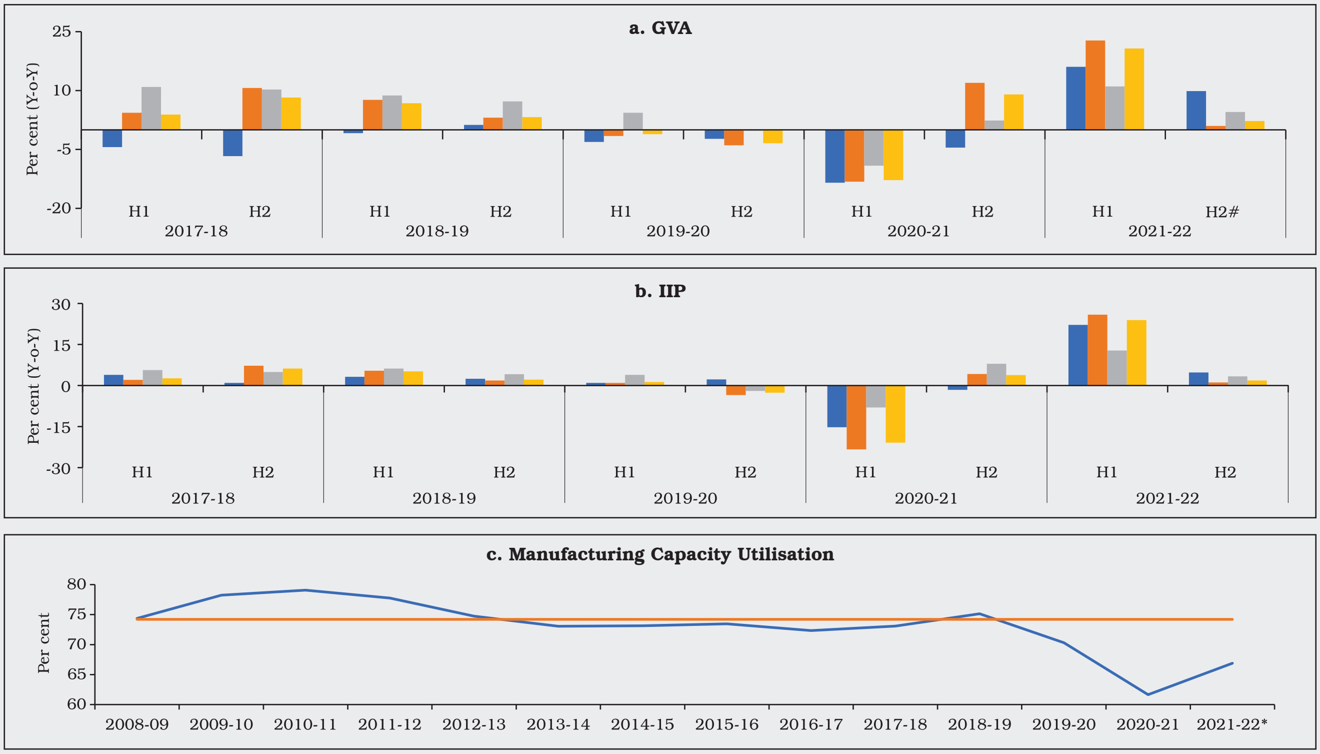
1. Issing, O. (2021), 'Central Banks – Independent or Almighty?' SAFE Policy Letter, No. 92.
2. NGFS (2020), 'Guide for Supervisors Integrating Climate-related and Environmental Risks into Prudential Supervision'.
3. RBI (2021), 'Statement of Commitment to Support Greening India's Financial System – NGFS', *Reserve Bank of India*.

Industrial Sector

II.1.29 The industrial sector, which was severely affected by the first wave of the pandemic, recovered with the easing of mobility restrictions in 2021-22. The second and third wave of the pandemic resulted in some moderation in the momentum of recovery. Industrial output measured by the index of industrial production (IIP) expanded by 11.4 per cent during 2021-22 as against a contraction of 8.4 per cent in the previous year (Charts II.1.12a and II.1.12b). However, manufacturing capacity utilisation continues to drag (Chart II.1.12c).

II.1.30 Within the manufacturing sector, recovery picked up in the second half, as the impact of second wave of COVID-19 subsided. Cumulatively, in 2021-22, of the 23 industry groups, eight recorded expansion over 2019-20 levels. In terms of use-based classification, infrastructure goods registered robust growth as increased activity in the construction sector led recovery. Other

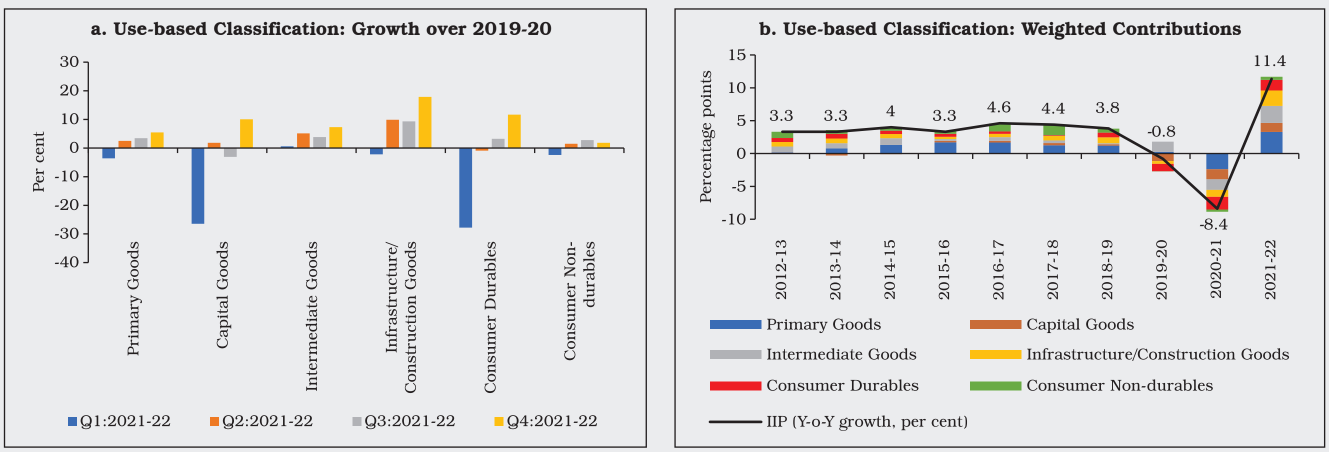
Chart II.1.12: Growth in Industrial Production



#: Implicit growth. *: April-December 2021.
Source: NSO and RBI staff calculations.

categories of intermediate and primary goods also recovered even as investment scenario remained muted with consumer demand yet to fully recover, as reflected in contraction in capital goods and consumer durables goods segment, over pre-pandemic 2019-20 (Chart II.1.13).

Chart II.1.13: Index of Industrial Production



Source: Ministry of Statistics and Programme Implementation, GoI.

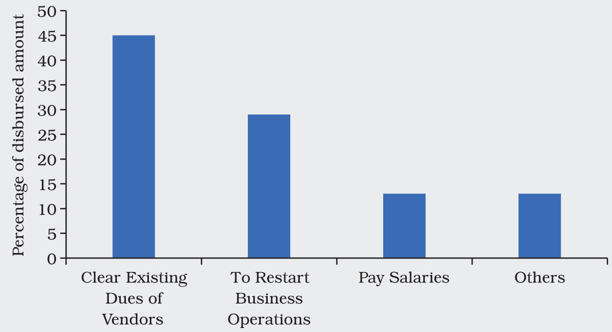
II.1.31 In India, micro, small and medium enterprises (MSMEs), which contribute about a third of the total gross value added (GVA) and provide employment to around 11 crore people was badly hit by the pandemic (Box II.1.3).

Box II.1.3
Impact of COVID-19 Relief Measures on Small Business Financing

The GoI and the Reserve Bank introduced several policy measures to support the MSME sector during the pandemic (RBI, 2021a, 2021b). Following the announcement of the emergency credit line guarantee scheme (ECLGS) in May 2020,[9] MSME loan demand increased sharply, particularly credit disbursements to small enterprises with loan sizes of less than ₹10 lakh during Q2:2020-21 (Charts 1 and 2). Nearly half of these loans were used to clear the dues of vendors providing raw materials; one-third was used to restart businesses, and the remaining amount was used for payment of salaries and to meet other expenses (Chart 3).

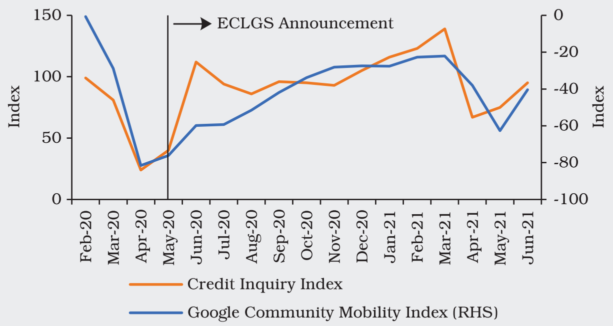
Of about 15 lakh ECLGS accounts, 88 per cent are standard assets, 10 per cent are special mention accounts (SMAs), and 2 per cent are non-performing assets (NPAs) [CIBIL, 2021a]. Out of total NPAs, the transition from NPAs to standard assets were significantly higher in ECLGS accounts than non-ECLGS accounts of the same borrowers during 2021-22 (Charts 4 and 5). The scheme, however,

Chart 3: Usage of ECLGS Funds



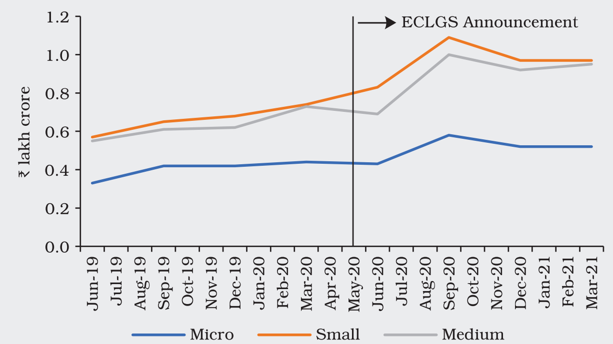
Source: TransUnion CIBIL ECLGS Insights Report.

Chart 1: Demand for MSME Credit



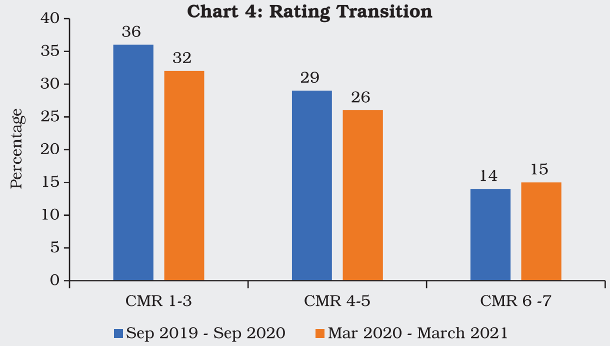
Source: TransUnion CIBIL MSME Pulse and Google Community Mobility Index.

Chart 2: MSME Loan Disbursement



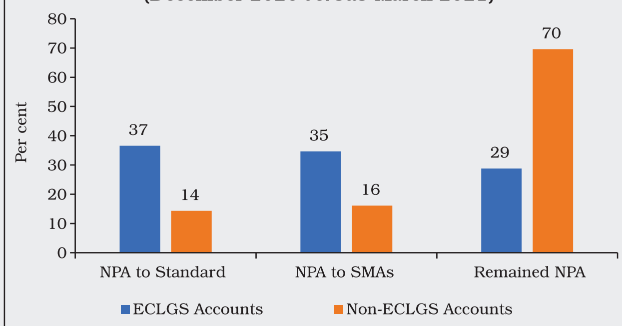
Source: TransUnion CIBIL MSME Pulse.

Chart 4: Rating Transition



CMR: CIBIL MSME Rank.
Source: TransUnion CIBIL MSME Pulse.

Chart 5: Transition of NPAs (December 2020 *versus* March 2021)

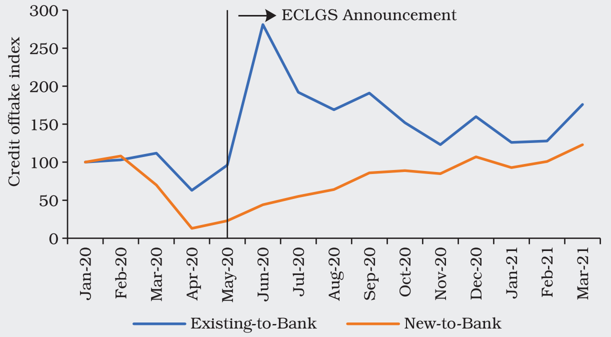


Source: TransUnion CIBIL ECLGS Insights Report.

(Contd.)

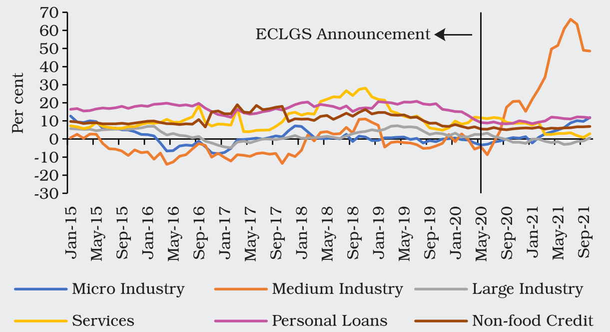
[9] GoI (2020), 'Emergency Credit Line Guarantee Scheme', https://www.eclgs.com.

Chart 6: Benefits of Existing Borrowers



Source: TransUnion CIBIL MSME Pulse.

Chart 7: Sector-wise Credit Growth (y-o-y)



Source: Reserve Bank of India.

benefitted firms that already had a relationship with a bank rather than new borrowers (CIBIL, 2021b). In February 2021, the Reserve Bank announced a deduction of loans given to new borrowers in the MSME sector from the cash reserve ratio (CRR) maintenance by banks. This measure increased the availability of loanable funds to new MSME sector borrowers, as loans to new borrowers grew almost at the same pace as for existing borrowers (Chart 6). Credit growth (y-o-y) in medium-sized industries accelerated post-announcement of the ECLGS scheme (Chart 7).

A difference-in-difference analysis to estimate the causal effect of the ECLGS scheme on credit growth in the MSME sector *vis-à-vis* other sectors of the economy, based on monthly data from March 2016 to October 2021, reveals that several policy measures including the ECLGS contributed to about 35 per cent and 23 per cent of credit growth in the medium-scale industry, and micro and medium industry together, respectively (Table 1).

Table 1: Empirical Estimates of the Impact of Policy Measures on MSME Credit Growth

	Annual Rate of Credit Growth (per cent)		
	Micro	Medium	Micro and Medium
OECD India Composite Leading Indicator	0.27 *** (0.10)	0.27 *** (0.09)	0.27 *** (0.09)
Sector Dummy*ECLGS Dummy	-4.47 (3.44)	35.29 *** (2.86)	23.12 *** (2.66)
R^2	0.20	0.45	0.36

***: Significant at 1 per cent level. **: Significant at 5 per cent level.
*: Significant at 10 per cent level.

Note: 1. In the analysis, ECLGS dummy takes value 1 after May 2020, and 0 otherwise. The sector dummy takes value 1, if the sector is micro, medium, micro and medium, otherwise, it takes value 0. There are three sectoral dummies for the above three categories. Along with the reported interaction term of dummies, separate dummies are considered independently and controlled for lending rate and asset quality review undertaken during 2015, however, the results are not provided due to space constraints.

2. Figures in the parentheses denote the standard errors.

Source: RBI staff estimates.

References:

1. CIBIL (2021a), 'ECLGS Insights Report', TransUnion CIBIL, December.
2. CIBIL (2021b), 'ECLGS Pulse', TransUnion CIBIL, June.
3. RBI. (2021a), 'Credit to MSME Entrepreneurs', Notification, May 5.
4. RBI. (2021b), 'Statement on Development and Regulatory Policies', Press Release, April 7.

II.1.32 The mining sector recorded resilience in 2021-22, registering growth both year-on-year and over pre-pandemic 2019-20. Electricity generation also expanded in H1:2021-22 – led by a double digit expansion in thermal electricity generation over a year ago, even as hydro and nuclear electricity generation recorded a contraction. Renewable energy, which accounts for about 11 per cent of total generation, recorded a double-digit expansion over pre-pandemic levels during H1:2021-22. In H2:2021-22, electricity generation moderated on account of low thermal electricity generation in Q3, due to supply disruptions resulting from unseasonal rains and coal shortage. In H2:2021-22, renewables continued to register robust growth, while nuclear and hydro electricity generation recovered, posting double digit growth over the corresponding period a year ago.

II.1.33 The Union Budget 2022-23 has made an additional allocation of ₹19,500 crore for production linked incentive (PLI) for manufacturing of high efficiency solar modules. Measures were also announced to increase domestic production of capital goods, electronics, chemicals and gems and jewellery. Other incentives for production included, extension of the concessional tax regime by one year and measures to ease doing business in special economic zones (SEZs) units. On the industry front, tax incentives to startups have been extended by one year.

II.1.34 The COVID-19 pandemic caused supply chain disruptions globally. These disruptions were manifested in reduced access to low cost labour, clogged ports, shortages of semiconductor chips, containers and ships, and other commodities (Box II.1.4).

Box II.1.4
Impact of Supply Chain Disruptions on GDP Growth and Labour Markets amidst the COVID-19 Shock

In order to assess the impact of global supply chain disruptions on India's GDP growth, GSCDCI (Global Supply Chain Disruption Cost Index) is estimated by extracting an underlying common factor from four variables[10] using the dynamic factor (DF) approach (Chart 1). An increase in GSCDCI indicates that there are tighter supply side constraints, and these, could potentially cause a downside risk to overall GDP growth.

A group of AR(1) models of GDP growth, augmented by high-frequency 9-indicator and 15-indicator dynamic factors, that track economic activity (Bhadury *et al.*, 2021),

Chart 1: Global Supply Chain Disruption Cost Index[11]

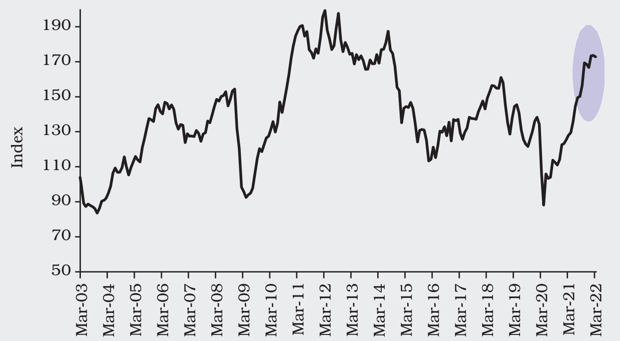


Table 1: Assessing the impact of GSCDCI on GDP

	GDP YoY Seasonally Adjusted	GDP YoY Seasonally Adjusted	GDP YoY Seasonally Adjusted	GDP YoY Seasonally Adjusted
Own Lag	0.1	0.14**	0.11*	0.14**
	(0.07)	(0.07)	(0.07)	(0.07)
DF9	7.26***	7.81***		
	(0.58)	(0.56)		
DF15			7.40***	7.57***
			(0.56)	(0.56)
GSDCI(-1)		**-0.53*****		**-0.26***
		(0.15)		(0.15)
Constant	2.33***	1.83***	1.80***	1.56***
	(0.50)	(0.49)	(0.49)	(0.50)
N	70	70	70	70
Adj. R^2	0.77	0.80	0.79	0.79

***: Significant at 1 per cent level. **: Significant at 5 per cent level. *: Significant at 10 per cent level.

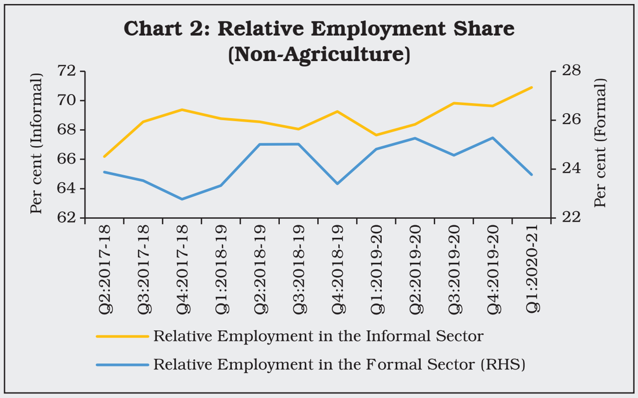
Note: 1. 9-Indicator and 15-Indicator baseline bridge equations are augmented with GSCDCI shock.
2. Figures in the parentheses denote the standard errors.

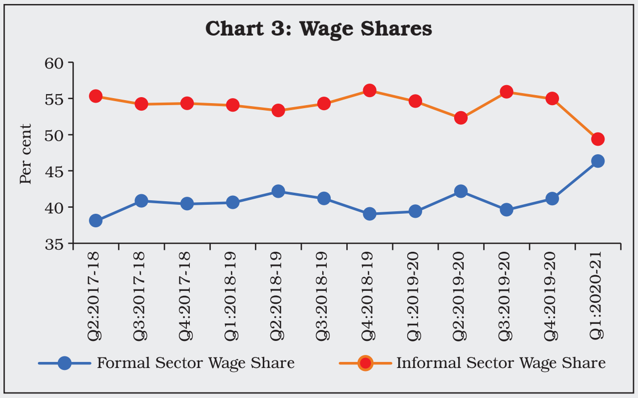
Source: RBI staff estimates.

(Contd.)

[10] Monthly Baltic Dry Index, Bloomberg Commodity Index, IMF Fuel Index and Semi-conductor Equipment Billing.

[11] The Monthly Baltic Dry Index, a shipping and trade index, created by the Baltic Exchange (London), measures the cost of transporting dry bulk raw materials such as coal, iron, steel, *etc.* The Bloomberg Commodity Index tracks prices of futures contracts on physical commodities (23 commodities covering 6 sectors). The IMF Fuel Index is a benchmark index determined by the largest exporter of commodities that include crude oil (petroleum), natural gas, coal and propane. Finally, the world semi-conductor equipment billing, sourced from Semiconductor Industry Association (SIA), captures the 3-month average sale value of semi-conductor equipment that are crucial inputs for durables. All these indices, rebased to 2011-12 = 100, suggest that there has been an upward cost pressure by 2021, which affected costs of imports, and hence, the overall GDP.





Source: PLFS.

is employed to obtain baseline estimates of GDP growth forecasts and are summarised in Table 1. To quantify the impact of GSCDCI on GDP growth forecasts, the same set of baseline models are re-estimated, augmented by GSCDCI. The model findings suggest that a 1 unit (year-on-year) tightening in GSCDCI (or supply constraints) could have lowered GDP growth in 2021-22 by around 26 basis points (bps). If global supply chain disruptions persist at the same level as in 2021-22, it could entail a cumulative downside risk to baseline growth projection.

To assess the direction and magnitude of the pandemic shock's influence on India's informal sector workers, quarterly individual level Periodic Labour Force Survey (PLFS) data published by the NSO are analysed. Additionally, the Consumer Pyramids (CP) data of the Centre for Monitoring Indian Economy (CMIE) are also used. PLFS data suggest that in India, the informal sector employs more than 65 per cent of the employed population, and the informal sector's relative employment share always outnumbers the share of formal sector[12] (Chart 2). Contrary to popular opinion, the contribution of the informal sector in terms of employment was larger than the formal sector during the first wave of the pandemic. The informal sector's share in total wage bill, however, fell through this period.

During the first wave of COVID-19, the total gross value added (GVA) of the economy contracted. The total wage bill also declined with heterogenous impact on the wage share. PLFS data show that the shares of informal and formal sectors in wages usually diverge, a phenomenon that was upturned by the first wave of the pandemic (Chart 3). Thus, there was a greater contribution of the formal sector to the GVA in terms of its wage share during the first wave despite an increase in the share of the informal sector in total employment. The industries that led the fall in the informal sector wage share are wholesale and retail trade and manufacturing.[13]

PLFS data are not available for post first wave of COVID-19. Therefore, after appropriately mapping the CMIE consumer pyramid (CP) data to PLFS, the series for formal sector wage share is extrapolated. This hybrid-data series indicate that the increase in the share of the formal sector in total wages during the first wave appears to be transitory, without any visible impact of the second wave.

References:

1. Bhadury, S., S. Ghosh, and P. Kumar (2021), 'Constructing a Coincident Economic Indicator for India: How Well Does It Track Gross Domestic Product?', *Asian Development Review, 38*(02), Pages 237-277.

2. Ray, D. and S. Subramanian (2020), 'India's Lockdown: An Interim Report', *Indian Economic Review*, *55*(1), Pages 31-79.

[12] The definition of the informal sector given by NSO in the PLFS report is followed. The industries with the biggest share of informal sector employment include wholesale and retail trade, lodging and food services, real estate, and construction.

[13] The fall of informal sector wage share in the wholesale and retail trade was largest, 8 percentage points, whereas in the case of manufacturing, it was 5.7 percentage points according to the 2019-20 round PLFS data.

Services Sector

II.1.35 The services sector, which had suffered an unprecedented contraction in 2020-21, regained some lost ground in 2021-22. Despite the virulent second wave during Q1:2021-22, the recovery of the services sector was broad-based as all the sub-segments except trade, hotels, transport, communication, and services related to broadcasting surpassed their pre-pandemic levels (of 2019-20).

II.1.36 The residential housing sector registered recovery in Q4:2021-22, with sales and launches improving sequentially, and inventory overhang declining to the lowest in eight quarters. The optimism in the sector was reflected in the number of units launched, the highest in 15 quarters. The construction sector benefitted from the thrust by the government on infrastructure, coupled with activity in the housing segment. The *Pradhan Mantri Awas Yojana*, with an allocation of ₹48,000 crore, is expected to support growth in the construction sector along with generation of mass employment in the economy. Financial, real estate and professional services surpassed their pre-pandemic levels. The performance of information technology (IT) companies has been better than hospitality and aviation segments. In the financial sector, while bank credit to commercial sector improved, aggregate deposits moderated with the ebbing of precautionary savings. Public administration, defence and other services (PADO) witnessed an impressive turnaround to register a double-digit growth of 12.5 per cent on account of strong growth in both central and state governments' expenditure. Rail and cargo freight also saw swift recovery.

II.1.37 Global supply side disruptions in semiconductor chips spilled over to the automobile sector, where declining production and increased delivery timings impacted registrations adversely (Table II.1.5). Passenger car sales registered contraction. Two-wheeler sales also declined in H2, and tractor sales were impacted by exhaustion of pent-up demand. A low base pushed up growth in air passenger traffic, even though they remained muted *vis-à-vis* pre-pandemic levels. Port cargo segment, which displayed resilience during the pandemic, was impacted in the third quarter by global container shortages. Indicators that remain robust despite a high base include railway freight, GST E-way bills and GST revenue.

II.1.38 The Reserve Bank's services sector composite index (SSCI),[14] which tracks activity in construction, trade, transport and finance and is a coincident indicator of GVA growth in the services excluding PADO, remained almost at the same level in Q4:2021-22 as in Q3, after declining for previous two consecutive quarters (Chart II.1.14).

4. Employment

II.1.39 Annual PLFS data are available up to 2019-20 and the quarterly PLFS data released by the Ministry of Statistics and Programme Implementation (MoSPI) for urban areas is available till December 2021. The impact of the second wave of COVID-19 infections was relatively muted as compared to the first wave (Chart II.1.15). During the first wave (April-June 2020), the labour force participation rate (LFPR)

[14] SSCI is constructed by suitably extracting and combining the information collected from high frequency indicators, namely, steel consumption, cement production, cargo handled at major ports, sale/production of commercial vehicles, railway freight traffic, air passenger/freight traffic, tourist arrivals, non-oil imports, bank credit and deposit.

Table II.1.5: High Frequency Indicators: Growth Rates

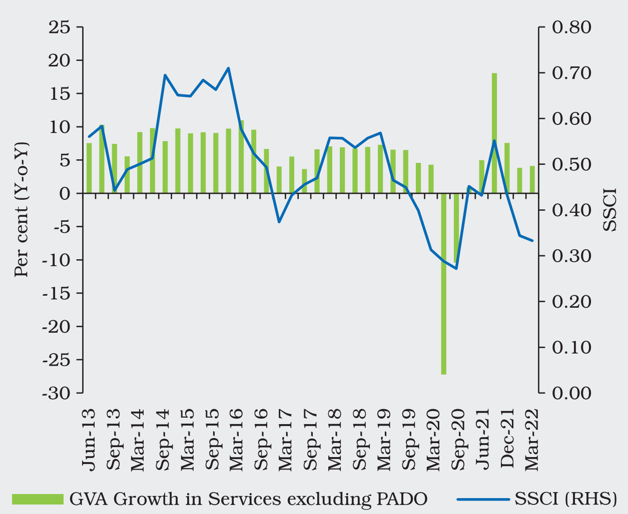
(Per cent, Y-o-Y)

Indicators	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22
1	2	3	4	5	6	7	8	9	10	11	12	13
Urban Demand												
Automobiles Sales	-	40.0	14.7	4.0	-11.4	-19.7	-24.7	-31.8	-10.7	-18.8	-23.5	-17.8
Passenger Vehicles	-	162.5	119.3	44.7	7.6	-41.2	-27.1	-18.6	-13.3	-8.1	-6.5	-3.9
Agriculture / Rural Demand												
Domestic Sales of Tractors	436.2	-8.0	18.9	3.3	-17.0	-14.8	0.4	-22.5	-27.5	-32.6	-31.3	-14.3
Two Wheelers Sales	-	26.1	4.0	-2.1	-14.6	-17.4	-24.9	-34.4	-10.8	-21.1	-27.3	-20.9
Three Wheelers Sales	59,587.0	-48.7	-8.8	40.5	59.7	53.8	19.1	-6.6	27.0	-8.5	-1.1	0.5
Transport												
Vahan Total Registration	215.5	158.6	22.5	34.0	14.6	-5.3	-5.3	-2.7	-16.0	-10.7	-9.0	-2.9
Domestic Air Passenger Traffic	1,05,896.5	608.7	53.8	136.4	132.6	76.5	68.7	65.5	53.3	-16.2	-1.0	37.7
International Air Passenger Traffic	2,575.0	343.3	31.2	45.9	119.2	155.9	162.9	140.2	121.7	67.5	66.6	105.7
Domestic Air Cargo	1,117.7	285.7	43.0	41.3	35.7	10.1	6.7	-1.7	2.0	-6.1	-6.3	-1.0
International Air Cargo	312.5	116.8	46.9	31.7	25.8	18.1	23.8	11.7	10.5	5.2	-0.4	1.1
Freight Traffic Net Tonne Kilometre	86.9	55.7	27.1	21.4	20.0	9.0	20.6	14.3	8.4	11.5	11.0	11.2
Freight Traffic Freight Originating	70.7	39.1	20.5	18.4	16.9	3.6	8.4	6.1	7.2	7.7	6.6	6.7
Port Cargo	29.5	31.5	19.5	6.7	11.4	0.1	6.5	-0.2	-0.4	-2.9	0.0	0.7
Domestic Trade												
GST E-way Bill	582.5	56.8	25.9	32.7	33.3	18.3	14.5	5.9	11.6	9.5	8.3	9.7
GST E-way Bill Intra-state	480.3	47.1	24.3	31.6	30.8	15.6	14.1	7.3	13.4	11.4	10.3	11.8
GST E-way Bill Inter-state	840.6	76.5	28.8	34.4	37.2	22.3	15.1	3.9	8.9	6.6	5.3	6.6
GST Revenue	339.5	65.3	2.1	33.1	29.6	22.5	23.7	25.3	12.7	15.5	17.6	14.7
Construction												
Steel Consumption	721.5	64.3	28.3	4.2	-2.2	-3.2	-3.8	-7.1	-8.3	0.5	-5.3	-0.5
Cement Production	582.7	8.3	7.5	21.7	36.3	11.3	14.5	-3.6	14.2	14.3	5.0	8.8

Expansion Contraction

-: Not available.
Source: CEIC.

Chart II.1.14: Growth in Services Sector (excluding PADO) and Services Sector Composite Index

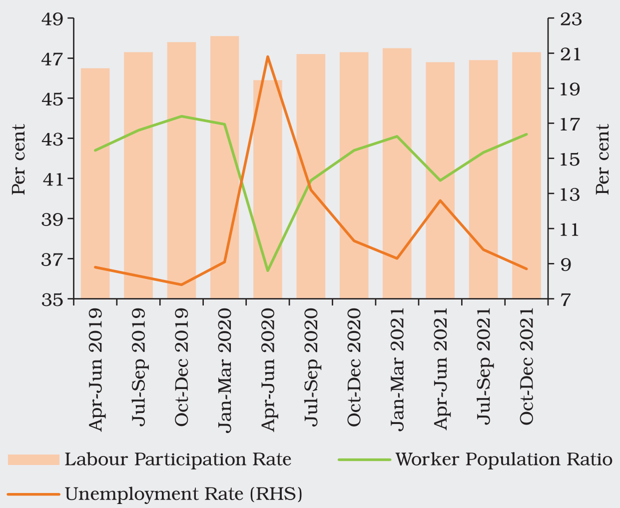


Source: NSO and RBI staff estimates.

fell to 45.9 per cent, but during the second wave (April-June 2021), the LFPR declined to 46.8 per cent. Similarly, the worker population ratio (WPR) contracted less during the second wave as compared to the first. While the unemployment rate ballooned to 20.8 per cent during first wave, they rose relatively less to 9.8 per cent during the second wave. However, the labour market recovery was not complete by December 2021, and LFPR and WPR, both remain low as compared to the pre-pandemic quarter (January-March 2020).

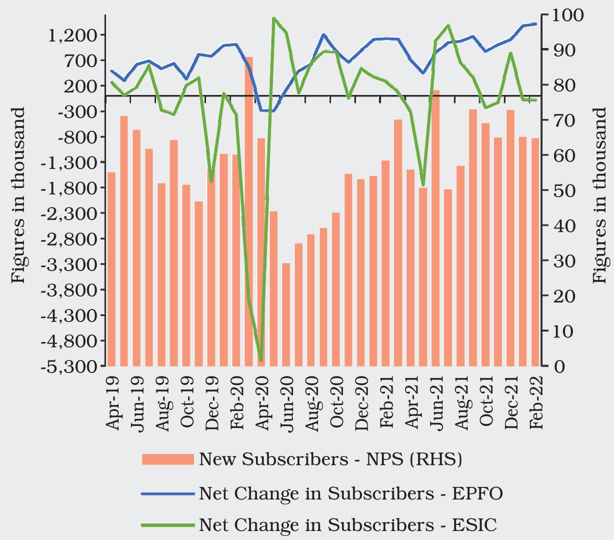
II.1.40 Organised sector employment, measured by payroll data, presents a picture of strong recovery in job creation in 2021-22 so far. On

Chart II.1.15: Quarterly Periodic Labour Force Survey (Urban)



Source: MoSPI, GoI.

Chart II.1.16: Jobs in Organised Sector



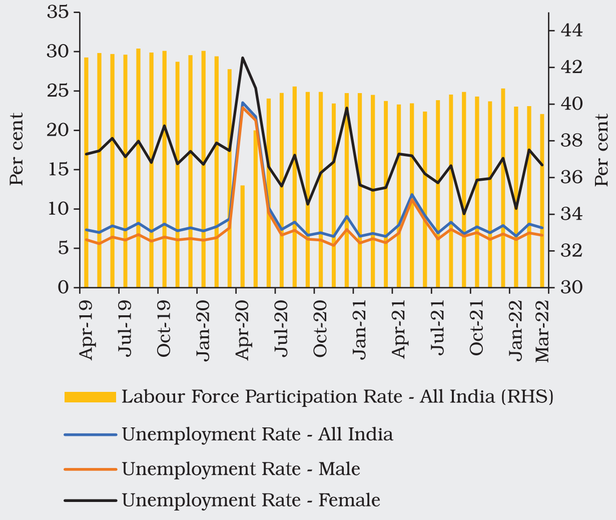
Source: Government of India.

a cumulative basis, net subscribers added to employees' provident fund organisation (EPFO) per month increased to 10.1 lakh in April-February 2021-22 from 6.0 lakh for the same period in the previous year. On the other hand, the average number of members who paid their contribution to employees' state insurance corporation (ESIC) improved from 1.0 lakh per month during April-February 2020-21 to 1.6 lakh per month during April-February 2021-22. New subscribers to the national pension scheme (NPS) also increased during the same period (Chart II.1.16).

II.1.41 An assessment of the employment and unemployment situation using CMIE household survey data indicates relatively resilient labour market conditions during the second and third wave. The localised nature of restrictions and intermittent relaxations for movement ensured that there were sufficient employment opportunities available. During 2021-22, the average monthly labour force participation rate stood above 40 per cent as compared to 39.9 per cent in 2020-21. Further, the peak unemployment rate between the two waves halved from 23.5 per cent in April 2020 to 11.8 per cent in May 2021. Across both rural and urban areas, unemployment rate followed the same pattern. In terms of gender gap in the labour market, the unemployment rate for women registered a sluggish recovery. The male unemployment rate declined substantially from 11.2 per cent in May 2021, at the peak of the second wave, to 6.7 per cent in March 2022, but the decline was lower for female unemployment rate from 16.8 per cent in May 2021 to 15.6 per cent in March 2022 (Chart II.1.17).

II.1.42 Other surveys covering information on employment like the employment sub-index of the overall purchasing managers' index (PMI) registered marginal contraction in hiring in manufacturing and services sectors after the second wave of COVID-19. As compared to the first wave, the services sector during the second wave was severely affected in comparison to the manufacturing sector. During

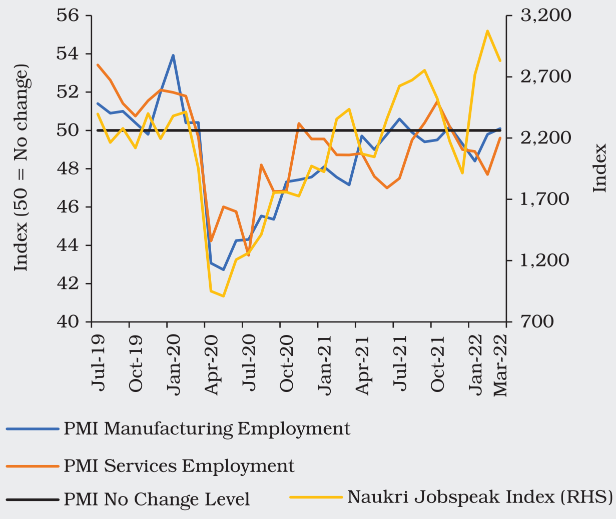
Chart II.1.17: Unemployment and Labour Force Participation Rate



Source: CMIE Household Survey.

Q3:2021-22, however, the services sector employment expanded at a brisk pace. Similarly, *Naukri* Jobspeak index shows that private sector hiring picked up in Q4:2021-22 (Chart II.1.18).

Chart II.1.18: Employment Scenario - Alternate Employment Indicators



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

5. Conclusion

II.1.43 India's economic recovery from the pandemic depths has been sustained in 2021-22 and the momentum is expected to broadly continue in 2022-23, though with risks to the downside from the geopolitical shock and its spillovers. Despite these risks, the recovery is getting entrenched and is broadening. The Union Budget 2022-23 envisioned the roadmap for 'India at 100', with a focus on demand side measures. The substantial increase in government capex outlay could crowd-in private investment and propel a virtuous cycle, thereby improving aggregate demand. Furthermore, the National Infrastructure Plan (NIP) amounting to ₹100 lakh crore and the National Monetisation Pipeline (NMP) involving ₹6 lakh crore - both targeted for completion by 2024-25, are also expected to give a major thrust to infrastructure spending. The focus on supply side management[15] through 'process reforms', facilitating the smoothening and simplification of processes in some sectors where government's presence as a facilitator or regulator is necessary, would help improve the resilience of the Indian economy. Several sectors have benefitted from process reforms such as public procurement and telecommunications. Laying out a path for sustainable agricultural growth and enhanced farm income, the Union Budget 2022-23 announced several initiatives focusing on chemical free natural farming, increase in the domestic production of oilseeds and millets and promotion of agri-tech startups to enhance productivity. The *Pradhan Mantri Gati Shakti Yojana* laid the roadmap, driven by seven engines of roads, railways, airports, ports, mass transport, waterways, and logistics

[15] Includes deregulation of sectors, simplification of processes, privatisation, asset monetisation and production-linked incentives (Economic Survey 2021-22).

infrastructure. For the MSME sector, the ECLGS has been extended up to March 2023 with the guarantee cover expanded by ₹50,000 crore to a total cover of ₹5 lakh crore, the additional amount being earmarked exclusively for hospitality and related enterprises.

II.1.44 Overall consumer and business confidence remains resilient in spite of the third wave on the back of the accelerated pace of vaccination and better prospects for economic activity. A full recovery in aggregate demand is, however, contingent on a turnaround in private investment. On the supply side, there is a resurgence in mining and manufacturing sectors. The services sector, which felt the brunt of the pandemic, is staging a broad-based recovery since Q2:2021-22.

II.1.45 The future path of growth will be conditioned by addressing supply-side bottlenecks and by calibrating monetary and fiscal policy support to aggregate demand and structural reforms. Such reforms are also warranted in the labour market so as to adapt to the pandemic by reskilling workers. The pandemic also provides a unique opportunity to boost digitalisation and adopt new technologies for raising productivity growth.

II.2 PRICE SITUATION

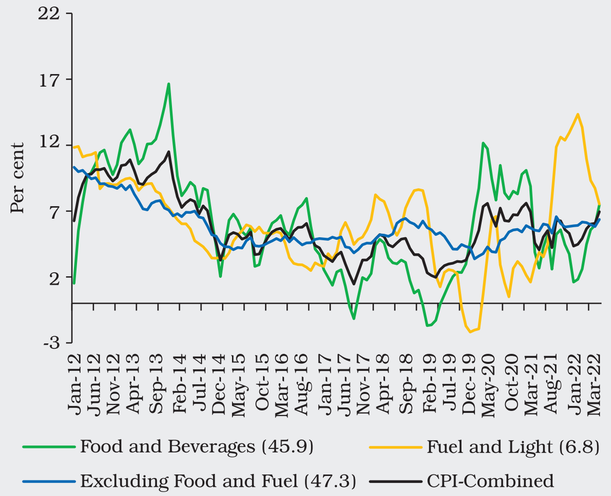
II.2.1 Inflation rose sharply across advanced economies (AEs) and emerging market and developing economies (EMDEs) during 2021, reflecting pandemic related supply and logistics disruptions, a rebound in global commodity prices and a release of pent-up demand. The intensity of price pressures varied across countries, with AEs registering a sharper rise in inflation than EMDEs in spite of the latter also facing the pass-through of exchange rate depreciation into domestic inflation.

II.2.2 During 2021, the World Bank energy price index was 81 per cent higher than 2020, while 'metals and minerals' and agriculture commodity price indices were up by 47.1 per cent and 24.2 per cent, respectively. Energy prices, which had undergone corrections during November-December 2021 as supply conditions improved, increased sharply in the first quarter of 2022 due to geopolitical conflict and subsequent economic sanctions. Brent crude prices rose by 55.6 per cent in March 2022 over December 2021 levels. Other major primary commodities have also recorded significant price increases – metals and minerals by 21 per cent and food by 23.6 per cent in March 2022 over December 2021. This broad-based increase in commodity prices has raised concerns about extreme inflation risks. The conflict has placed at risk the prospect of an early normalisation of global supply chain disruptions and has brought forward the danger of inflation expectations getting unhinged.

II.2.3 In India, headline inflation[16] breached the upper tolerance level of the inflation target during May-June 2021, driven by a sharp increase in inflation in all the three major groups - food, fuel and excluding food and fuel (core) - due to supply disruptions induced by the localised lockdowns (Chart II.2.1). Subsequently, while fuel inflation increased due to rising international prices, core inflation remained elevated, reflecting the pass-through of input cost pressures. By contrast, food inflation eased with the progress in *kharif*

[16] 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 (GoI).

Chart II.2.1: Inflation across Major Components



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

crop sowing until excess/unseasonal rains during October-November 2021 damaged standing crops (especially vegetables) and led to a build-up in price pressures. As a result, headline inflation which had eased close to the inflation target by September 2021 aided by favourable base effects, increased again in October 2021 and breached the upper tolerance level of 6 per cent during January-March 2022. This rise in Q4:2021-22 was led by elevated international commodity prices and supply bottlenecks on account of the Russia-Ukraine conflict along with lower winter easing in domestic food prices.

II.2.4 Average inflation, as well as volatility measured by the standard deviation of the consumer price index (CPI) inflation, was lower in 2021-22 than a year ago (Table II.2.1). The intra-year distribution of inflation was also more balanced, as reflected in a smaller negative skew.

II.2.5 Against this backdrop, sub-section 2 assesses developments in global commodity prices. Sub-section 3 discusses movements in headline inflation in India including major turning points, followed by a detailed analysis of its primary constituents in sub-section 4. Other indicators of prices and costs are analysed in sub-section 5, followed by concluding observations.

2. Global Inflation Developments

II.2.6 Elevation in global commodity prices was primarily led by energy prices (Chart II.2.2). Natural gas and coal prices reached record highs amid supply constraints and an increase in demand for electricity as global economic activity revived. Global crude oil prices remained volatile during the year and rose sharply in Q4:2021-22 due to the conflict in Ukraine. The decision by the organisation of petroleum exporting countries

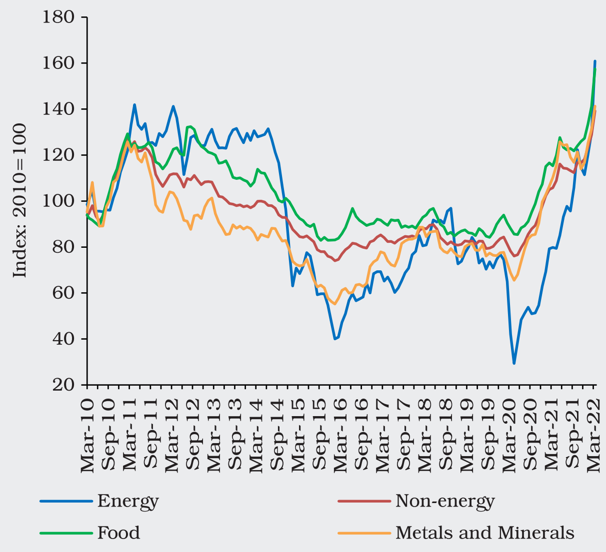
Table II.2.1: Headline Inflation – Key Summary Statistics

(Per cent)

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
1	2	3	4	5	6	7	8	9	10	11
Mean	10.0	9.4	5.8	4.9	4.5	3.6	3.4	4.8	6.2	5.5
Standard Deviation	0.5	1.3	1.5	0.7	1.0	1.2	1.1	1.8	1.1	0.9
Skewness	0.2	-0.2	-0.1	-0.9	0.2	-0.2	0.1	0.5	-0.7	-0.1
Kurtosis	-0.2	-0.5	-1.0	-0.1	-1.6	-1.0	-1.5	-1.4	-0.7	-1.0
Median	10.1	9.5	5.5	5.0	4.3	3.4	3.5	4.3	6.5	5.6
Maximum	10.9	11.5	7.9	5.7	6.1	5.2	4.9	7.6	7.6	7.0
Minimum	9.3	7.3	3.3	3.7	3.2	1.5	2.0	3.0	4.1	4.2

Note: Skewness and Kurtosis are unit-free. Annual inflation is the average of the monthly inflation rates during the year and therefore, may vary from the annual inflation calculated from the average index for the year.
Source: NSO and RBI staff estimates.

Chart II.2.2: International Commodity Prices



Source: World Bank Pink Sheet Database.

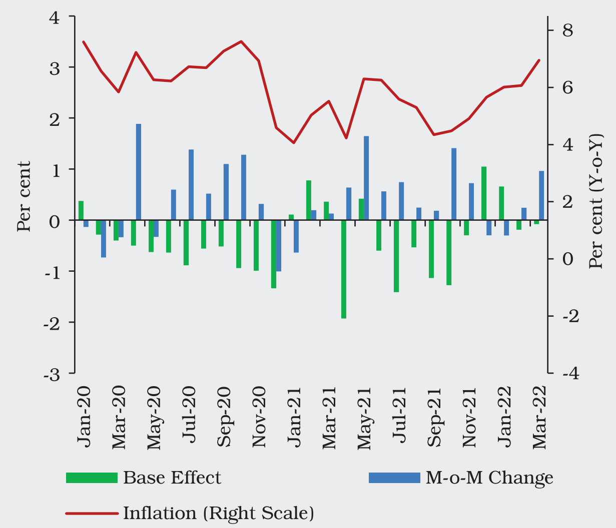
(OPEC) and their allies (OPEC+) in July 2021 to increase production only gradually by 0.4 million barrels per day on a monthly basis from August 2021 to make up for the large production cuts announced in April 2020, together with sluggish pick up in investment in new oil production, including US shale, supported prices. As a result, global crude oil prices picked up to US$ 112 per barrel in March 2022 from US$ 49 per barrel in December 2020. The demand for metals continued to increase even as production was disrupted by energy shortages and lockdowns. International food prices also remained elevated during the year and the food index (World Bank Pink Sheet) reached an all-time high (since January 1960) in March 2022, primarily driven by edible oils (palm oil; sunflower oil; rapeseed oil and soybean oil) and grain prices, due to tight supply conditions caused by adverse weather in several producing countries (South America and East Asia), Russia-Ukraine conflict and higher demand for animal feed (maize and soybean). Moreover, higher natural gas and coal prices affected fertiliser production, pushing up their prices and consequently the input costs for food crops. Reflecting these global commodity price developments, consumer price inflation rose in both AEs and EMDEs.

3. Inflation in India

II.2.7 Circling back to CPI headline inflation in India, it had eased to 4.2 per cent in April 2021 (Chart II.2.3), before the second wave of COVID-19 led supply disruptions, localised lockdowns and pass-through of increase in global commodity prices (crude oil and metals) led to a sharp and broad-based pick up in headline inflation during May-June 2021. Inflation eased thereafter with moderation in food prices aided by the easing of curbs and favourable base effects. Inflation began picking up again from October 2021, breaching the upper tolerance level in Q4: 2021-22 as stated earlier.

II.2.8 Inflation in food and beverages remained the primary mover of headline inflation although its contribution to headline inflation declined to 35.9 per cent in 2021-22 from 54.8 per cent a

Chart II.2.3: Movements in Headline Inflation



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

year ago. Nonetheless, supply-side measures implemented by the central government to relieve price pressures in edible oils and pulses aided in keeping food inflation under control.

II.2.9 Fuel prices, on the other hand, scaled new peaks and reached an all-time high of 14.3 per cent in the current inflation series in October 2021 due to a sharp pick up in prices of liquefied petroleum gas (LPG) and kerosene, in line with international prices. Subsequently, fuel inflation eased during November 2021 - March 2022 mainly due to the reduction in electricity prices announced by some states and favourable base effects.

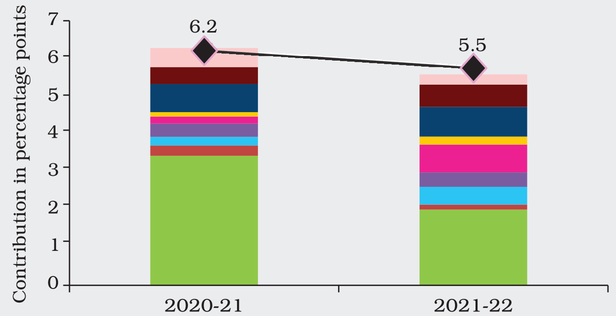
II.2.10 Inflation excluding food and fuel or core inflation remained elevated throughout the year reflecting input cost pressures amid global supply disruptions and some recovery in domestic demand. The main contributors were prices of transport and communication; health; household goods and services; and clothing and footwear. The excise duty cut in petrol and diesel prices in early November 2021 led to some easing of transport and communication inflation.

II.2.11 For the year, inflation eased to an average of 5.5 per cent in 2021-22, 66 basis points (bps) lower than a year ago (Appendix Table 4). Notwithstanding the easing in headline inflation, households' median inflation expectations hardened during 2021-22 by 59 bps three months ahead and by 62 bps a year ahead reflecting the uncertainty surrounding the path of the pandemic and sporadic supply shocks.

4. Constituents of CPI Inflation

II.2.12 During 2021-22, the drivers of CPI headline inflation showed notable changes wherein food and beverages; fuel and light; transport and communication; health; and clothing and footwear remained the major drivers (Chart II.2.4).

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

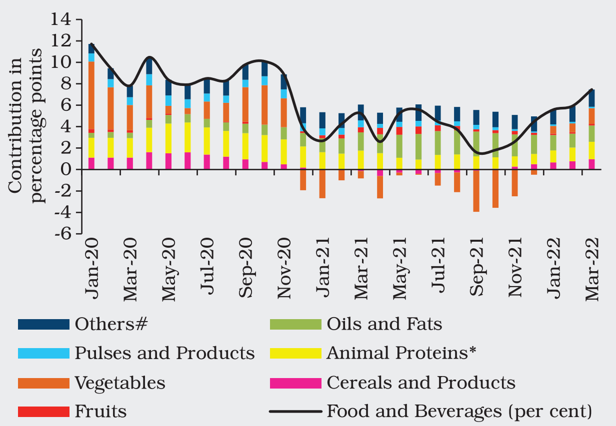


*: Includes recreation and amusement and personal care and effects.
Note: April and May 2020 data were imputed by the NSO.
Source: NSO and RBI staff estimates.

Food

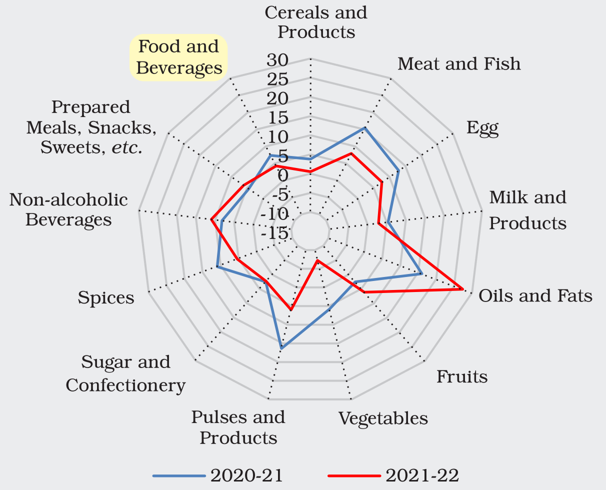
II.2.13 Inflation in prices of food and beverages (weight: 45.9 per cent in CPI) moved within a wide range of 1.6 per cent to 7.5 per cent during 2021-22 largely reflecting the movements in vegetables and oils and fats inflation (Chart II.2.5).

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



#: Includes sugar and confectionery, spices, non-alcoholic beverages, and prepared meals, snacks, sweets, *etc*.
* : Includes meat and fish, egg and milk and products.
Note: For April 2020, indices for meat and fish and prepared meals, *etc.* and for May 2020 index for prepared meals, *etc.* were imputed by the NSO.
Source: NSO and RBI staff estimates.

Chart II.2.6: Inflation in Major Food Subgroups



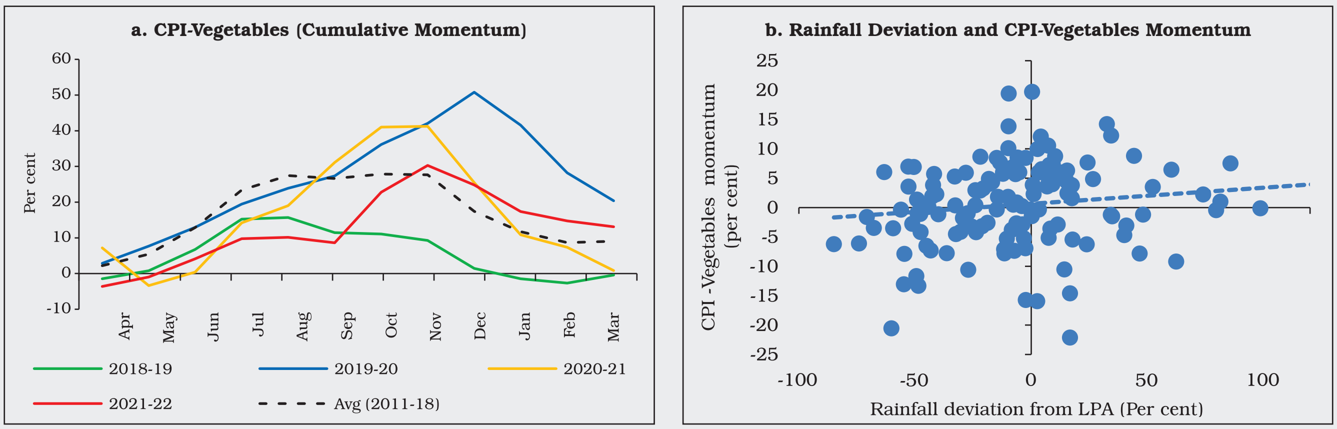
Note: For April 2020, indices for meat and fish and prepared meals, *etc.* and for May 2020, index for prepared meals, *etc.* were imputed by the NSO.
Source: NSO and RBI staff estimates.

II.2.14 Food inflation averaged 4.2 per cent in 2021-22, compared to 7.3 per cent in 2020-21. Eight out of the 12 sub-groups witnessed a moderation in inflation (Chart II.2.6). Vegetable prices (weight: 13.2 per cent in CPI-Food and beverages) remained in deflation during a major part of the year, recording an average deflation of (-) 7.2 per cent on favourable base effects and exerted downward pressure on overall food inflation during the year.

II.2.15 Food inflation, excluding vegetables would have averaged 204 bps higher (Chart II.2.7a). While higher production generally led to lower price build-up, excess/unseasonal rains pushed up vegetable prices during October-November 2021, as also observed in the past (Chart II.2.7b).

II.2.16 Onion prices increased during the months of June-July 2021 reflecting summer uptick and damage to stored *rabi* onions in Maharashtra and Gujarat due to cyclone *Tauktae* and again during October-November 2021 as heavy rains damaged *kharif* crops in major producing states. Government intervened by releasing stored onions from a total buffer stock of 2 lakh metric tonnes under the price stabilisation fund (PSF) scheme. Support came from fresh arrivals, which eased price pressures during December 2021- March 2022, barring a temporary rise in February 2022. In the case of tomatoes, price pick-up was observed during October-November 2021 owing to erratic rains in some major producing states in north India in September 2021 followed by heavy rains in major producing states in south

Chart II.2.7: CPI-Vegetables: Seasonality in Prices and Drivers of Inflation



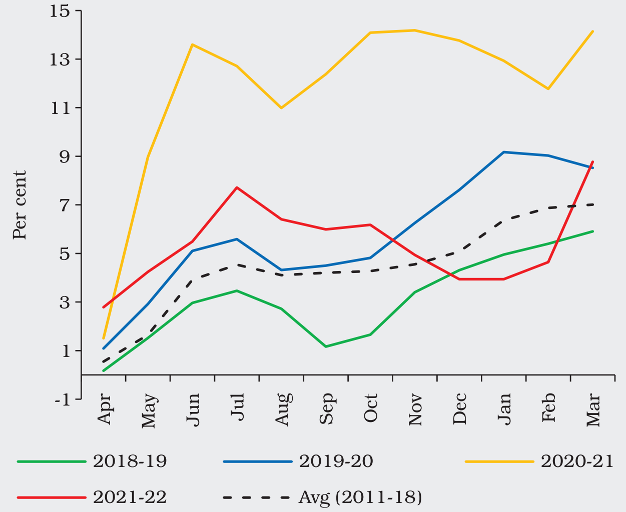
LPA: Long Period Average.
Note: For chart b, data are from February 2011 to March 2022.
Source: NSO, Indian Meteorological Department and RBI staff estimates.

India in October 2021, which resulted in supply disruption and crop damages. Potato prices were in deflation throughout 2021-22 (barring February-March 2022) on higher production [15.7 per cent in 2020-21 final estimates (FE) over 2019-20 FE] in response to attractive prices in the previous year. However, prices firmed up during October-November 2021 due to unseasonal rains and delays in the arrivals of fresh crops. Lower production in 2021-22 [estimated to be (-) 4.6 per cent in 2021-22 1st advanced estimates (AE) over 2020-21 FE] led to the re-emergence of price pressures in March 2022.

II.2.17 Prices of cereals and products (weight of 21 per cent in the CPI-Food and beverages) recorded deflation during the first half of the year, before registering some price pressures during October 2021-March 2022. Higher procurement, offtake under *Pradhan Mantri Garib Kalyan Anna Yojana* (PMGKAY), record production of rice (4.3 per cent as per 2021-22 3rd AE over 2020-21 FE) kept prices soft during the first half of the year. However, price pressures emerged in wheat during the second half due to higher exports (236 per cent year-on-year during 2021-22).

II.2.18 In the case of protein-rich items such as eggs, meat and fish (weight of 8.8 per cent in CPI-Food and beverages), price pressures were seen during April-July 2021 reflecting supply disruptions and input cost pressures from an increase in feed and transportation costs (Chart II.2.8). Prices eased during August 2021-January 2022 in line with the gradual normalisation of supply chains and import of 12 lakh tonnes of genetically modified soya meal. However, price pressures re-emerged during February-March 2022 reflecting a further increase in feed costs. In the case of milk and products prices remained subdued, barring the increase seen in July 2021 and March 2022, due

Chart II.2.8: CPI-Egg, Meat and Fish (Cumulative Momentum)

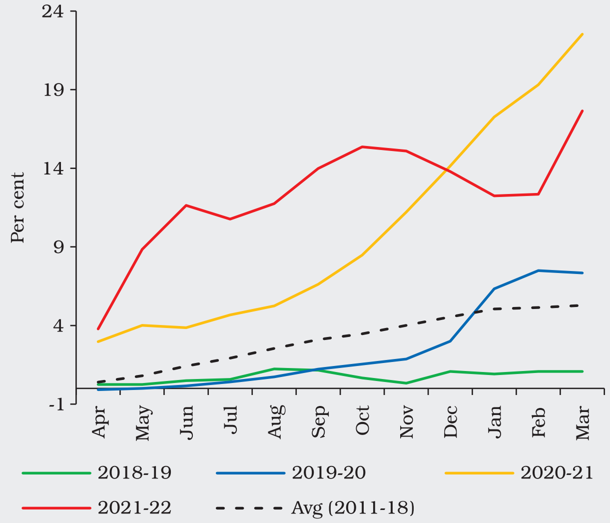


Note: For April 2020, index for meat and fish was imputed by NSO.
Source: NSO and RBI staff estimates.

to upward revision in retail prices by ₹2 per litre by major milk co-operatives like *Amul* and *Mother Dairy,* followed by some state milk co-operatives.

II.2.19 Oils and fats (weight of 7.8 per cent in CPI-Food and beverages) recorded historically high inflation of 34.8 per cent in June 2021 on the back of rising international prices, especially of palm oil (Chart II.2.9). In order to contain price pressures, a number of measures were undertaken by the government - imposing stock limits on edible oils and oilseeds for a period up to September 31, 2022 and successive reduction in import duties on palm oil (bringing down the duty on refined and crude palm oil to 12.5 per cent and 5 per cent, respectively, by February 2022 from 37.5 per cent and 32.5 per cent, respectively, in June 2021), soybean oil and sunflower oil. Responding to these measures and following sharp increase in *rabi* oilseeds sowing, edible oil prices recorded a correction during November 2021-January 2022. However, the conflict in Ukraine (which is a major global supplier of sunflower oil) led to the return of price pressures during February-March 2022.

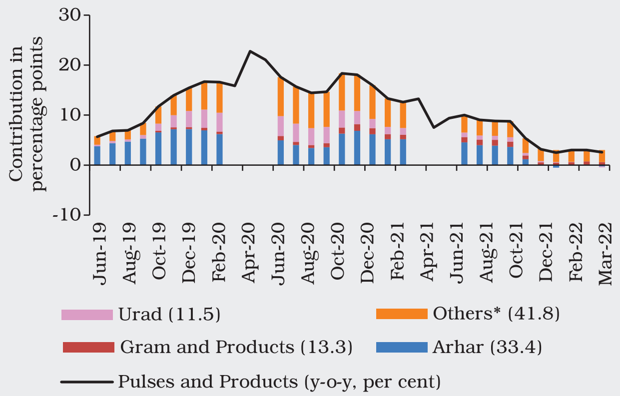
Chart II.2.9: CPI-Oils and Fats (Cumulative Momentum)



Source: NSO and RBI staff estimates.

II.2.20 Inflation in prices of pulses (weight of 5.2 per cent in CPI-Food and beverages) followed a declining path after the May-June 2021 rise on account of a host of supply side measures undertaken by the government (Chart II.2.10). The supply measures include moving imports of *tur, urad* and *moong* from restricted to 'free category' from May 15, 2021 till October 31, 2021; imposing stock limit on all pulses except *moong* until October 31, 2021; completely abolishing import duty on *masur* and reducing Agriculture Infrastructure and Development Cess (AIDC) to 10 per cent from July 27, 2021; releasing *masur* from buffer stocks at discounted prices; and extending free import policy of *urad* and *tur* to March 31, 2023. These measures led to cooling down of inflation to 2.6 per cent by March 2022 from an intra-year peak of 10 per cent in June 2021.

Chart II.2.10: 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 were not released by the NSO during March-May 2020.

Source: NSO and RBI staff estimates.

II.2.21 Inflation in fruits (weight of 6.3 per cent in CPI-Food and beverages) picked up to a 3-year high of 11.8 per cent in May/June 2021. Subsequently, however, price pressures ebbed owing to higher production of apples and grapes.

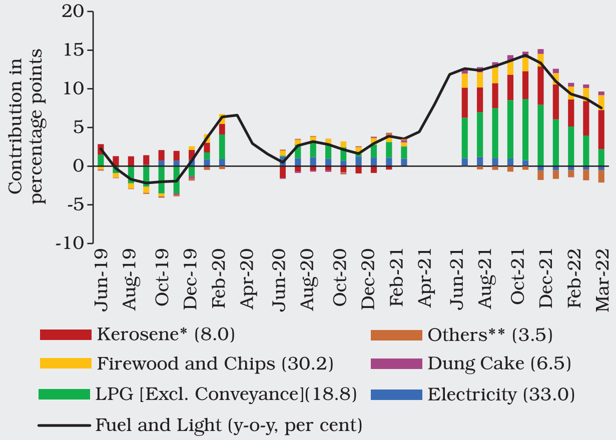
Fuel

II.2.22 The contribution of the fuel group (weight of 6.8 per cent in CPI) to headline inflation increased to 13.1 per cent in 2021-22 from 2.9 per cent in the previous year. Fuel inflation picked up sharply to 14.3 per cent in October 2021, largely due to the hardening of domestic LPG and kerosene prices which tracked international price movements (Chart II.2.11 and Chart II.2.12). Subsequently, inflation witnessed some moderation and reached 7.5 per cent in March 2022 mainly due to the easing of electricity prices and favourable base effects.

Inflation Excluding Food and Fuel

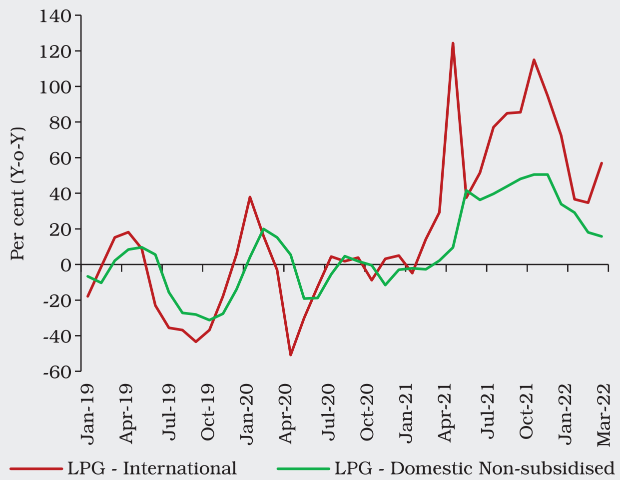
II.2.23 Inflation excluding the volatile food and fuel items, *i.e.*, core inflation, picked up to an average of 6.0 per cent in 2021-22, with an intra-year peak of 6.6 per cent at the height of the second wave of COVID-19 in May 2021 (Chart II.2.13) [Appendix Table 4]. Subsequently, inflation eased somewhat in line with the gradual

Chart II.2.11: Drivers of Fuel Inflation



*: Includes kerosene PDS and kerosene from 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 were not released by the NSO during March-May 2020.
Source: NSO and RBI staff estimates.

Chart II.2.12: Movements in LPG Retail Prices

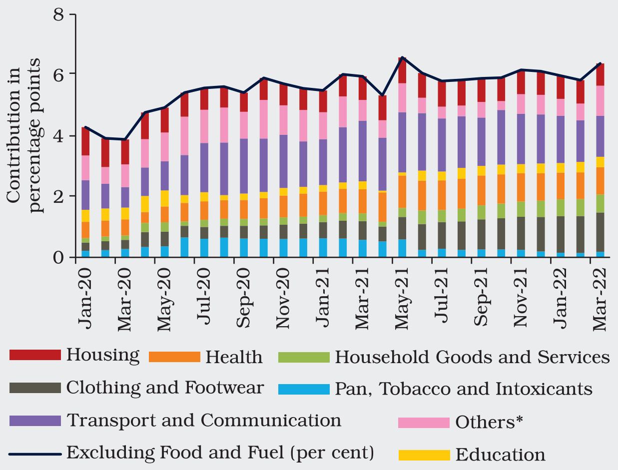


Note: Domestic non-subsidised LPG prices are the average of prices in four metros.
Source: Petroleum Planning and Analysis Cell (PPAC), Bloomberg and RBI staff estimates.

removal of lockdown restrictions before crossing 6 per cent again during November 2021-March 2022 (barring February 2022) despite the cut in excise duty on petrol and diesel (₹5 per litre and ₹10 per litre, respectively) in early November 2021, followed by a reduction in value added tax (VAT) by most of the state governments.

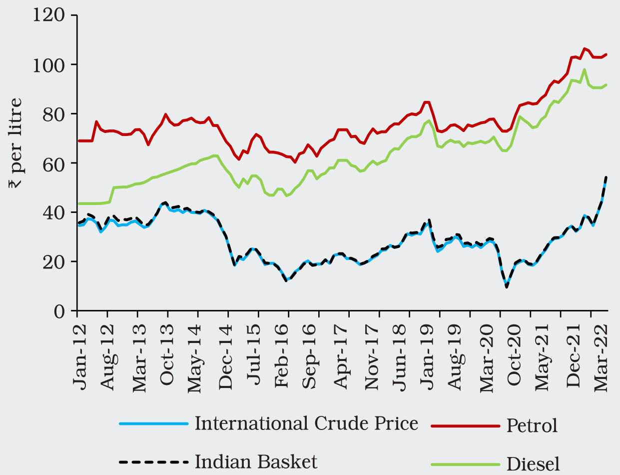
II.2.24 Among the major constituents, double-digit inflation in transport and communication reflected an increase in domestic prices of petrol and diesel in line with international prices (Chart II.2.14). Inflation in the health sub-group rose on account of the increase in medicine prices and hospital and nursing charges due to higher raw material

Chart II.2.13: Drivers of CPI Excluding Food and Fuel Inflation



*: Includes recreation and amusement and personal care and effects.
Note: April and May 2020 data were imputed by the NSO.
Source: NSO and RBI staff estimates.

Chart II.2.14: Domestic Oil Price Trends



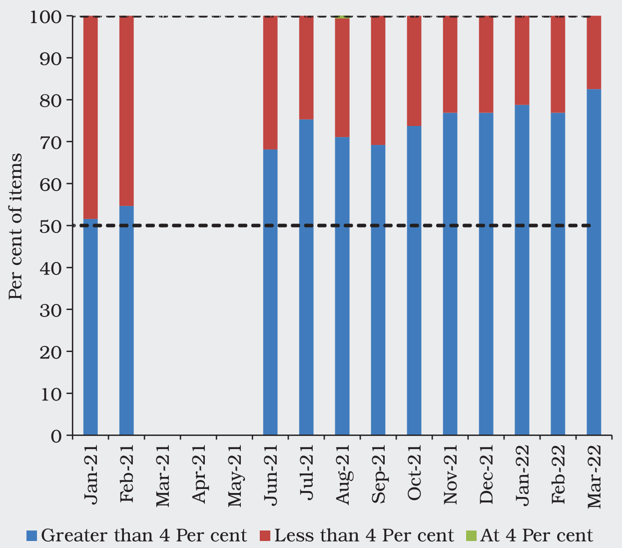
Note: International crude oil price represents the average price of WTI, Brent and Dubai Fateh.
Source: World Bank Pink Sheet Database, Indian Oil Corporation Limited, PPAC and RBI staff estimates.

costs, supply bottlenecks and pandemic-induced demand. Within transport and communication, prices of personal transport vehicles also increased reflecting a gradual pass-through of higher input costs (especially metals and microchips) by major automobile manufacturers. Private telecom operators increased mobile tariff charges for various plans in July 2021 (around 40 per cent for base categories) and November 2021 (20-25 per cent). As a result of pass-through of input costs to retail prices, a larger number of items within core goods registered greater than 4 per cent inflation rates during 2021-22 (Chart II.2.15).

II.2.25 Housing inflation remained moderate at 3.7 per cent in 2021-22 (3.3 per cent in 2020-21), reflecting subdued rental demand on account of hybrid work culture amid the multiple waves of COVID-19. Net of housing, inflation excluding food and fuel averaged 6.6 per cent in 2021-22, up from 6.2 per cent a year ago.

II.2.26 Inflation in clothing and footwear picked up significantly and remained a major pressure point, averaging 7.2 per cent in 2021-22. It increased consistently from 3.5 per cent in April 2021 to 9.4 per cent in March 2022, largely reflecting input cost pressures emanating from rising international prices of cotton (as measured by the Cotton A Index) due to lower global and domestic production as well as improved global demand.

Chart II.2.15: Inflation: Core Items



Source: NSO and RBI staff estimates.

5. Other Indicators of Inflation

II.2.27 From a sectoral perspective, inflation based on the CPI for industrial workers (CPI-IW) remained slightly elevated at 5.1 per cent during 2021-22, although it eased to 4.4 per cent in September 2021 before picking up to 5.8 per cent in January 2022, largely due to the increase in food prices. On the other hand, inflation based on the CPI for agricultural labourers (CPI-AL) and rural labourers (CPI-RL) eased to 4.0 per cent and 4.2 per cent, respectively, in 2021-22 from 5.5 per cent in the previous year due to favourable base effects and subdued food inflation, although both crossed 6 per cent level in March 2022.

II.2.28 Inflation measured by the wholesale price index (WPI) rose sharply from 1.3 per cent in 2020-21 to 13.0 per cent in 2021-22, with an intra-year peak of 14.9 per cent in November 2021 (the highest level in the current series). WPI Inflation picked up from February 2021 and remained in double-digits during the year, reflecting a sharp pick up in prices across all major groups. Within primary articles, inflation in non-food articles (21.2 per cent), minerals (19.4 per cent) and crude petroleum and natural gas (56.5 per cent) remained in double-digits, reflecting higher international commodity prices amid rising domestic demand. Inflation in fuel and power also jumped to an average of 32.8 per cent, driven mainly by a sharp increase in mineral oil prices. With the broad-based increase in input costs, manufactured product inflation also reached double-digits since May 2021 (Box II.2.1). Reflecting the sharp rise in WPI

Box II.2.1
Sensitivity of Inflation in India to Input Cost Pressures

In order to understand the responsiveness of CPI inflation to the input cost pressures in India, two approaches have been followed: (a) pass-through of global commodity prices directly to the CPI, and (ii) indirectly *via* the WPI. Monthly data for the period 1992 to 2021 are employed in an ordinary least squares (OLS) framework using a polynomial distributed lag (PDL) model (Batten and Thornton, 1983) [equations[17] (1) and (2)]:

$$\begin{aligned} \text{dlog}(\text{Domestic Price Index}_t) = c_1 &+ \sum_{(i=1)}^{P} \beta_i \, \text{dlog}(\text{Domestic Price Index}_{t-i}) \\ &+ \sum_{i=0}^{Q} \alpha_i \, \text{dlog}(\text{IMF Price}_{t-i}) + \sum_{i=0}^{R} \gamma_i \, \text{dlog}(\text{Ex Rate}_{t-i}) \\ &+ \theta_1 \, \text{IIPGapDom}_{t-j} + \delta_1 \, \text{IIPGapOECD}_{t-k} \\ &+ \phi_1 \text{Abs Rain Dev}_{t-l} + \varepsilon_t \qquad \ldots(1) \end{aligned}$$

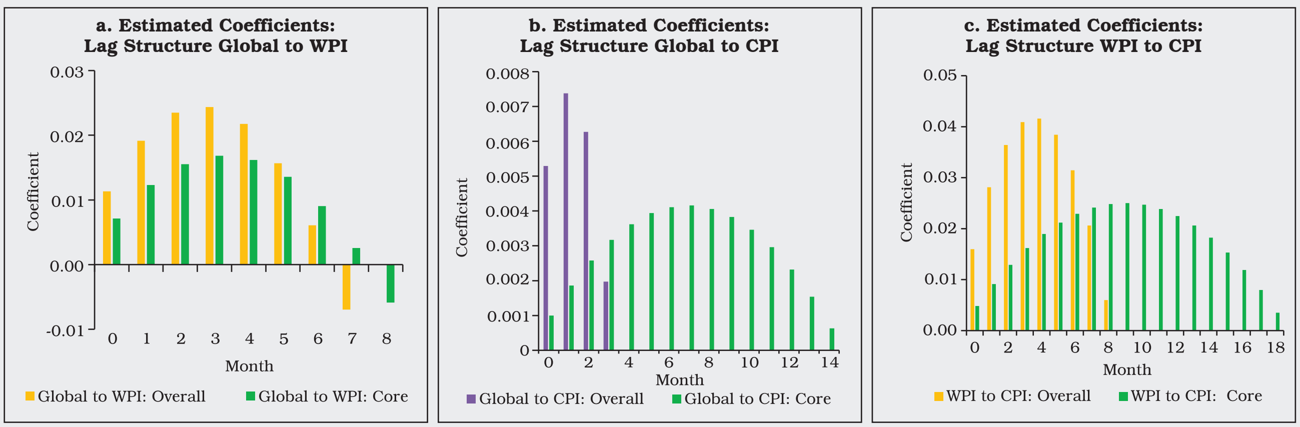
$$\begin{aligned} \text{dlog}(\text{CPI}_t) = c_2 &+ \sum_{(i=1)}^{S} \phi_i \, \text{dlog}(\text{CPI}_{t-i}) + \sum_{i=0}^{T} \text{ч}_i \, \text{dlog}(\text{WPI}_{t-i}) \\ &+ \sum_{i=0}^{U} \gamma_i \, \text{dlog}(\text{Ex Rate}_{t-i}) + \eta_1 \, \text{IIPGapDom}_{t-v} \\ &+ \lambda_1 \, \text{IIPGapOECD}_{t-w} + \omega_1 \text{Abs Rain Dev}_{t-x} + \upsilon_t \qquad \ldots(2) \end{aligned}$$

The results suggest that the direct pass-through of global commodity prices to CPI is lower than *via* the WPI, with a longer transmission lag in the case of non-food non-fuel (or core). The impact is also persistent in the case of core inflation (Chart 1). A one per cent change in overall (non-food non-fuel) global commodity prices leads to a 0.02 (0.04) per cent change in overall (non-food non-fuel) CPI inflation, and around a 0.11 (0.09) per cent change in overall (non-food non-fuel) WPI inflation.

On the other hand, a one per cent change in the overall (non-food non-fuel) WPI leads to around 0.26 (0.33) per cent change in the overall (non-food non-fuel) CPI inflation. Indirect estimates corroborate direct estimates, *i.e.*, a one per cent change in overall (non-food non-fuel) global commodity prices leads to around 0.03 per cent change in overall (non-food non-fuel) CPI inflation.

To sum up, the hardening of global commodity prices has a relatively moderate impact on CPI inflation relative to WPI inflation, but the impact on CPI core is more persistent.

Chart 1: Estimated Results



Note: Coefficients are pass-through estimates.
Source: NSO, Office of the Economic Adviser, GoI, International Monetary Fund and RBI staff estimates.

Reference:

Batten, Dallas S., and Daniel L. Thornton (1983), 'Polynomial Distributed Lags and the Estimation of the St. Louis Equation', *Federal Reserve Bank of St. Louis,* Vol.65 (Apr.), Pages 13-25.

17 Where *Domestic Price Index* refers to CPI and WPI overall/non-food non-fuel as the case may be; *IMF Price* refers to overall/non-food non-fuel primary commodity price index; *Ex Rate* refers to USD/INR exchange rate; *IIP Gap Dom/IIP Gap OECD* are IIP gaps used as proxies for domestic and global demand, respectively, *Abs Rain Dev* refers to absolute deviation of actual rainfall from its long period average, and ε_t and u_t are associated error terms and t denotes time. All data series have been converted to their natural log form and then de-seasonalised before estimation.

inflation and elevated CPI inflation, the gross domestic product (GDP) deflator inflation also hardened to 9.6 per cent in 2021-22 as per 2nd AE 2021-22 from 5.6 per cent in 2020-21.

II.2.29 There was a moderate hike in minimum support prices (MSPs) for *kharif* and *rabi* crops in 2021-22. The extent of MSP increases varied across crops, ranging from 1.1 per cent in the case of *moong* and maize to 8.6 per cent for rapeseed/mustard. MSPs for rice and wheat were increased by 3.9 per cent and 2.0 per cent, respectively.

II.2.30 Wage growth for agricultural and non-agricultural labourers remained muted during the year, averaging 4.4 per cent and 3.6 per cent, respectively, during May 2021-February 2022, on account of subdued demand conditions coexisting with lower rural inflation. However, agricultural wage growth picked up to 6.0 per cent in February 2022 from a low of 1.1 per cent in June 2021, while non-agricultural wage growth increased to 6.1 per cent in February 2022 from 0.2 per cent in May 2021, partly reflecting unfavourable base effects.

6. Conclusion

II.2.31 In sum, headline inflation remains above the target of 4 per cent, having tested the upper tolerance level during the second wave in May-June 2021 and the third wave along with the Russia-Ukraine conflict in January-March 2022. The flare-up in vegetable prices due to heavy rains in October and November 2021 started to reverse with winter crop arrivals in December 2021 but the extent of winter easing was shallower than normal. The supply side interventions by the government continue to restrain the pass-through of elevated international edible oil prices to domestic retail inflation. Cost-push pressures from high industrial raw material prices, transportation costs, and global logistics and supply chain bottlenecks continue to impinge on core inflation. The substantial wedge between wholesale and retail price inflation amidst a sharp rise in manufactured products' inflation poses risk of a possible pass-through of input cost pressures to retail inflation with a lag, although slack in the economy is muting the pass-through. The conflict over Ukraine and the consequent spike in commodity prices has overcast the outlook for inflation in India as in the rest of the world.

II.3 MONEY AND CREDIT

II.3.1 Monetary and credit conditions during the year evolved in sync with the Reserve Bank's accommodative policy stance. Overall financial conditions remained benign although there has been some tightening in the recent period largely due to global spillovers. Reserve money (RM), adjusted for the first-round effects of the increase in the cash reserve ratio (CRR)[18], moderated. Precautionary demand for currency, which had surged in 2020-21 due to the COVID-19-induced uncertainties, softened during the year. Concomitantly, there was a marginal uptick in the velocity of money, possibly reflecting improvement in consumer demand conditions in the economy. Money supply (M_3) growth decelerated during the year, mirroring the behaviour of its largest component - aggregate deposits. On the other hand, bank credit growth picked up, especially since August 2021, and it was broad-based.

II.3.2 Against this backdrop, sub-section 2 delves into the dynamics underlying movements

[18] CRR was increased from 3.0 per cent to 3.5 per cent, effective March 27, 2021; to 4.0 per cent, effective May 22, 2021; and further to 4.5 per cent, effective May 21, 2022.

in RM and, thereby, the shifts in the Reserve Bank's balance sheet. Sub-section 3 examines developments in money supply in terms of its components and sources, throwing light on the movements in assets and liabilities of the banking sector. The underpinnings of bank credit are covered in sub-section 4, followed by concluding observations.

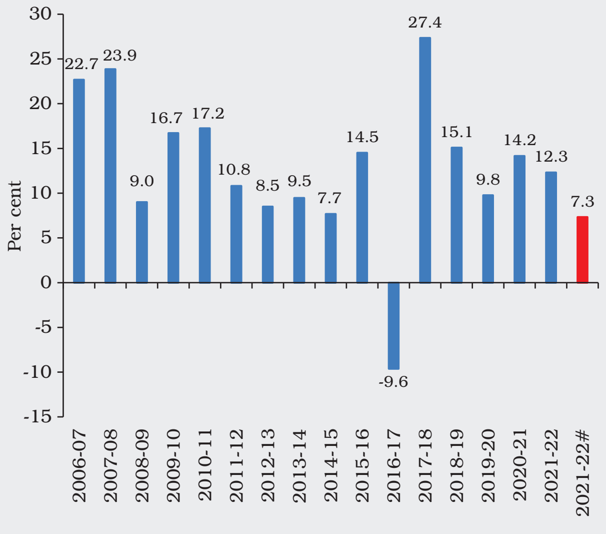
2. Reserve Money[19]

II.3.3 Reserve money - which is essentially an analytical and stylised depiction of the Reserve Bank's balance sheet that focuses on its monetary liabilities, comprising currency in circulation, bankers' deposits, and other deposits with the Reserve Bank - increased by 12.3 per cent in 2021-22, lower than 14.2 per cent a year ago but higher than its decennial average of 10.6 per cent (2012-21) [Chart II.3.1; Appendix Table 4]. Adjusted for the increase in CRR in phases by 100 basis points (bps) since March 27, 2021, RM grew by 7.3 per cent in 2021-22, as against 18.0 per cent a year ago.

II.3.4 Among its components, currency in circulation (CiC) constituted around 80 per cent of RM in 2021-22. Although the contribution of currency in determining the overall expansion in RM peaked in June 2021[20], CiC accounted for 88 per cent of the overall expansion in RM during the year (89 per cent a year ago), which is below the decennial average of 108 per cent (2012-21).

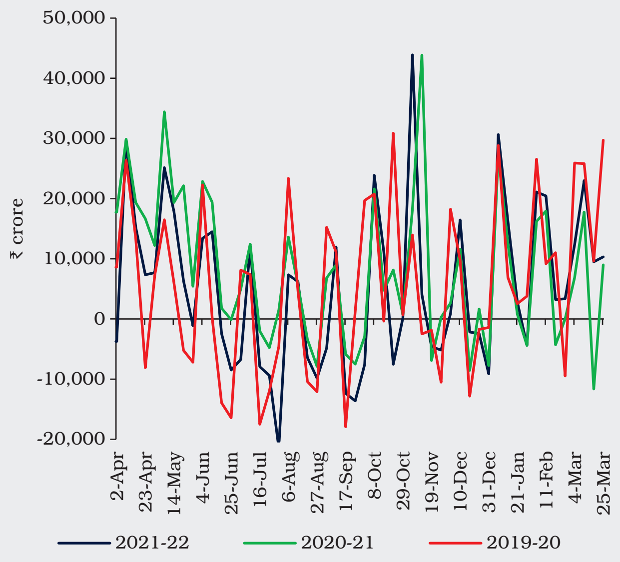
II.3.5 The demand for CiC normally follows a predictable intra-month pattern - expansion during the first fortnight due to transactions by households, followed by a contraction in the second fortnight due to flow back of currency from households to the banking system (Chart II.3.2).

Chart II.3.1: Reserve Money Growth



#: RM adjusted for the change in CRR.
Source: RBI.

Chart II.3.2: Weekly Variation in Currency in Circulation

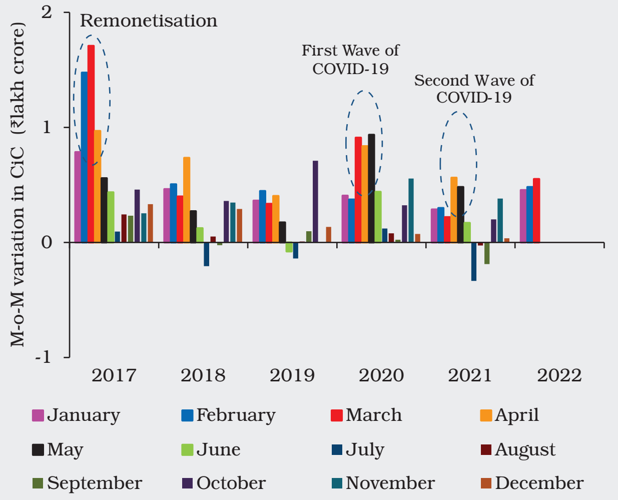


Source: RBI.

[19] In sub-section 2, growth and other ratios pertaining to end of financial year/quarter/month are based on the last Friday of the respective financial year/quarter/month.

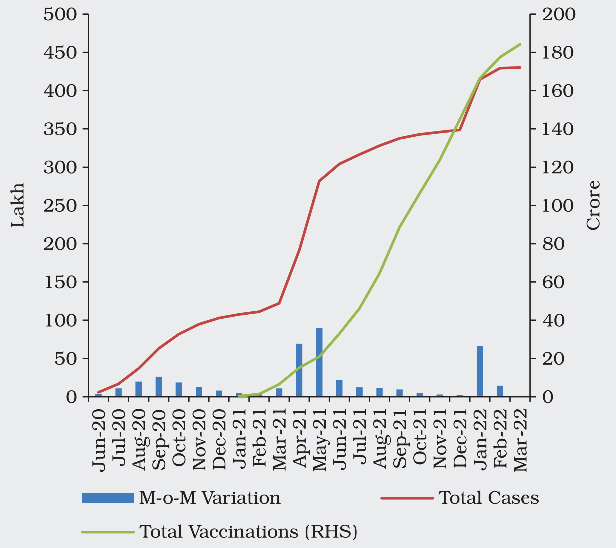
[20] Excluding the months in which RM contracted.

Chart II.3.3: Impact of COVID-19 on CiC



Note: The unusual increase in CiC during January-June 2017 was on account of the remonetisation process, post demonetisation.
Source: RBI.

Chart II.3.4: COVID-19 Cases and Vaccinations in India

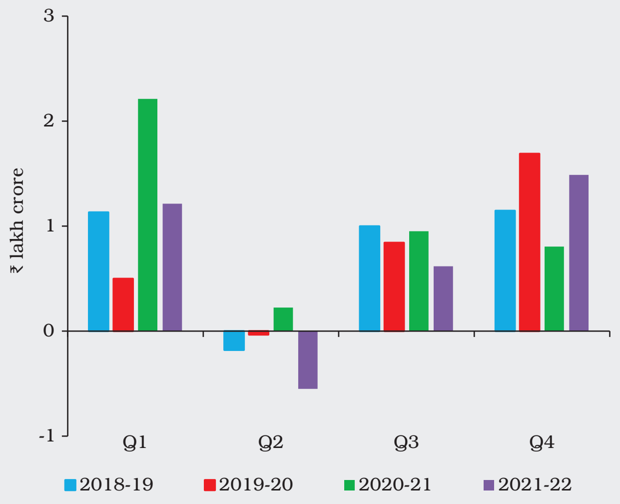


Source: www.ourworldindata.org.

II.3.6 There was an unusual rise in month-over-month (M-o-M) CiC variation in April-May 2021 due to the second wave of COVID-19, *albeit* to a lesser extent as compared with the first wave in April-June 2020, but higher than the corresponding period of pre-pandemic years (Chart II.3.3). With the epidemiological curve bending downwards from June 2021, the variations in CiC were mostly determined by seasonal factors (Chart II.3.4).

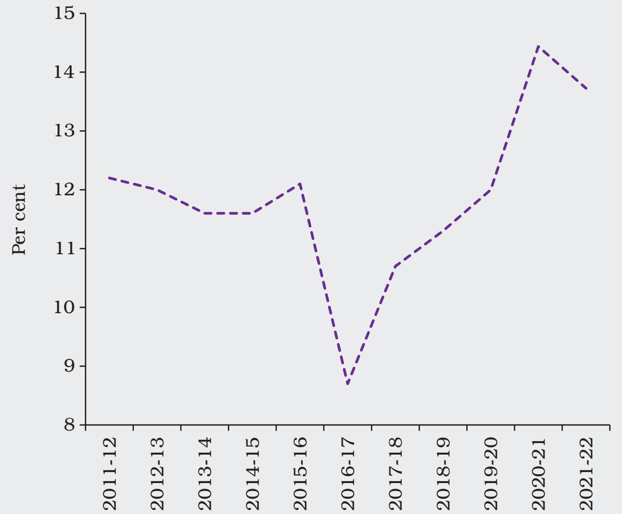
II.3.7 Barring the sharp surge during April-May 2021 due to the second wave of the pandemic, currency demand reverted to its usual seasonal pattern in 2021-22. The typical seasonal spurt in Q1:2021-22, associated with *rabi* procurement and *kharif* sowing, was significantly lower than Q1:2020-21, and was comparable with pre-pandemic years. In the following quarter, CiC contracted due to the seasonal slack in economic activity in cash-intensive sectors such as construction and agriculture. In Q3:2021-22, CiC expanded, reflecting increase in demand for currency for festivals and *kharif* harvest. Further expansion in CiC was evident in Q4:2021-22 due to the harvest of *rabi* crops, various festivals, and run up to the legislative assembly elections in five states (Chart II.3.5). Lower CiC growth at 9.7 per cent in 2021-22 (17.2 per cent a year ago) resulted in a decline in the currency-GDP ratio to 13.7 per cent (14.4 per cent in 2020-21) as cash-intensity

Chart II.3.5: Quarterly Variation in Currency in Circulation



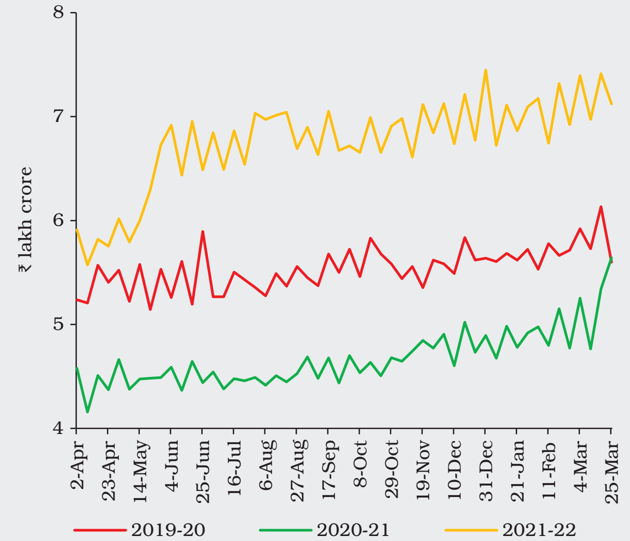
Source: RBI.

Chart II.3.6: India's Currency-GDP Ratio



Source: RBI and Ministry of Statistics and Programme Implementation, GoI.

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



Source: RBI.

in the economy started normalising with reduction in the intensity of the pandemic (Chart II.3.6).

II.3.8 Bankers' deposits with the Reserve Bank increased by 25.3 per cent in 2021-22 as against a marginal expansion of 0.8 per cent in the previous year, primarily due to increase in CRR in phases by 100 bps to 4.0 per cent (Chart II.3.7).

II.3.9 Amongst the sources of RM, during 2021-22, the main driver for RM growth was net foreign assets (NFA), even though net purchases from authorised dealers at ₹2.07 lakh crore were lower than ₹5.16 lakh crore of the previous year (Chart II.3.8a and II.3.8b). Consistent with the accommodative stance of monetary policy, liquidity management operations boosted net domestic assets (NDA) of the Reserve Bank.

II.3.10 In particular, net open market purchases (including auctions of special OMOs involving

Chart II.3.8a: NFA as per cent of RM

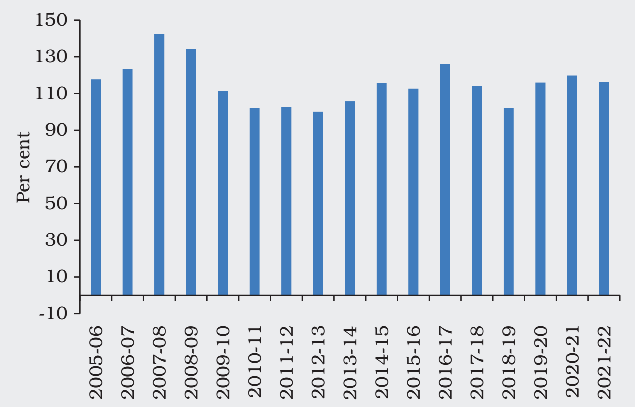
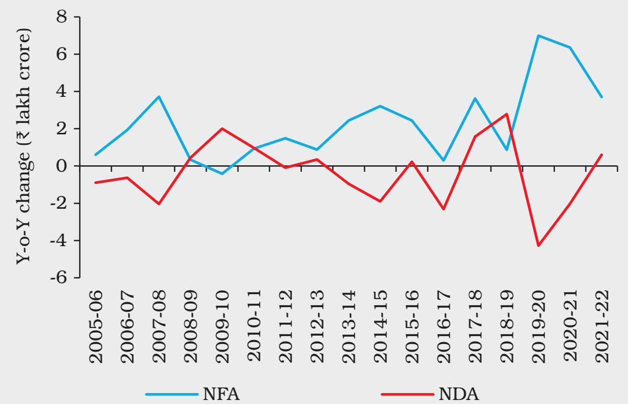
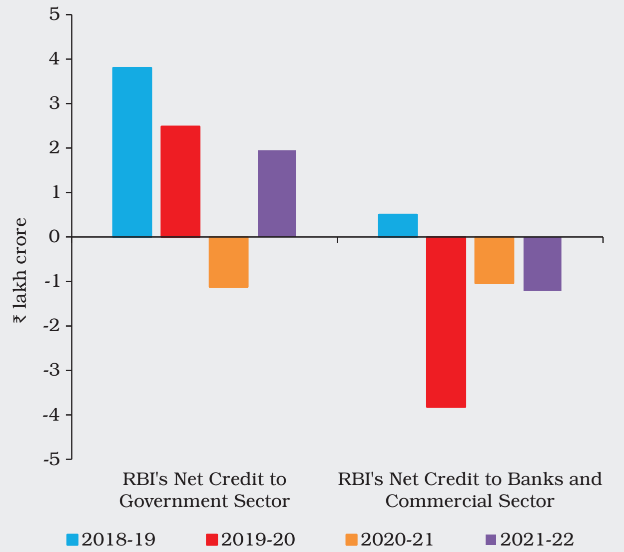


Chart II.3.8b: Variation in Domestic and Foreign Assets of the Reserve Bank



Source: RBI.

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



Source: RBI.

in the Reserve Bank's net credit to banks and the commercial sector (mainly PDs), primarily reflected in net liquidity adjustment facility (LAF) absorption (Chart II.3.9).

II.3.11 The net LAF position remained in reverse repo mode throughout 2021-22, averaging ₹6.7 lakh crore, indicating ample system level liquidity (Chart II.3.10).

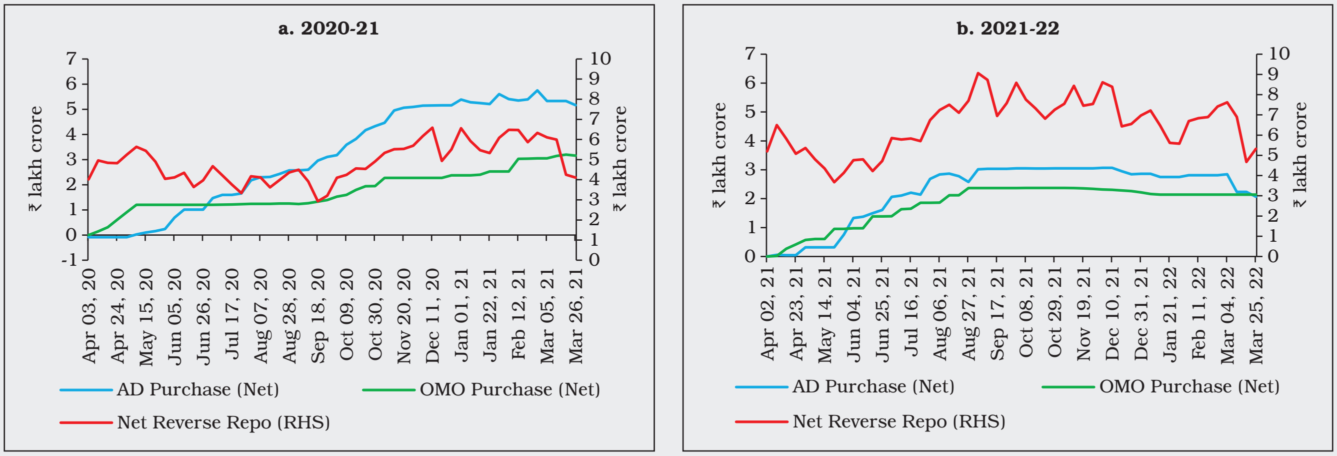
3. Money Supply[21]

II.3.12 Stabilising from a prolonged decline till 2016-17, M_3 comprising currency with the public (CwP), aggregate deposits (AD) and other deposits with the Reserve Bank, recorded a growth of 8.7 per cent in 2021-22 (12.3 per cent a year ago) driven by time deposits (Chart II.3.11).

simultaneous purchase and sale of securities for liquidity distribution across the yield curve and OMOs in state development loans) of ₹2.14 lakh crore reflected in an increase in the net Reserve Bank credit to the government by ₹1.95 lakh crore in 2021-22. On the other hand, contraction

II.3.13 On the components side, M_3 expansion was driven by AD, its largest constituent (85 per cent share). In fact, AD accounted for 82 per cent of the increase in M_3 during the year, with time deposits growing at 8.1 per cent (10.9 per cent a year ago) in spite of considerable moderation

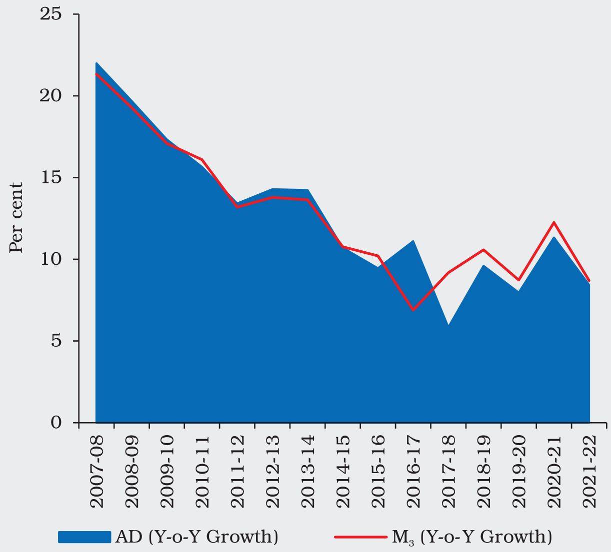
Chart II.3.10: Liquidity Injection/Absorption



Source: RBI.

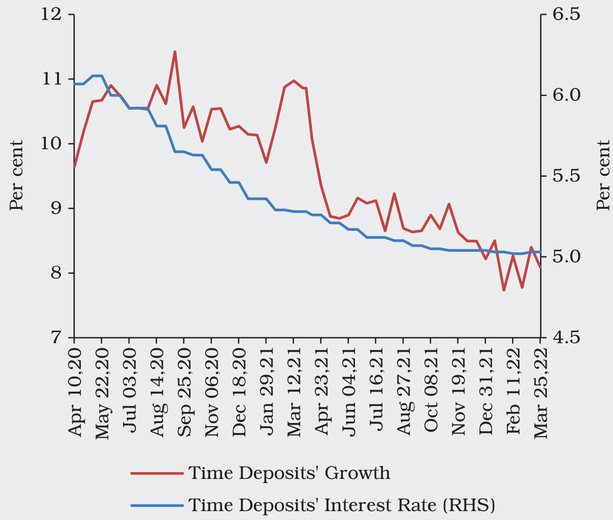
[21] In sub-sections 3 and 4, growth and other ratios pertaining to end of financial year/quarter/month are based on the last reporting Friday of the respective financial year/quarter/month.

Chart II.3.11: Aggregate Deposits and M_3



Source: RBI.

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

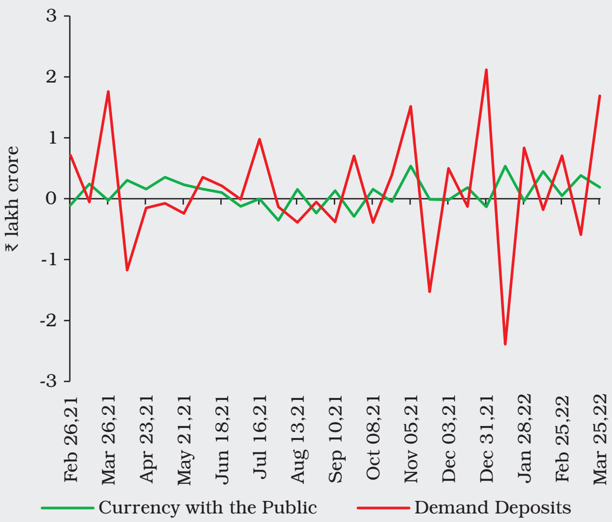


Source: RBI.

in interest rates (Chart II.3.12). As usual, demand deposits remained volatile, largely mirroring the variations in currency with the public which grew by 10.2 per cent in 2021-22 *vis-à-vis* 17.7 per cent in the previous year (Chart II.3.13).

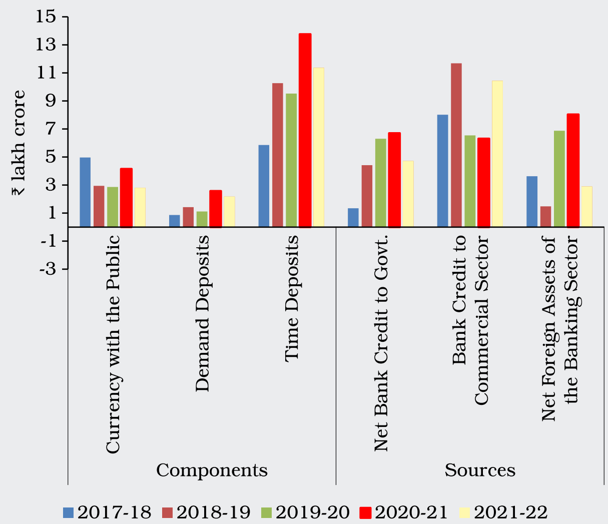
II.3.14 On the sources side, bank credit to the commercial sector, followed by net bank credit to the government and net foreign exchange assets of the banking sector led the expansion in M_3 in 2021-22 (Chart II.3.14). Amongst these sources, bank credit to the commercial sector - the largest constituent of M_3 from the sources side - grew at a rate higher than a year ago.

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



Source: RBI.

Chart II.3.14: Expansion in M_3: Components and Sources



Source: RBI.

Table II.3.1: Monetary Aggregates

Item	Outstanding as on March 25, 2022 (₹ crore)	Year-on-Year Growth Rate (Per cent)		
		2019-20	2020-21	2021-22
1	2	3	4	5
I. Reserve Money (RM)	39,20,298	9.8	14.2	12.3
II. Money Supply (M_3)	2,04,89,597	8.7	12.3	8.7
III. Major Components of M_3				
III.1. Currency with the Public	30,37,622	14.0	17.7	10.2
III.2. Aggregate Deposits	1,73,99,596	8.0	11.3	8.4
IV. Major Sources of M_3				
IV.1. Net Bank Credit to Government	62,04,211	14.2	13.2	8.2
IV.2. Bank Credit to Commercial Sector	1,26,10,042	6.3	5.7	9.0
IV.3. Net Foreign Assets of the Banking Sector	48,50,355	22.4	21.4	6.3
V. M_3 Net of FCNR(B)	2,03,60,720	8.7	12.6	8.9
VI. Money Multiplier*	5.2	5.0	4.8	3.8

*: In columns 3, 4 and 5, data indicate incremental money multiplier.
Note: Data are provisional.
Source: RBI.

II.3.15 On the other hand, net bank credit to government decelerated to 8.2 per cent in 2021-22 as compared with 13.2 per cent a year ago, reflecting active usage of funds for credit creation, unlike a year ago when banks augmented their SLR portfolios in search of safe haven amidst COVID-19 induced uncertainties (Table II.3.1).

Key Monetary Ratios

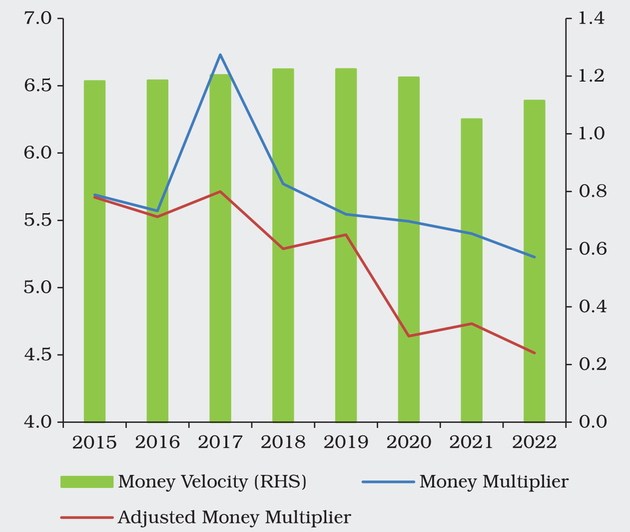
II.3.16 The money multiplier stood at 5.2 in 2021-22, below its decennial average of 5.7 (2012-21). Adjusted for reverse repo - analytically more meaningful and akin to banks' deposits with the central bank - the money multiplier turned out to be lower at 4.5. A weak money multiplier along with the deceleration in RM growth (adjusted for the first-round effects of CRR increase) explain the slower growth in M_3 in 2021-22 *vis-à-vis* last year (Chart II.3.15 and Chart II.3.16).

II.3.17 The currency-deposit ratio stood at 17.5 per cent in 2021-22, above its decennial average (2012-21) of 15.3 per cent. It is at a similar level *vis-à-vis* end-March 2021, indicating that the public's preference towards cash, the most liquid asset, in response to the uncertainties relating to the pandemic, did not increase significantly during the year. The reserve-deposit ratio at 4.2 per cent (3.6 per cent a year ago), reflected the impact of CRR increase during 2021-22 (Chart II.3.17).

Chart II.3.15: M_3 Growth

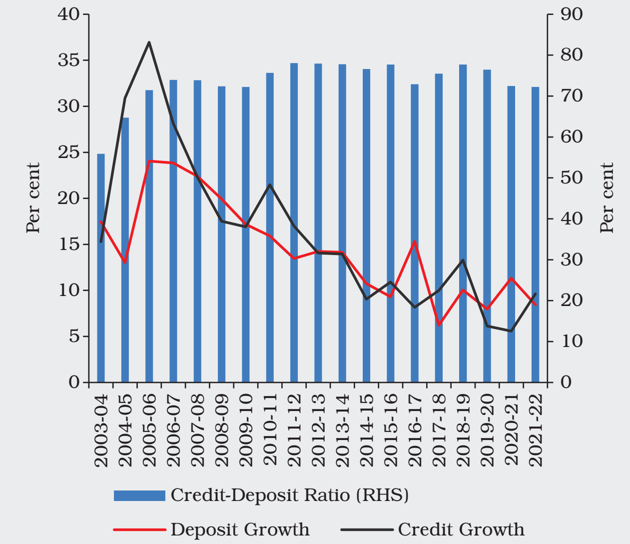
Source: RBI.

Chart II.3.16: Money Multiplier and Velocity*



*: As on end-March.
Source: RBI.

Chart II.3.18: SCBs' Credit-Deposit Ratio

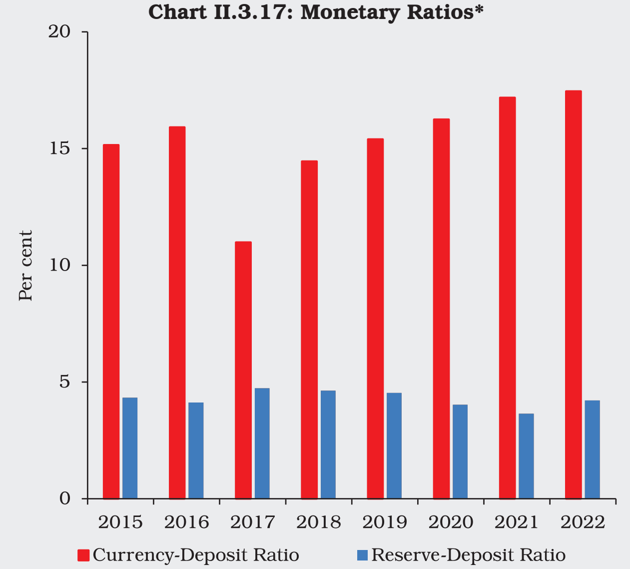


Source: RBI.

4. Credit

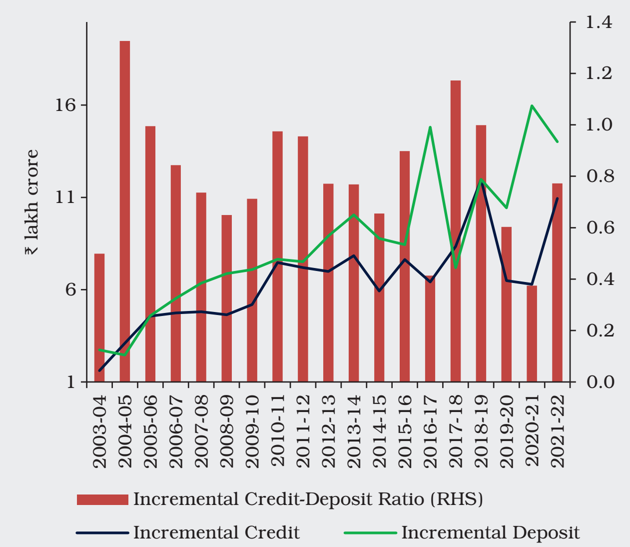
II.3.18 With the current policy prescription of 4.5 per cent and 18 per cent for CRR and SLR, respectively, around 78 per cent of the deposits are available with the banking system for extending credit. In 2021-22, scheduled commercial banks' (SCBs) credit-deposit ratio stood at 72.2 per cent, a level comparable with end-March 2021 (72.4 per cent), as credit expansion broadly maintained pace with deposit mobilisation after lagging behind during 2019-20 and 2020-21 (Chart II.3.18 and Chart II.3.19).

Chart II.3.17: Monetary Ratios*



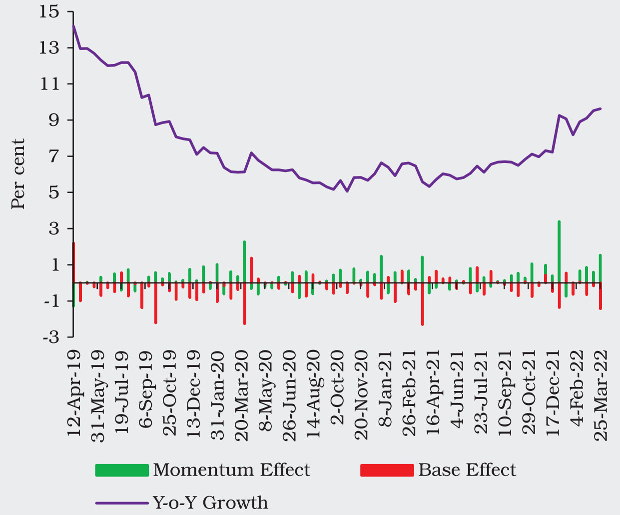
*: As on end-March.
Source: RBI.

Chart II.3.19: Incremental Credit-Deposit Ratio



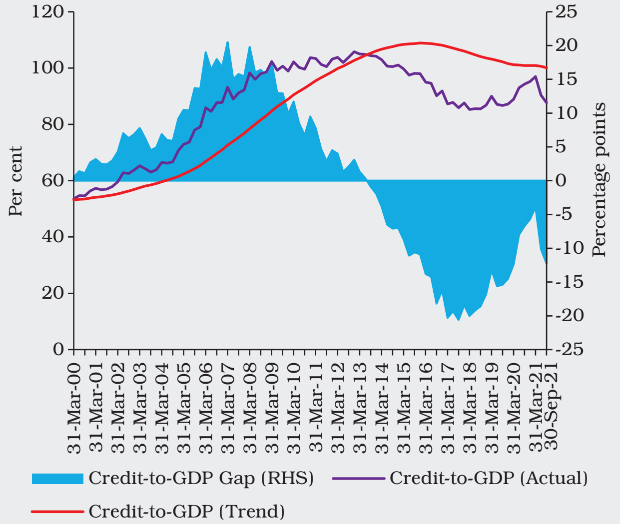
Source: RBI.

Chart II.3.20: SCBs' Credit Growth: Momentum and Base Effect



Source: RBI.

Chart II.3.21: Credit-to-GDP Gap



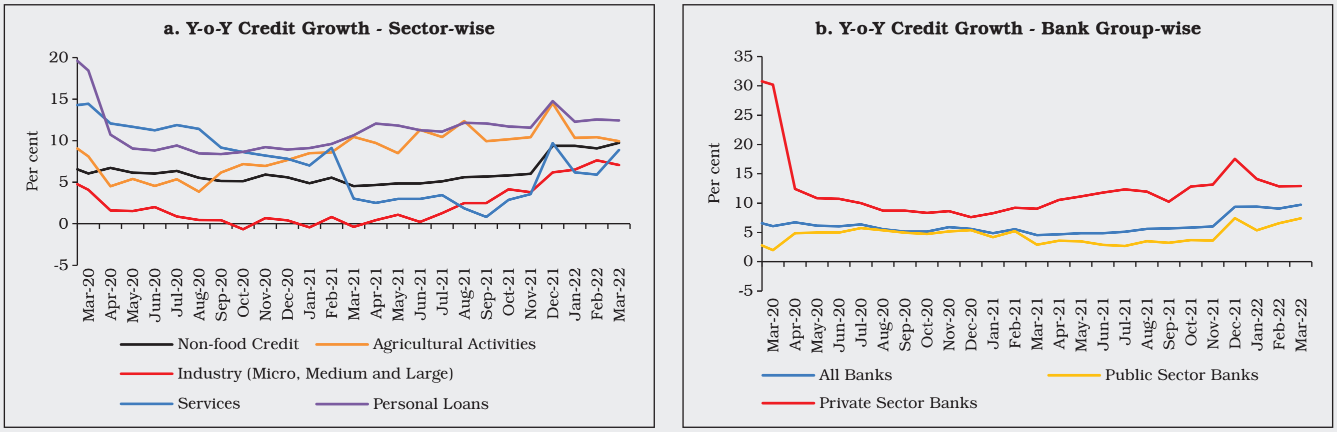
Source: Bank for International Settlements (BIS) Credit-to-GDP Gap statistics.

II.3.19 In 2021-22, the y-o-y growth in SCBs' credit recouped lost pace. As per the Section 42 returns data submitted by banks under the Reserve Bank of India Act, the momentum in SCBs' credit offtake has been mostly positive since end-August 2021 and its growth stood at 9.6 per cent on a year-on-year basis for 2021-22 as compared with 5.6 per cent a year ago (Chart II.3.20). The credit-to-GDP gap, however, continues to be large, reflecting the persisting slack in credit demand in the economy (Chart II.3.21).

II.3.20 After remaining subdued in the beginning of the financial year 2021-22, a turnaround in credit growth was recorded across major sectors in Q4:2021-22. The Reserve Bank's continuous efforts to maintain adequate liquidity in the banking system, coupled with the government's efforts to boost credit demand conditions in the economy was reflected in the pickup in credit offtake by various sectors. According to data on the sectoral deployment of bank credit[22], credit to agriculture and allied activities grew by 9.9 per cent in March 2022 *vis-à-vis* 10.5 per cent in March 2021. Bank credit growth remained robust for the resilient agriculture sector even during the COVID-19 pandemic period, with continued support of the government's interest subvention scheme. Industrial credit growth improved steadily after Q1:2021-22 and accelerated to 7.1 per cent in March 2022. Medium industries, in particular, registered a growth of 71.4 per cent in March 2022, as compared with 34.5 per cent a year ago. Credit to micro and small industries also posted a faster growth of 21.5 per cent in March 2022 from 3.9 per cent a year ago. The growth recorded in the MSME sector's credit demand is largely attributable to the government's impetus and the Reserve Bank's policies to revive the sector. Credit growth to large industry, which was mainly in contraction

[22] In the sectoral deployment of bank credit data, non-food credit data are based on fortnightly Section 42 return, which covers all SCBs, while sectoral non-food credit data are based on sector-wise and industry-wise bank credit (SIBC) return, which covers select banks accounting for about 94 per cent of total non-food credit extended by all SCBs, pertaining to the last reporting Friday of the month.

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



Note: Data are provisional.
Source: RBI.

zone till December 2021, turned positive in January 2022 and stood at 0.9 per cent in March 2022 (Chart II.3.22a and Table II.3.2).

II.3.21 Among the industry sub sectors, credit to engineering, beverage and tobacco, chemicals and chemical products, construction, food processing, infrastructure, leather and leather products, mining and quarrying, petroleum, coal products and nuclear fuels, textiles, rubber plastic and their products, and vehicles, vehicle parts and transport equipment recorded accelerated growth in March 2022 on a year-on-year basis. However, credit growth to

Table II.3.2: Credit Deployment to Select Sectors

Sectors	Outstanding as on March 25, 2022 (₹ crore)	Year-on-Year Growth (Per cent)		
		2019-20*	2020-21#	2021-22##
1	2	3	4	5
Non-food Credit	**1,18,35,628**	**6.1**	**4.5**	**9.7**
1. Agriculture & Allied Activities	**14,66,514**	**8.1**	**10.5**	**9.9**
2. Industry (Micro & Small, Medium and Large)	**31,71,909**	**4.1**	**-0.4**	**7.1**
2.1. Micro & Small	4,95,281	4.5	3.9	21.5
2.2. Medium	2,42,269	3.4	34.5	71.4
2.3. Large	24,34,359	4.1	-2.5	0.9
(i) Infrastructure	12,02,694	2.7	1.6	9.3
(a) Power	6,09,773	0.3	-0.3	7.2
(b) Telecommunications	1,37,381	29.4	-21.3	18.6
(c) Roads	2,70,806	3.6	27.6	17.0
(ii) Chemicals & Chemical Products	2,14,141	10.2	-6.8	8.7
(iii) Basic Metals & Metal Products	2,96,427	-6.3	-6.4	-9.2
(iv) Food Processing	1,73,530	-1.3	8.2	10.9
(v) Textiles	2,25,096	-3.6	5.0	10.1
3. Services	**30,36,122**	**14.4**	**3.0**	**8.9**
4. Personal Loans	**33,74,876**	**18.4**	**10.7**	**12.4**

*: March 2020 over March 2019. #: March 2021 over March 2020. ##: March 2022 over March 2021.
Note: Data are provisional.
Source: RBI.

gems and jewellery, paper and paper products and wood and wood products decelerated. Bank credit to basic metal and metal products, cement and cement products, and glass and glassware recorded contraction during the same period.

II.3.22 Credit growth to infrastructure, a major constituent of the industrial sector, improved during 2021-22. The sector recorded a credit growth of 9.3 per cent in March 2022 as compared to 1.6 per cent a year ago. The credit growth to the sector was mainly driven by roads, power and telecommunications.

II.3.23 Services sector credit growth picked up in Q4:2021-22 and recorded an accelerated growth of 8.9 per cent in March 2022 *vis-à-vis* 3 per cent growth registered a year ago. The spurt in credit growth was mainly on account of a credit pick up in sub-sectors like NBFCs and trade, which together constitute around 58 per cent of the total services sector credit. The bank credit growth in personal loans segment remained in double digits during 2021-22, primarily driven by housing, the largest constituent of the sector, followed by vehicle loans.

II.3.24 Among bank groups, public sector banks' credit growth remained sub 4 per cent till November 2021 before improving to 7.4 per cent in March 2022 (2.9 per cent a year ago), driven by personal loans. Credit extended by private sector banks registered an improved growth of 12.9 per cent in March 2022 as compared with 9 per cent a year ago (Chart II.3.22b).

5. Conclusion

II.3.25 To sum up, key monetary and credit aggregates moved in line with the Reserve Bank's accommodative policy stance during the year. Overall financial conditions remained supportive of the recovery, despite the volatile global environment and diverging monetary policy stances, geopolitical tensions and persistent supply bottlenecks. Precautionary currency demand is ebbing and the usual seasonal pattern in CiC, comparable to pre-pandemic years, has re-emerged. In tandem with economic activity, credit growth has accelerated. Going forward, the broad-based rebound in domestic economic activity is likely to sustain credit demand. Several measures undertaken by the government such as the PLI scheme and the extended ECLGS support had a salutary effect on credit growth and are expected to limit the impact of risks facing the borrowers from global spillovers and the uncertainty about the recurrence of COVID-19 waves.

II.4 FINANCIAL MARKETS

II.4.1 Global financial markets which generally remained buoyant during the greater part of 2021, turned volatile in Q1:2022 in the anticipation of start of the withdrawal of monetary policy accommodation by many central banks. Abrupt and large shifts in risk sentiment caused volatility to spike and repricing of assets roiled financial markets with the escalation of the Ukraine-Russia conflict.

II.4.2 Earlier during the year, abundance of liquidity and accommodative monetary policies in major economies had pushed financial asset prices to all-time highs, bolstered also by stimulus packages and easing of COVID-19 restrictions, with occasional bouts of turbulence dispelling the calm as monetary policy stances diverged and intent to normalise triggered illiquidity fears, alongside rising cases of the Omicron variant. Surges in energy prices and the persisting disruptions to international supply chains kept market sentiment unsettled. Equity markets in emerging market economies (EMEs) experienced spillovers and occasional flights to safety as well as risk-on bounce backs. The US dollar strengthened on safe haven demand. Global bond yields also hardened in response to these developments. Commodity prices, including oil, rose sharply with crude oil prices touching their highest levels in the past fourteen years in March 2022 as geopolitical tensions collided with these visitations of turbulence and overwhelmed market sentiment.

II.4.3 In India, financial markets remained vibrant amidst easy liquidity conditions, although the severe second wave of the pandemic during April-May 2021 dampened sentiments. The equity market continued to register double-digit growth in 2021-22 in sync with global peers with optimism on large scale vaccine rollouts and resurgence in economic activity. Sustained support from monetary and fiscal measures cushioned domestic equities and initial public offerings (IPOs) and follow-on public offers (FPOs) recharged investor ebullience while containing movements in bond yields. In H1:2021-22, substantial resources were raised from the market in a non-disruptive manner, helped by strong corporate earnings. Investors turned cautious in H2:2021-22 following the announcements of policy normalisation in advanced economies (AEs) and rapid spread of Omicron. In 2021-22, the Sensex increased by 18.3 per cent, outperforming global peers. The Reserve Bank proactively managed liquidity conditions during the year with various liquidity measures. Expectation of faster normalisation of monetary policy by global central banks amid inflationary concerns along with upside movement in the US treasury yields and crude oil prices led to upward pressure on domestic 10-year G-sec yields. The strengthening of the US dollar and net foreign portfolio investment (FPI) outflows contributed to weakening of the Indian rupee during the year.

II.4.4 Money market developments are detailed in sub-section 2. G-sec yields are discussed in sub-section 3. Sub-section 4 presents developments in the corporate bond market. Sub-section 5 profiles 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 last sub-section offers concluding observations along with some forward-looking perspectives.

2. Money Market

II.4.5 Notwithstanding the ravages unleashed by the virulent second wave of the pandemic in April-May 2021, the money market remained stable during the year 2021-22, as the Reserve Bank maintained ample liquidity[23] in the system.

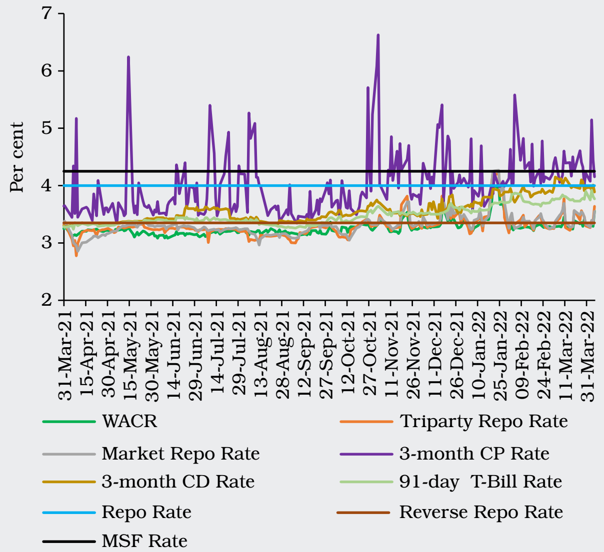
II.4.6 The weighted average call rate (WACR) in the unsecured call money market – the operating target of monetary policy – generally traded below the floor of the policy corridor, *i.e.*, the fixed rate reverse repo, during the year reflecting abundant liquidity in the system (Chart II.4.1). The average spread of the WACR over the policy rate widened to (-) 75 basis points (bps) in 2021-22 from (-) 63 bps in 2020-21.

II.4.7 Volatility in the call money segment, measured by the coefficient of variation[24] of the WACR, decreased significantly to 4.05 from 8.34 in 2020-21 on account of the proactive liquidity measures taken by the Reserve Bank.

[23] Details relating to liquidity management operations are covered in Chapter III of this Report.

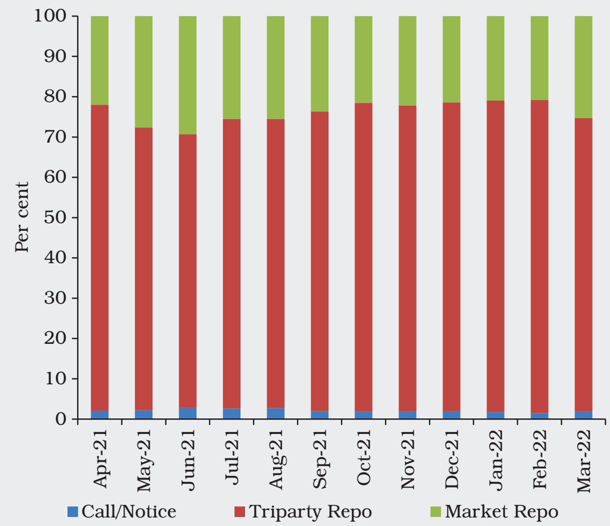
[24] Coefficient of variation is measured as a ratio of standard deviation to the mean.

Chart II.4.1: Money Market Rates and Policy Corridor



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

Chart II.4.2: Share of Major Segments in Money Market Volume

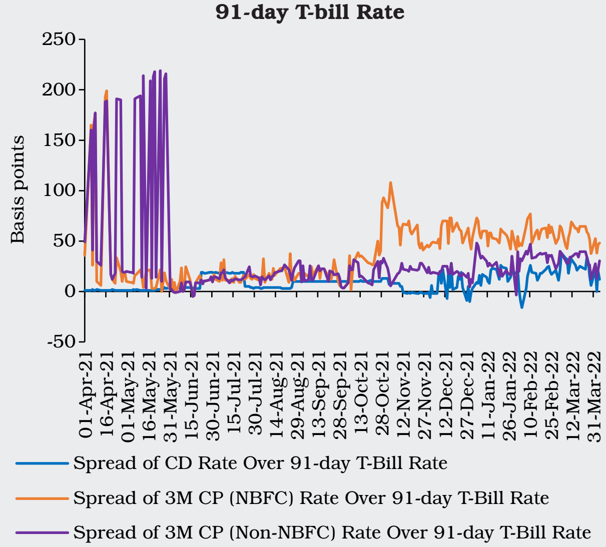


Source: CCIL and RBI staff calculations.

II.4.8 The average daily volume in the money market (call money, triparty repo and market repo taken together, excluding Saturdays) increased by 35 per cent to ₹4,55,224 crore during 2021-22 from ₹3,36,371 crore in 2020-21. Volumes in the triparty repo and market repo segments also increased and accounted for 74 per cent and 24 per cent, respectively, of the total money market volume (call/triparty repo and market repo) as compared with 69 per cent and 28 per cent, respectively, in 2020-21. In the call money segment, average daily volumes decreased by 18 per cent to ₹9,060 crore during the year from ₹10,993 crore in 2020-21, reducing market share to 2 per cent from 3 per cent in the previous year (Chart II.4.2).

II.4.9 Interest rates on long term money market instruments, *viz.,* 91-day Treasury Bills (T-bills), certificates of deposit (CDs) and commercial papers (CPs) generally moved in sync with the short term (call, triparty repo and market repo) rates during the year under review. The average daily spread of CD rates over T-bill rates narrowed to 9 bps during the year from 16 bps in 2020-21 (Chart II.4.3). The average daily spread of 3-month CP(NBFC) rates over the 91-day T-bill rates increased from 16 bps during Q2: 2021-22 to 56 bps in Q4:2021-22. The weighted average discount rates in the primary CP market, which softened in mid-September 2021 to 3.51 per cent, hardened

Chart II.4.3: Spread of 3-month CP and CD Rate over 91-day T-bill Rate



Source: Bloomberg, FBIL and RBI staff calculations.

thereafter by about 96 bps to 4.47 per cent in end-March 2022. The hardening of the rates was led by increased liquidity absorption by the Reserve Bank through variable rate reverse repo (VRRR) operations and the NBFCs borrowing through CPs to subscribe to initial public offerings (IPOs) by companies. The 3-month CP (NBFC) rate increased from 3.48 per cent at end-September 2021 to 4.25 per cent at end-March 2022. The 3-month CP (non-NBFC) rate increased from 3.48 per cent to 4.08 per cent during the same period.

II.4.10 In the primary market, fresh issuance of CDs increased to ₹2.33 lakh crore during 2021-22 from ₹1.31 lakh crore in 2020-21. New issuance of CPs in the primary market increased to ₹20.19 lakh crore in 2021-22 from ₹17.41 lakh crore in 2020-21.

3. G-sec Market

II.4.11 During Q1:2021-22, the benchmark G-sec yield softened in response to accommodative stance of monetary policy operations under G-SAP 1.0 and special OMOs (operation twist). Fears of additional government borrowing to bridge the GST compensation cess shortfall and a higher than expected CPI inflation print for May 2021 imparted transient bearishness to market sentiment. Overall, the 10-year generic G-sec yield softened by 12 bps during the quarter to close at 6.05 per cent, trading in the range of 5.96-6.19 per cent (on an intra-day basis).

II.4.12 During Q2:2021-22, the 10-year generic yield rose by 17 bps to close at 6.22 per cent. The rise in global crude oil prices, announcements of a phased increase in the quantum of VRRR operations on August 6, 2021 and upward revision of MPC's inflation forecast in August 2021 meeting led to hardening of yields pushing them up to 6.26 per cent in August 2021. In the first half of September 2021, however, yields softened with resumption of portfolio debt inflows, lower than expected fiscal deficit of the central government for April-July and a softer CPI inflation print for August 2021. Towards the latter part of September 2021, the announcement of OMO sales of short-term securities along with G-SAP 2.0, higher cut-offs in VRRR auctions, hawkish signals from other central banks and a sharp rise in crude oil prices contributed to upward pressure on yields.

II.4.13 The 10-year yield hardened during October 2021 in sympathy with rise in US treasury yields and international crude oil prices and pause in G-SAP auctions. The 10-year yield hardened further in December 2021 and closed at 6.45 per cent on December 31, 2021, amidst, devolvement/cancellation in weekly primary auction and rise in international crude oil prices. Overall, the 10-year generic G-sec yield hardened by 23 bps in Q3:2021-22.

II.4.14 The 10-year generic G-sec yield hardened in Q4:2021-22, tracking the rise in international crude oil prices and higher than expected gross borrowing by the central government for the next financial year. Yields remained elevated in March amidst rally in commodity prices following escalation of geopolitical conflict. The 10-year generic G-sec yield closed at 6.84 per cent on March 31, 2022 (Chart II.4.4). Overall, the 10-year yield hardened by 67 bps with the sovereign yield curve shifting upwards and flattening during the year.

Chart II.4.4: 10-year G-sec Generic Yield

Source: Bloomberg.

II.4.15 With the introduction of the fully accessible route (FAR)[25] with effect from April 1, 2020, FPIs have three routes to invest in G-secs, *viz.,* the general route with investment limits set under the medium-term framework (MTF), the voluntary retention route (VRR) and the FAR. The limit for FPI investments in G-sec under the MTF for the year 2021-22 was set at ₹3,75,596 crore. The number of securities included under the FAR scheme increased from 12 securities (with outstanding stock of ₹11,79,423 crore as on April 1, 2021) to 17 securities (with outstanding stock of ₹17,58,043 crore as on March 31, 2022). During 2021-22, FPIs registered a net sell of ₹15,048 crore in G-secs under the general route. However, FPIs invested ₹13,275 crore under the FAR route during the same period. FPIs also invested ₹4,370 crore in G-secs under VRR, which has a combined investment limit of ₹1,50,000 crore for G-secs and corporate bonds (increased to ₹2,50,000 crore with effect from April 1, 2022). FPIs bought a net amount of ₹30 crore of State Development Loans (SDLs) during the same period and in the aggregate invested ₹2,627 crore in G-secs and SDLs, across MTF, FAR and VRR segments during April 1, 2021 to March 31, 2022.

4. Corporate Debt Market

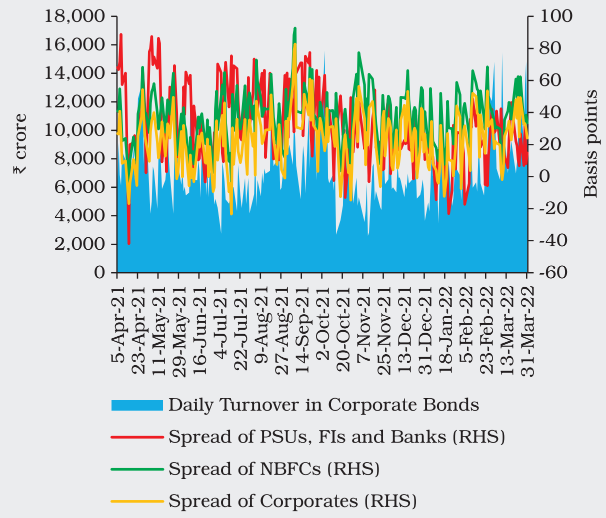
II.4.16 Financing conditions in the corporate bond market remained accommodative, with compression in credit spreads. During 2021-22, the monthly average yield on AAA-rated 3-year bonds of public sector undertakings (PSUs), financial institutions (FIs) and banks, NBFCs and corporate paper hardened by 3 bps, 29 bps and 32 bps, respectively. The average yield on AAA-rated 3-year bonds stood at 5.84 per cent for PSUs, FIs and banks, 5.98 per cent for NBFCs, and 5.88 per cent for corporates in March 2022.

II.4.17 During 2021-22, the monthly average risk premium or spread on AAA-rated 3-year bonds (over 3-year G-sec) decreased from 60 bps to 23 bps for PSUs, FIs and banks, 48 bps to 37 bps for NBFCs and 35 bps to 26 bps for corporates. The narrowing of spreads was also visible across the rating segments. The average daily turnover decreased to ₹7,358 crore during 2021-22 from ₹7,675 crore in the previous year (Chart II.4.5).

II.4.18 Primary corporate bond issuances witnessed moderation in Q1:2021-22, but picked up subsequently. Overall, primary corporate bond issuances decreased by 23.4 per cent to ₹6 lakh crore during 2021-22 as against issuances of ₹7.8 lakh crore during the previous year. Private placements remained the preferred choice for corporates, accounting for 98.1 per cent of total

[25] Under FAR, certain categories of central government securities were opened fully for non-resident investors without any restrictions, apart from being available to domestic investors as well.

Chart II.4.5: Turnover and AAA-rated 3-Year Yield Spread in Corporate Bond Market



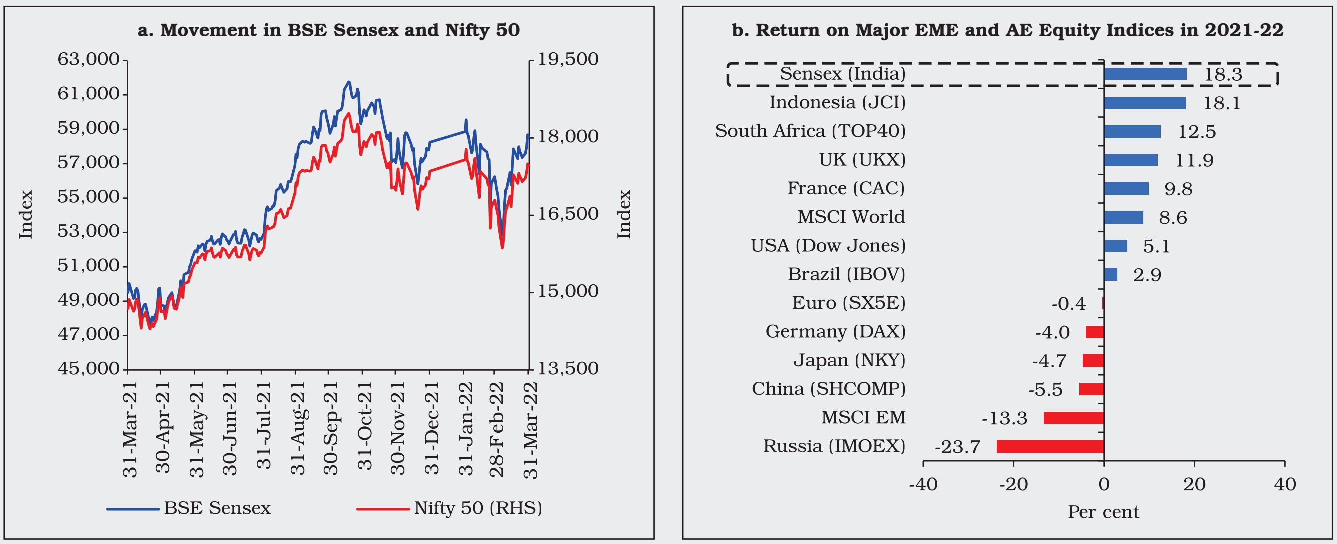
Source: SEBI and FIMMDA.

resources mobilised through the bond market. Outstanding corporate bonds increased by 11.2 per cent y-o-y to ₹40.2 lakh crore, *i.e.,* 17.0 per cent of GDP at end-March 2022. Investments by FPIs in corporate bonds decreased to ₹1.2 lakh crore at end-March 2022 from ₹1.3 lakh crore at end-March 2021. Consequently, utilisation of the approved limit by FPIs declined to 19.9 per cent at end-March 2022 from 24.5 per cent at end-March 2021.

5. Equity Market

II.4.19 Extending the rally from 2020-21, bulls continued to dominate the Indian equity markets in 2021-22. Market sentiment was unsettled, however, on global cues amid concerns over policy normalisation in AEs, country specific factors in systemic EMEs, the spread of Omicron and geopolitical tensions. Nevertheless, the BSE Sensex surged by 18.3 per cent to close at 58,569, outperforming many global peers, while the Nifty 50 increased by 18.9 per cent to close at 17,465 on March 31, 2022 (Chart II.4.6a and Chart II.4.6b). In 2021-22, the total market capitalisation of BSE listed companies surged by 29.2 per cent to ₹264.1 lakh crore. After increasing to 32 per cent in February 2022, India VIX, which captures short-term volatility of Nifty 50, dipped back to its end-March 2021 level of 20.6 per cent.

Chart II.4.6: Equity Market



Source: BSE, NSE and Bloomberg.

II.4.20 The equity markets commenced the year with modest losses due to a sudden spike in COVID-19 cases, sell-off by FPIs, decline in the manufacturing PMI to a 7-month low and imposition of fresh lockdown-like restrictions in some parts of the country. However, strong corporate earnings for Q4:2020-21 and positive cues from the global markets amidst a swift vaccine roll-out and fiscal stimulus measures lifted investor sentiment towards the end of the quarter. As a result, the market rebounded in May 2021 with the announcement of a series of liquidity enhancing measures by the Reserve Bank and upbeat corporate results. With domestic equities remaining bullish, market capitalisation of the BSE-listed companies rose to over US$ 3 trillion for the first time in its history.

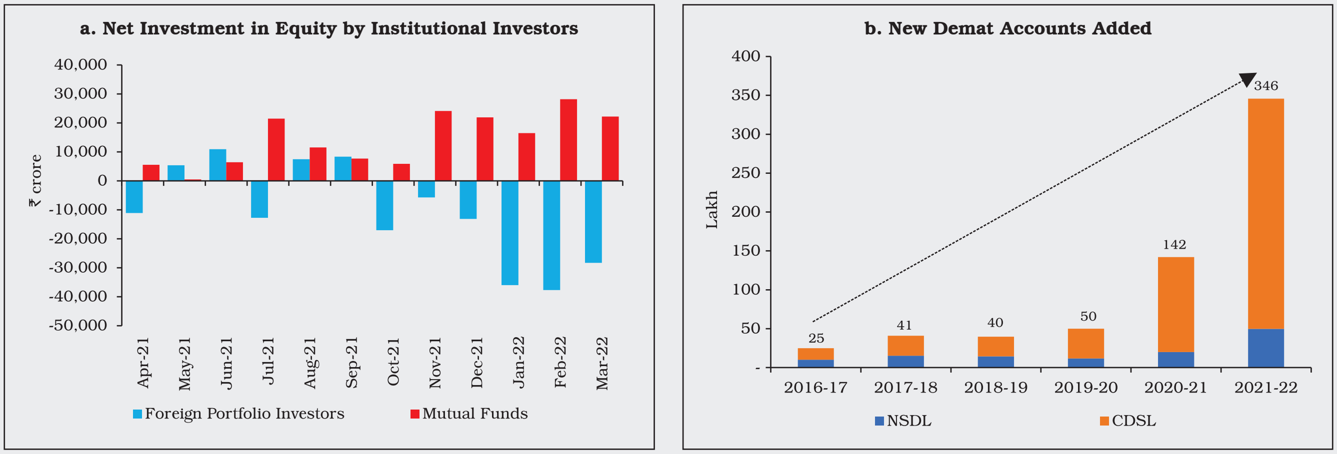
II.4.21 The Sensex climbed to fresh highs during June 2021 with the gradual reopening of the economy and pick up in business activity. Market sentiment was dented by concerns over inflation and imminent tapering of monetary stimulus by systemic central banks. The market extended losses towards the end of the month following negative global cues on concerns over the spread of COVID-19 infections in various countries, with sharp volatility spikes in July 2021. Sustained selling by FPIs also added pressure on domestic equities. Equity market bulls wrestled their way back in August 2021, pushing the benchmark indices to record highs, supported by recovery in auto sales, robust GST collections, strong corporate earnings results for Q1:2021-22, benign CPI inflation prints and expansion in India's manufacturing PMI to 55.3 in July.

II.4.22 Despite a sell-off in global equities, the domestic equity market registered gains in September 2021 on bullish sentiment stirred by announcements of the extension of production-linked incentive (PLI) scheme for various sectors by the government, setting up of the National Asset Reconstruction Company (NARCL) and relief measures for the telecom sector. Thereafter, domestic equity markets witnessed episodes of volatility in sync with global peers as a combination of ongoing regulatory clampdowns in a systemic EME and corporate debt woes sparked global investor concern over potential spillovers. Fresh highs were climbed during the first half of October 2021, buoyed by signs of recovery in economic activity, strong demand outlook ahead of the festive season and continued accommodative monetary policy stance. However, the rally proved transient due to accelerated profit bookings in the second half following mixed Q2:2021-22 corporate earnings results and concerns over stretched valuations.

II.4.23 The domestic equity market remained undeterred by tapering announcements by the US Fed in the first week of November 2021. Notwithstanding this positive start, however, the equities registered sharp declines towards the end of the month, triggered by the reports of detection of Omicron and imposition of fresh rounds of travel restrictions across various parts of the globe. The downtrend deepened in the first half of December 2021 as FPIs continued to offload Indian equities and monetary tightening in AEs seemed imminent. However, robust GST collection, expansion in the manufacturing PMI for November and the Reserve Bank's *status quo* in monetary policy setting provided succour to the market.

II.4.24 Amidst heightened volatility, the sell-off in the domestic equities exacerbated in January 2022 as inflationary concerns, rising US Treasury yields and crude oil prices as well as the Fed's signalling of an early interest rate hike dampened investor sentiments. Notwithstanding global headwinds, the Indian equity market reacted

Chart II.4.7: Investment in Equity



Source: NSDL, CDSL and SEBI.

positively to the budget announcements and the Reserve Bank's accommodative monetary policy in February 2022. However, the steady rise in crude oil prices amidst escalating geopolitical tensions weighed heavily on investor sentiments. Domestic equities witnessed sharp sell-off in the second half of the month following the breakout of war in Ukraine. Sentiments improved somewhat in March following the announcements of electoral results of state assemblies and positive global cues, but remained edgy as concerns persisted over Russia-Ukraine peace talks, volatility in commodity prices and renewed lockdown measures in China.

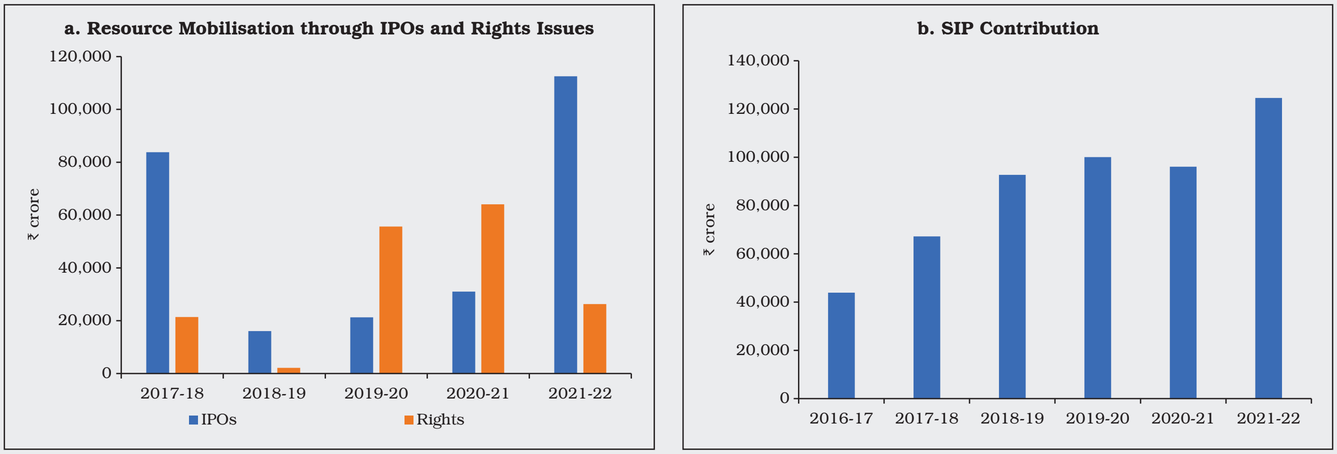
II.4.25 The FPIs became net sellers for eight out of 12 months in 2021-22 with a net outflow of ₹1.3 lakh crore as against a net inflow of ₹2.8 lakh crore in the previous year. Mutual funds, on the other hand, made heavy investments worth ₹1.7 lakh crore in the Indian equity market in 2021-22 (Chart II.4.7a).

II.4.26 The direct participation of retail investors in equities continued to increase, with the opening of 3.46 crore demat accounts during 2021-22, as against 1.42 crore demat accounts opened during the previous year (Chart II.4.7b). During 2021-22, on an average, 28.8 lakh demat accounts were opened every month, which is higher than 11.8 lakh per month in the previous year and 4.2 lakh demat accounts per month in 2019-20.

Primary Market Resource Mobilisation

II.4.27 In the primary segment of the equity market, resource mobilisation through initial public offerings (IPOs), follow-on public offers (FPOs) and rights issues increased by 26.1 per cent to ₹1.39 lakh crore during 2021-22 as against ₹1.1 lakh crore during the previous year (Chart II.4.8a and Appendix Table 5). ₹1.13 lakh crore were mobilised through 121 IPO/FPO issues, out of which 70 issues amounting to ₹958 crore were listed on the small and medium enterprises (SMEs) platform of the BSE and the NSE. Resource mobilisation through rights issues decreased to ₹26,327 crore during 2021-22 as compared with ₹64,059 crore during the previous year. Resource mobilisation through preferential allotment and qualified institutional placement (QIP) decreased to ₹92,135 crore during 2021-22, as against ₹1,19,678 crore during the previous year.

Chart II.4.8: Resource Mobilisation



Source: SEBI and AMFI.

II.4.28 Of the net resources mobilised by mutual funds of ₹2.5 lakh crore during 2021-22, systematic investment plan (SIP) contributions witnessed a healthy growth - an indication of rising retail participation and financialisation of household savings (Chart II.4.8b). Equity-oriented schemes witnessed net mobilisation of ₹1,54,094 crore in 2021-22 as against net redemption of ₹39,327 crore in the previous year. Assets under management (AUM) of equity-oriented mutual funds increased by 37.2 per cent to ₹13.7 lakh crore at end-March 2022 from ₹10 lakh crore at end-March 2021.

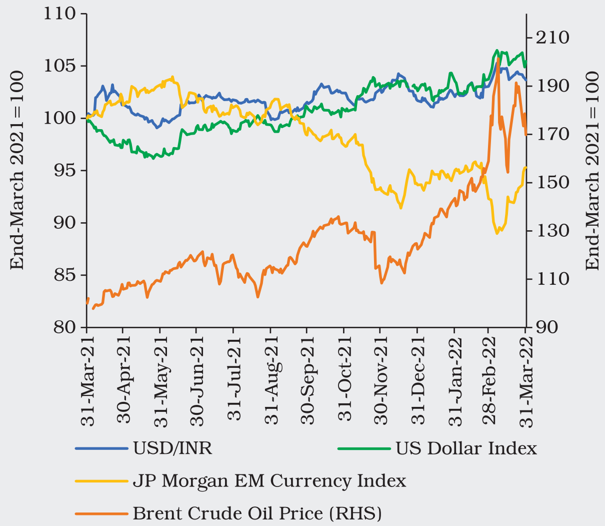
6. Foreign Exchange Market

II.4.29 In the foreign exchange market, turnover picked up in both interbank and merchant segments as compared with the previous year.

II.4.30 The Indian rupee weakened by 1.64 per cent during Q1:2021-22 amid a steep rise in COVID-19 infections and sustained gains in crude oil prices. A weaker dollar and a current account surplus of USD 6.5 billion during the quarter limited the downside for the rupee. A pick-up in the pace of vaccination and strong foreign flows to IPOs by Indian corporates helped Indian rupee outperform most of its Asian peers in Q2:2021-22. The rupee was also supported by a mild correction in crude oil prices and a brief rally in emerging market currencies.

II.4.31 The Indian rupee again came under pressure during Q3:2021-22 as the US dollar gained, tracking rise in US short term yields, as traders priced in hawkish FOMC statements (faster taper and rate hikes in 2022). During the quarter, pressure on EME currencies rose across the board. The Indian rupee touched an intra-day low of ₹76.32 against the US dollar on December 16, 2021 as markets braced for acceleration of US Federal Reserve taper and prepared for policy divergence between US and the rest of the AEs. The rupee recovered sharply in the latter part of December 2021 tracking dollar weakness and closed at ₹74.33/USD on December 31, 2021, weakening 0.13 per cent over Q3:2021-22. The rupee remained under pressure in Q4:2021-22 as US yields rose sharply in anticipation of rate hikes by the US Fed with the US dollar index inching

Chart II.4.9: Movement in Rupee, US Dollar, Crude Oil Price and EM Currency Index



Source: Bloomberg.

towards 100 mark amid safe haven demand due to geopolitical tensions. FPI outflows from domestic equity markets and a broad-based rally in commodity prices also impacted the rupee during the quarter. Consequently, Indian rupee touched a fresh intra-day low of ₹76.98/USD on March 7, 2022 with most emerging market currencies remaining under pressure during the quarter. Overall, Indian rupee closed at ₹75.79/USD on March 31, 2022, with a net depreciation of 3.53 per cent in 2021-22 (Chart II.4.9).

II.4.32 On an average basis, the 40-currency nominal effective exchange rate (NEER) depreciated by 0.8 per cent in 2021-22 (y-o-y). However, the 40-currency real effective exchange rate (REER) appreciated by 1.2 per cent during this period, reflecting higher domestic inflation *vis-à-vis* trading partners.

II.4.33 During 2021-22, long-term forward premia remained anchored. While short-term forward premia witnessed some gyration due to factors like IPO related rupee demand during Q1:2021-22, they stabilised in the subsequent quarters, amidst comfortable system-wide liquidity conditions.

7. Conclusion

II.4.34 In sum, financial markets, going forward, face considerable uncertainty and tightening of global financial conditions. Inflation concerns amid growth worries have magnified the risks to emerging market currencies, with the risk of global spillovers.

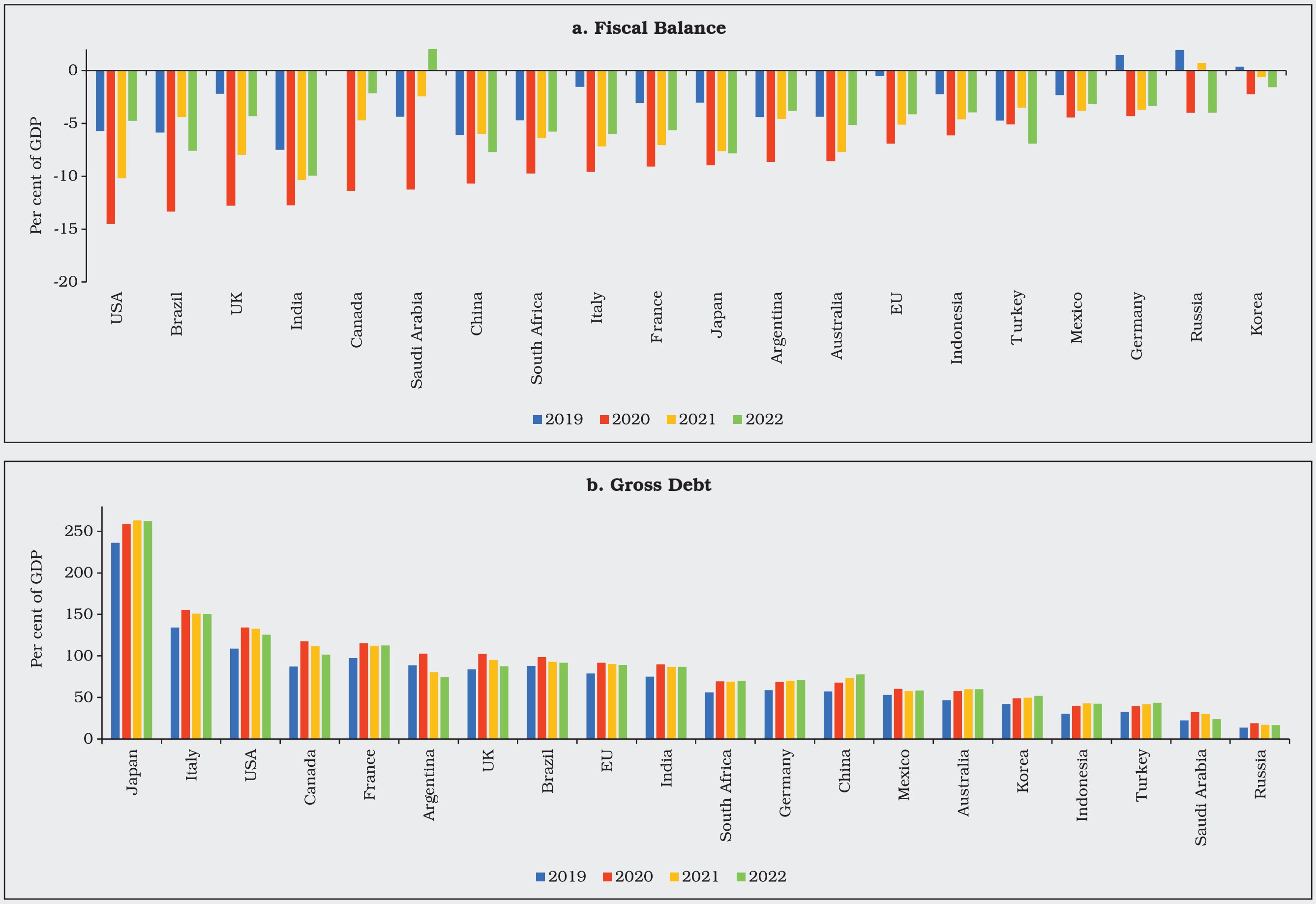
II.5 GOVERNMENT FINANCES

II.5.1 In 2022, fiscal deficits are projected to moderate in the majority of the G-20 countries but would mostly remain above pre-pandemic levels (Chart II.5.1a). While the projected fiscal adjustment plans are expected to lower the public debt-GDP ratios in advanced economies over the medium term, the average government debt-GDP ratio for emerging market economies (EMEs) remains on an upward trajectory, driven mainly by China.[26] India's gross debt is projected to remain range bound in 2022 but stay higher than peer EMEs (except Brazil) [Chart II.5.1b].

II.5.2 Against this backdrop, sub-sections 2 and 3 present the position of central government finances in 2021-22 and 2022-23, respectively. Sub-sections 4 and 5 outline the developments in state government finances during 2021-22 and 2022-23. General government finances are discussed in sub-section 6. The final section sets out concluding remarks and some policy perspectives.

[26] IMF (2022), Fiscal Monitor, *International Monetary Fund (IMF)*, Washington D.C., April.

Chart II.5.1: General Government Overall Fiscal Balance and Gross Debt in G-20 Economies



USA: United States of America UK: United Kingdom EU: European Union

Note: Data for India have been sourced from World Economic Outlook (WEO), IMF to ensure comparability with other countries. However, this may be at variance with data reported in Budget related documents or the Reserve Bank publications as the accounting practices and conventions followed by the Government of India and the IMF differ.

Source: World Economic Outlook, April 2022.

2. Central Government Finances in 2021-22

II.5.3 In the wake of the second wave of the pandemic, the government announced a fiscal package amounting to ₹6.3 lakh crore during Q1:2021-22, which included, *inter alia,* extension of the *Pradhan Mantri Garib Kalyan Anna Yojana*, measures to strengthen public health, extension of the *AatmaNirbhar Bharat Rozgar Yojana*, loan guarantee scheme for COVID-19 affected sectors, provision of broadband connectivity to villages and boost for project exports through the National Export Insurance Account. This was supplemented by additional expenditure measures during the year such as increased allocation for the National Rural Employment Guarantee Scheme and the *Pradhan Mantri Awas Yojana* (Urban), as outlined in the Supplementary Demand for Grants (SDG).[27] As a result, total expenditure overshot budget

[27] The proposed increase in expenditure over budget estimates, based on first and second batch of SDGs stood at ₹3,22,918 crore. The third and last SDGs (announced on March 14, 2022) involves an additional net cash outgo of ₹1.07 lakh crore over and above the revised estimates (RE) for 2021-22.

estimates by ₹2.9 lakh crore (a deviation of ₹2.4 lakh crore under revenue expenditure and ₹48,475 crore under capital expenditure). The additional spending was, however, offset by higher tax and non-tax revenues, leading to a consolidation of 0.03 percentage points in the gross fiscal deficit (GFD) from the budget estimate (BE) of 6.8 per cent of GDP.[28]

II.5.4 Tax revenues remained buoyant even in the face of the pandemic (Table II.5.1), with gross tax revenues registering a y-o-y growth of 24.1 per cent in 2021-22 RE (25.2 per cent over 2019-20). Aided by higher than budgeted surplus transfer by the Reserve Bank, non-tax revenues also surpassed BE by ₹70,763 crore. Disinvestment receipts, however, fell short of the BE by ₹97,000 crore.

Table II.5.1: Tax Buoyancy

	Average Tax Buoyancy (2010-11 to 2018-19)	2021-22 (BE)	2021-22 (RE)	2022-23 (BE)
1	2	3	4	5
1. Gross Tax Revenue	1.11	1.33	1.24	1.05
2. Direct Taxes	1.03	1.79	1.66	1.49
(i) Corporation Tax	0.92	1.80	2.00	1.47
(ii) Income Tax	1.27	1.81	1.37	1.57
3. Indirect Taxes	1.25	0.91	0.88	0.62
(i) GST	-	1.78	1.19	1.71
(ii) Customs Duty	0.31	1.71	2.07	1.39
(iii) Excise Duty	0.91	-0.57	0.03	-1.64

GST: Goods and Services Tax. - : Not available.
Note: Tax buoyancy is defined as the responsiveness of tax revenue to changes in nominal GDP and to discretionary changes in tax policies. Calculations for 2021-22 (BE) are made over 2020-21 (RE).
Source: RBI staff calculations based on Union Budget documents for various years.

3. Central Government Finances in 2022-23

II.5.5 For 2022-23, the Union Budget has sought to balance fiscal prudence with a focus on capital expenditure in order to accelerate growth and place the ongoing economic rebound on a firm footing. The GFD is budgeted at 6.4 per cent of GDP[29], a consolidation of 29 basis points (bps) over 2021-22 (RE) in line with the medium-term target of achieving a GFD below 4.5 per cent of GDP by 2025-26.[30] This consolidation is sought to be achieved through containment of revenue expenditure to 12.4 per cent of GDP, as capital expenditure is budgeted to rise to an all-time high of 2.9 per cent of GDP and receipts are pegged at moderate levels (Table II.5.2).

II.5.6 Under capital expenditure, a large push has been given to loans and advances to states, with a provision of ₹1 lakh crore in the form of 50-year interest free loans to be utilised for *Pradhan Mantri Gati Shakti*[31] related capital investment, supplemental funding for priority

[28] Budget 2021-22 had placed the GDP for 2021-22 at ₹2,22,87,379 crore (GFD-GDP ratio of 6.76 per cent). This was revised upwards in the first advance estimates and Union Budget 2022-23 to ₹2,32,14,703 crore, according to which GFD-GDP ratio stood at 6.85 per cent. As per the second advance estimates (SAE) [released on February 28, 2022], nominal GDP for 2021-22 is higher at ₹2,36,43,875 crore, which implies a GFD-GDP ratio of 6.73 per cent. Going by the principle of using the latest available GDP data for any year, the nominal GDP for 2021-22 (RE) is as per the SAE. In view of this, the fiscal indicators as per cent of GDP given in this section, may vary from those reported in the Union Budget documents.

[29] Nominal GDP for 2022-23 (BE) has been projected at ₹2,58,00,000 crore, assuming 11.1 per cent growth over the estimated nominal GDP of ₹2,32,14,703 crore for 2021-22 (RE).

[30] The Union Budget 2021-22 had announced the government's intention to reduce the GFD below 4.5 per cent of the nominal GDP by 2025-26 with a fairly steady decline over the period.

[31] *Gati Shakti* - a digital platform - will bring 16 ministries, including railways and roadways, together for integrated planning and coordinated implementation of infrastructure connectivity projects.

Table II.5.2: Central Government's Fiscal Performance

(Per cent of GDP)

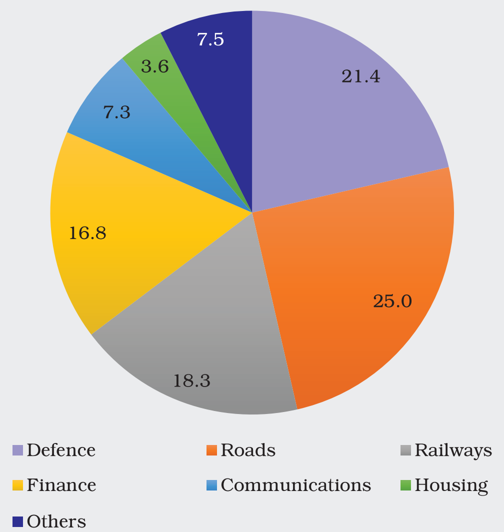
Item		2004-08	2008-10	2010-15	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22 (BE)	2021-22 (RE)	2022-23 (BE)
1		2	3	4	5	6	7	8	9	10	11	12	13	14
I.	Non-debt Receipts	11.0	9.7	9.5	9.2	9.1	9.4	9.1	8.8	8.7	8.5	8.9	9.2	8.9
II.	Gross Tax Revenue (a+b)	10.7	10.4	10.2	10.0	10.6	11.1	11.2	11.0	10.0	10.2	9.9	10.6	10.7
	a) Direct Tax	5.1	6.0	5.7	5.6	5.4	5.5	5.9	6.0	5.2	4.8	5.0	5.3	5.5
	b) Indirect Tax	5.6	4.4	4.5	4.4	5.2	5.6	5.4	5.0	4.8	5.5	5.0	5.4	5.2
III.	Net Tax Revenue	7.9	7.6	7.3	7.2	6.9	7.2	7.3	7.0	6.8	7.2	6.9	7.5	7.5
IV.	Non-tax Revenue	2.2	1.8	1.8	1.6	1.8	1.8	1.1	1.2	1.6	1.0	1.1	1.3	1.0
V.	Non-debt Capital Receipts	0.9	0.3	0.4	0.4	0.5	0.4	0.7	0.6	0.3	0.3	0.8	0.4	0.3
VI.	Total Expenditure	14.5	16.1	14.4	13.3	13.0	12.8	12.5	12.2	13.4	17.7	15.6	15.9	15.3
VII.	Revenue Expenditure	12.1	14.4	12.6	11.8	11.2	11.0	11.0	10.6	11.7	15.6	13.1	13.4	12.4
VIII.	Capital Expenditure	2.4	1.7	1.8	1.6	1.8	1.8	1.5	1.6	1.7	2.2	2.5	2.5	2.9
IX.	Revenue Deficit	2.0	5.0	3.5	2.9	2.5	2.1	2.6	2.4	3.3	7.3	5.1	4.6	3.8
X.	Gross Fiscal Deficit	3.5	6.3	4.9	4.1	3.9	3.5	3.5	3.4	4.7	9.2	6.8	6.7	6.4

BE: Budget Estimates. RE: Revised Estimates.
Note: Going by the principle of using the latest available GDP data for any year, GDP used for 2021-22 (RE) is as per the SAE, 2021-22.
Source: Union Budget documents.

segments of *Pradhan Mantri Gram Sadak Yojana*, digitisation of the economy, and other productive capital investment. Capital outlay, *i.e.*, capital expenditure less loans and advances, is also budgeted to increase by 11.5 per cent in 2022-23 on top of a growth of 73.3 per cent in 2021-22 (RE), led by robust growth in infrastructure spending. Around two-thirds (64.7 per cent) of the total capex is to be incurred by the ministries of defence; road; and railways (Chart II.5.2). The revenue expenditure to capital outlay (RECO) ratio is budgeted to improve for the second year in a row to 5.2, as against the decadal average of 7.8. On the receipts side, revenue forecasts are based on conservative nominal GDP projections and the disinvestment target has been set at ₹65,000 crore, which is close to the average realisation of around ₹66,000 crore in the past five years.

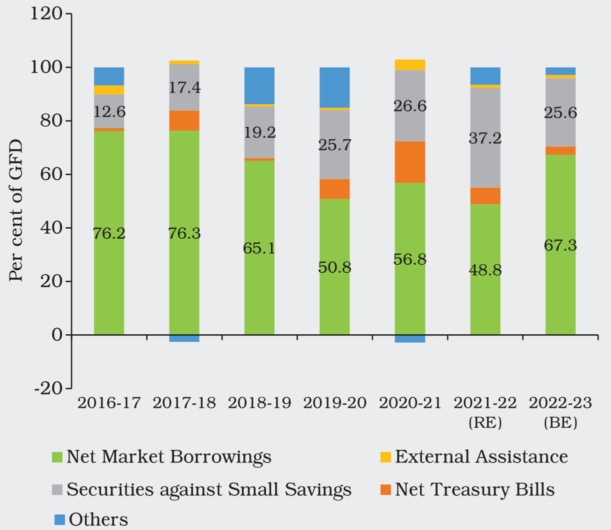
II.5.7 The Union Budget proposals for 2022-23 entail gross market borrowings of ₹14.31 lakh

Chart II.5.2: Ministry-wise Break up of Capital Expenditure in 2022-23 (Per cent of Total)



Source: Union Budget documents.

Chart II.5.3: Sources of Financing Gross Fiscal Deficit



Source: Union Budget documents.

crore (adjusting for switch operations conducted on January 28, 2022) as against ₹10.47 lakh crore in 2021-22 (RE), an increase of 36.7 per cent.[32] Marking a return to the pre-pandemic trend, net market borrowings are budgeted to finance 67.3 per cent of the GFD in 2022-23, up from 48.8 per cent in 2021-22 (RE), with lower recourse to treasury bills, small savings, and cash balances (Chart II.5.3). As a part of the overall market borrowings, the government also intends to issue Sovereign Green Bonds to facilitate climate change transition.

4. State Finances in 2021-22

II.5.8 State government finances were budgeted to improve in 2021-22 with the GFD-GDP ratio narrowing to 3.5 per cent from 4.7 per cent in the revised estimates for 2020-21 (Table II.5.3 and Appendix Table 6).

II.5.9 Provisional accounts (PA)[33] data of 26 states available for April-February 2021-22

Table II.5.3: Fiscal Position of States

(₹ lakh crore)

	2017-18	2018-19	2019-20	2020-21 (RE)	2021-22 (BE)
1	2	3	4	5	6
I. Revenue Receipts	23.2 (13.6)	26.2 (13.9)	26.7 (13.3)	27.9 (14.1)	34.5 (14.6)
II. Capital Receipts	0.4 (0.2)	0.4 (0.2)	0.6 (0.3)	0.2 (0.1)	0.2 (0.1)
III. Revenue Expenditure	23.4 (13.7)	26.4 (14.0)	27.9 (13.9)	31.9 (16.1)	35.7 (15.1)
IV. Capital Expenditure	4.3 (2.5)	4.9 (2.6)	4.6 (2.3)	5.5 (2.8)	7.2 (3.1)
a. Capital Outlay	3.9 (2.3)	4.4 (2.3)	4.2 (2.1)	5.0 (2.5)	6.7 (2.8)
b. Loans and Advances by States	0.4 (0.2)	0.5 (0.2)	0.4 (0.2)	0.5 (0.2)	0.5 (0.2)
V. Fiscal Deficit	4.1 (2.4)	4.6 (2.4)	5.3 (2.6)	9.3 (4.7)	8.2 (3.5)
VI. Revenue Deficit	0.2 (0.1)	0.2 (0.1)	1.2 (0.6)	3.9 (2.0)	1.2 (0.5)

Note: Figures in parentheses are per cent of GDP.
Source: Budget documents of state governments and CAG.

[32] Market borrowings of union government excludes borrowing of ₹1,59,000 crore in 2021-22 (RE) passed on to the states as loans on back-to-back basis in *lieu* of GST compensation cess shortfall.

[33] Website of Comptroller and Auditor General (CAG) of India.

indicate that their consolidated GFD was lower by 31.5 per cent than a year ago, mainly due to higher growth in revenue receipts (30.5 per cent as against a contraction of 8.6 per cent in 2020-21). Following the Centre's move of reduction in excise duty on petrol and diesel on November 3, 2021, majority of states reduced their value added tax (VAT) in the range of ₹1.8 to ₹10.0 per litre of petrol and ₹2.0 to ₹7.0 per litre of diesel. The embodied revenue loss was more than offset by central transfers in *lieu* of GST compensation – the Centre released ₹1.59 lakh crore in 2021-22 (₹0.75 lakh crore on July 15; 0.40 lakh crore on October 7; and ₹0.44 lakh crore on October 28) to states as back-to-back loans. Apart from these loans, the Centre has also released GST compensation of ₹60,000 crore. In addition to the regular instalment of tax devolution, the Centre released two advance instalments of tax devolution in November 2021 and January 2022.

II.5.10 Despite the second wave of the pandemic and corresponding state-specific restrictions, capital outlay remained robust, while higher revenue expenditure helped in strengthening the economic recovery. Thirteen states received permission to borrow an additional amount of ₹32,412 crore (till Q2: 2021-22) as an incentive for achieving the target set by the Ministry of Finance for capital expenditure. The outlay under the 'Scheme for Financial Assistance to States for Capital Investment' has been enhanced by the Centre from ₹10,000 crore in the BE to ₹15,000 crore in the RE for 2021-22.

5. State Finances in 2022-23

II.5.11 As per information available for 20 state governments, their combined GFD has been budgeted at 3.2 per cent of their consolidated GSDP in 2022-23 as against 3.7 per cent in 2021-22 (RE), though there is significant variation amongst states (Table II.5.4). The consolidation in states' fiscal position can entirely be attributed to revenue account as the growth in revenue receipts is budgeted at a significantly higher level than revenue expenditure, resulting in compression of revenue deficit by 55 bps.

Table II.5.4: State Government Finances 2022-23*: Key Indicators

(Per cent of GSDP)

Item	2020-21	2021-22 (BE)	2021-22 (RE)	2022-23 (BE)
1	2	3	4	5
Revenue Deficit	2.0	0.7	1.1	0.6
Gross Fiscal Deficit	4.1	3.7	3.7	3.2
Primary Deficit	2.2	1.7	1.9	1.5

*: Data pertain to twenty states that have presented their final budgets for 2022-23.
Source: Budget documents of state governments.

II.5.12 Following the recommendations of the FC-XV, Centre has allowed the states a fiscal deficit of up to 4 per cent of gross state domestic product (GSDP) in 2022-23, of which 0.5 per cent will be tied to power sector reforms. In the Union Budget 2022-23, the Centre has budgeted tax devolution to grow by 9.6 per cent on the top of a high base of 2021-22. For 2022-23, the budgeted FC-XV's grants are 9 per cent lower than in 2021-22 (RE), primarily due to reduction in post devolution revenue deficit grants in anticipation of further improvement in states' revenue deficit. As stated earlier, states are being extended ₹1 lakh crore in 50-year interest-free loans over and above normal borrowings to spur overall investment.

6. General Government Finances

II.5.13 As per the latest available information for 2022-23, the general government deficit and debt are expected to moderate to around 9 per cent and 85 per cent of GDP, respectively, from the peak levels of 13.3 per cent and 89.4 per cent in 2020-21 (RE), respectively (Appendix Table 7).

7. Conclusion

II.5.14 While maintaining fiscal prudence, the budget has relied on an investment-led growth strategy to steer the economy out of the COVID-19 pandemic. In 2022-23, calibrated fiscal consolidation is envisaged while improving the quality of expenditure. Going forward, fiscal consolidation will need to be pursued actively to manage fiscal and financing risks and to ensure debt sustainability, while building credibility in public finances.

II.6 EXTERNAL SECTOR

II.6.1 India's external sector remained resilient during the year. Even as the domestic economic recovery drove up import demand, adverse net terms of trade shocks and safe haven demand for gold expanded the merchandise trade deficit in the second half of 2021-22. Nevertheless, robust exports of services and strong capital inflows dominated by foreign direct investment (FDI) moderated pressures on the current account balance, which swung from surpluses into deficits in the later part of the year. With external funding needs remaining modest, reserve accretions during the year built up resilience in the face of global spillovers.

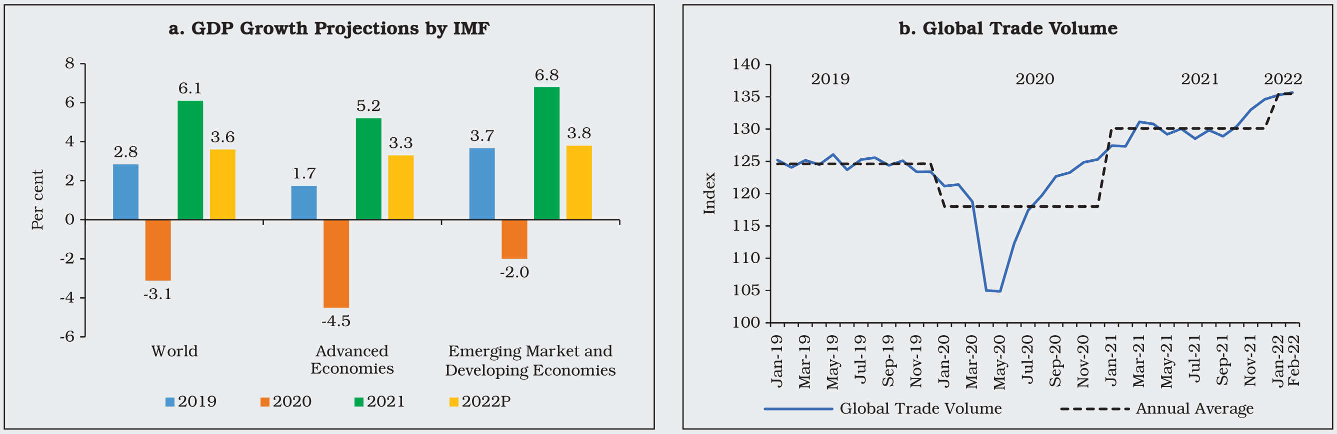
II.6.2 Set against this backdrop, sub-section 2 presents a brief overview of the global economic and financial conditions against which these shifts in external balances occurred. This is followed by a discussion on merchandise trade and invisibles in sub-sections 3 and 4, respectively. Sub-section 5 presents an analysis of capital flows. An assessment of external vulnerability indicators is provided in sub-section 6, followed by concluding observations.

2. Global Economic Conditions

II.6.3 Global economic activity gained traction, *albeit* unevenly, in Q1:2021, but lost pace in Q2:2021 as rising infections in several parts of the world and supply shortages took their toll. Supply chain and logistics disruptions combined with international surges in commodity price pressures posed downside risks to the global economic recovery. Although global growth picked up to 6.1 per cent in 2021 from (-) 3.1 per cent in 2020, the IMF revised downwards its global growth projection for 2022 in April 2022 to 3.6 per cent as against 4.4 per cent in January 2022 (Chart II.6.1a). In late February 2022, renewed bouts of financial market turbulence, synchronised upsurges in global commodity prices and economic and financial sanctions in the wake of the Russia-Ukraine conflict put the global economy at risk of stagflation with threats of supply bottlenecks and deglobalisation becoming acute.

II.6.4 World merchandise trade rebounded to pre-pandemic level, recording a growth of 26.0 per cent in value terms and 10.3 per cent in volume terms during 2021, aided by strong growth in Asian economies, inspite of supply disruptions and elevated freight rates (Chart II.6.1b). Thus, the contraction in world trade during the pandemic seems to be less severe, and the recovery has been much faster than the earlier two trade recessions (Chart II.6.2). According to UNCTAD's February 2022 Global Trade Update, the value of global trade reached a record level of US$ 28.5 trillion in 2021. Trade in services, however, lagged merchandise trade, primarily on account of the travel and tourism sector which was hit hard by the pandemic due to the imposition of travel restrictions.

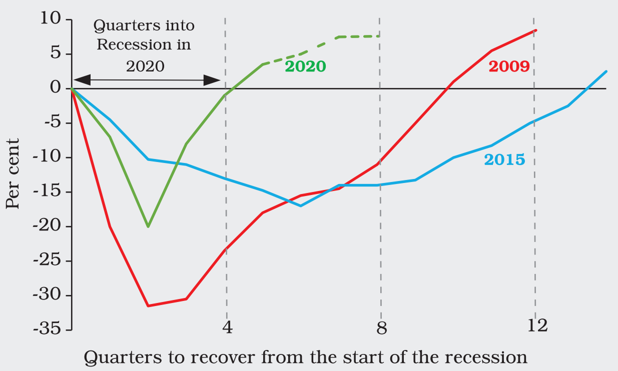
Chart II.6.1: Real GDP and World Trade Volume



P: Projection.
Source: IMF and CPB Netherlands.

II.6.5 FDI flows rebounded in 2021, with advanced economies (AEs) dominating. The outlook on portfolio flows in emerging market economies (EMEs) improved with strong rebounds in hard currency issuances, while local currency debt flows remained weak. Towards the close of 2021, intents of policy normalisation dovetailing into tapers of asset purchases, elevated inflation risks, renewed bouts of volatility and heightened uncertainties on the heels of war unsettled global financial market conditions and triggered flights of portfolio flows out of EMEs as an asset class in search of safe haven.

Chart II.6.2: Cumulative Change in Global Trade from the Start of Each Recession



Note: 1. Lines indicate that the trade recovered faster (less number of quarters) in 2020 as compared to the previous two recessions.
2. 2009 trade recession was caused by global financial crisis (GFC) and 2015 recession resulted from the structural changes in East Asian economies and decline in commodity prices. The recession in 2020 was COVID-19 pandemic-induced.

Source: UNCTAD.

3. Merchandise Trade

II.6.6 The year 2021-22 turned out to be a remarkable year for India's merchandise trade. Both exports and imports reached historically high levels. Shrugging off global supply chain disruptions, a broad-based recovery in exports got entrenched, expanding into newer markets and product categories. During 2021-22, India's merchandise exports and imports expanded by 34.7 per cent and 28.9 per cent in US dollar terms over pre-pandemic levels, respectively. In terms of volume, exports recorded an increase of 16.6 per cent on the same basis. Imports surpassed pre-pandemic levels from Q2:2021-22 (Table II.6.1).

II.6.7 At a disaggregated level, exports growth was driven by engineering goods, petroleum products, chemicals, agricultural products, textiles, electronic goods, drugs and pharmaceuticals and gems and jewellery. Labour-intensive export categories like apparels, also contributed positively, reversing the losses

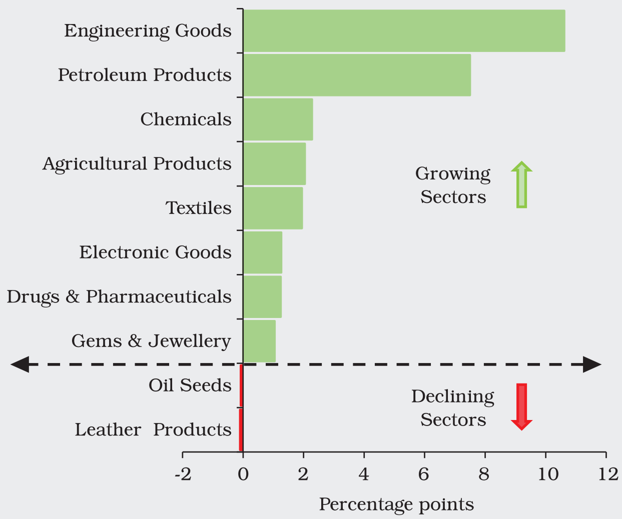
Table II.6.1: India's Merchandise Trade

	Value in US$ Billion			Growth Rate (Y-o-Y)			Growth over Pre-COVID Period
	2019-20	2020-21	2021-22	2019-20	2020-21	2021-22	2021-22
1	2	3	4	5	6	7	8
Exports							
Q1	80.9	51.3	95.5	-1.4	-36.6	86.1	18.1
Q2	78.2	74.1	102.7	-3.9	-5.3	38.6	31.3
Q3	79.1	75.8	106.8	-1.9	-4.2	41.0	35.1
Q4	75.1	90.4	116.8	-12.7	20.4	29.2	55.6
Annual	313.3	291.6	421.9	-5.1	-6.9	44.7	34.7
Imports							
Q1	130.1	61.3	127.0	1.1	-52.9	107.3	-2.4
Q2	118.0	88.3	147.5	-11.3	-25.2	67.1	25.0
Q3	116.1	110.8	166.9	-11.2	-4.6	50.6	43.7
Q4	110.5	131.7	170.7	-9.2	19.1	29.6	54.4
Annual	474.7	392.0	612.0	-7.7	-17.4	56.1	28.9
Trade Balance							
Q1	-49.2	-9.9	-31.4				
Q2	-39.7	-14.1	-44.8				
Q3	-37.1	-35.1	-60.1				
Q4	-35.4	-41.2	-53.9				
Annual	-161.4	-100.4	-190.1				

Note: Quarterly figures may not add up to annual figures.
Source: DGCI&S.

observed during April-September 2021. However, leather products and oilseeds recorded a slight decline (Chart II. 6.3).

Chart II.6.3: Major Drivers of Exports Growth in 2021-22 (Over Pre-COVID-19 Period)

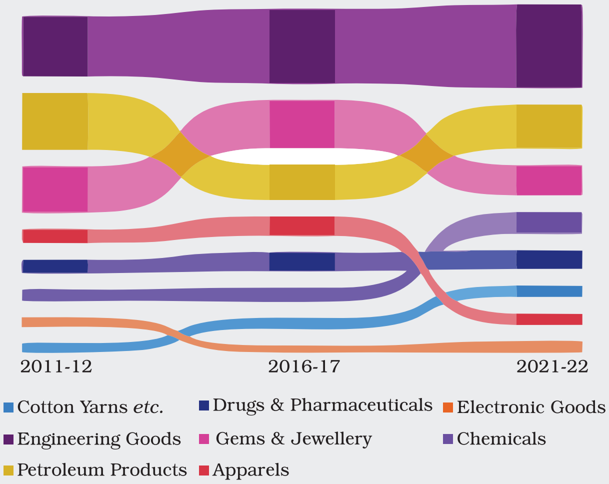


Source: DGCI&S.

II.6.8 Over the last decade, there has been an inter-temporal shift in the export basket, with the share of petroleum products and chemicals having gone up on the back of rising competitiveness (Economic Survey, GoI, 2020-21). In contrast, the shares of gems and jewellery and apparels have declined (Chart II.6.4).

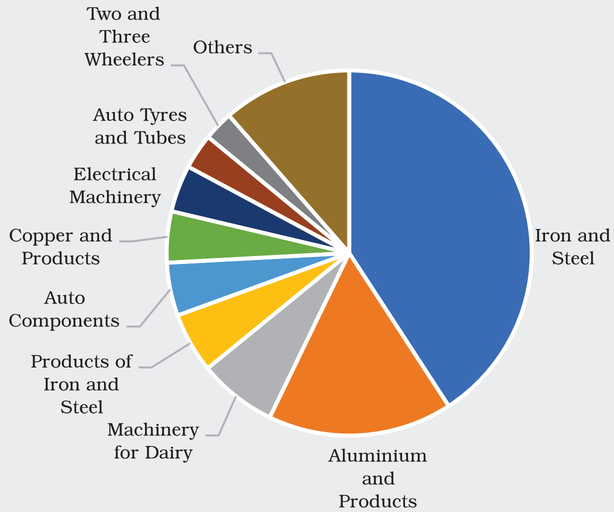
II.6.9 Engineering goods, which account for one-fourth of India's total exports, witnessed a robust growth of around 42 per cent in 2021-22 over their pre-pandemic levels. Iron and steel exports contributed nearly 41 per cent of growth of total engineering exports during 2021-22 (Chart II.6.5), benefitting from rising global prices, strong global demand and production cuts by China. The government has announced production-linked incentive (PLI) schemes for various product categories (Box II.6.1).

Chart II.6.4: Diversification of India's Key Commodity Exports



Note: The size of the band refers to the share of the respective product group in India's export basket.
Source: DGCI&S.

Chart II.6.5: Engineering Goods – Relative Contribution of Components to Growth (2021-22 over 2019-20)



Source: DGCI&S.

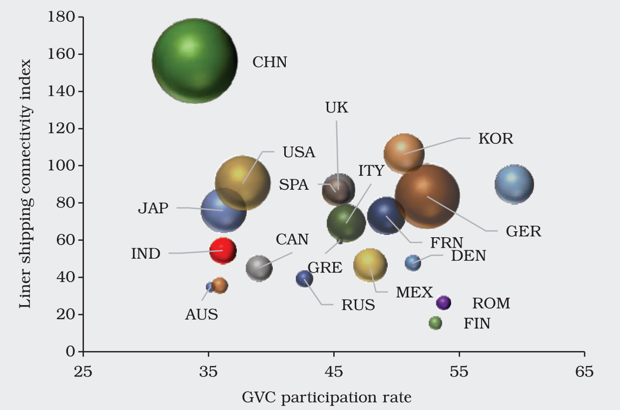
II.6.10 Petroleum, oil and lubricants (POL) exports accounted for 16.0 per cent of India's total exports, benefitting from higher global crude oil prices and expansion to new markets during

Box II.6.1
Role of Global Value Chains (GVCs) in Enhancing Exports Competitiveness

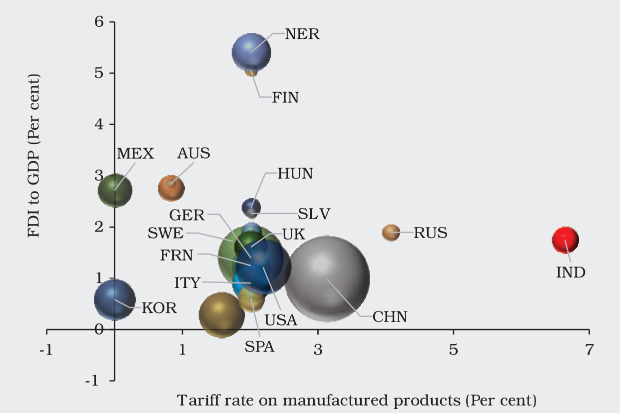
Over the past two decades, the structure and pattern of global trade has reflected a defragmentation of production processes across geographies. Now finished goods account for only 30 per cent of global trade in goods and

Chart 1: Key Factors for Promoting Manufacturing Exports

a. Shipping Connectivity and GVC Participation Rate



b. FDI and Tariff Rates on Manufactured Products



CHN: China	USA: United States	KOR: Korea	UK: United Kingdom	SPA: Spain	NER: Netherlands
JAP: Japan	GER: Germany	ITY: Italy	FRN: France	GRE: Greece	IND: India
CAN: Canada	DEN: Denmark	AUS: Australia	RUS: Russia	FIN: Finland	ROM: Romania
MEX: Mexico	SLV: Slovenia	SWE: Sweden	HUN: Hungary		

Note: Bubble represents the size of manufacturing exports in US$ million.
Source: ADB, World Bank, ITC and RBI staff calculations.

(Contd.)

services among countries. 70 per cent of global trade involves transactions in services, raw materials, parts and components through global value chains (GVCs) [OECD, 2020]. India's GVC integration, as measured by the GVC participation index, has been low – 34.0 per cent, of total exports – relative to the Association of Southeast Asian Nations (ASEAN) countries (45.9 per cent of gross exports). Shipping connectivity, greater GVC participation, higher FDI flows, and lower tariff rates are driving this phenomenon (Chart 1a and 1b).

A cross-country panel regression framework covering 40 major advanced and emerging economies for the period 2000-2019, with manufacturing exports of country 'i' in year 't' ($MExp_{it}$) as the dependent variable and the GVC participation index (GVC_{it}) and shipping connectivity index ($Shipping_{it}$) as regressors and tariff levels ($Tariff_{it}$), research and development ($R\&D_{it}$) expenditure, infrastructure and FDI inflows as control variables in the form indicated below suggests that GVC participation positively impacts export performance for manufacturing exports in all specifications (Table 1).

$$\mathrm{MExp}_{it} = \beta_0 + \beta_1 \mathrm{GVC}_{it} + \beta_2 \mathrm{Tariff}_{it} + \beta_3 \mathrm{Shipping}_{it} + \mu\, \text{other controls}_{it} + \varepsilon_{it}$$

(UNCTAD, 2018)

Shipping connectivity index has a positive and significant impact on exports. Higher tariff levels adversely impact the input cost structure and export competitiveness. These results suggest that even as the production-linked incentive (PLI) scheme aims to enhance India's participation in GVCs, higher tariff rates, especially on intermediate goods, may be a deterrent in enhancing India's export competitiveness. Longer duration tax incentives for R&D on the lines of practices in ASEAN countries and appropriate FDI policies can bring technological competitiveness and export-orientation to India's manufacturing sector.

Table 1: Impact of Logistics and GVC on Manufacturing Export Performance

(Dependent Variable: Manufacturing Exports)

Explanatory Variables	Coefficient		
	Model 1	Model 2	Model 3
1	2	3	4
GVC_{it}	0.0128*** (0.00346)	0.0114*** (0.00325)	
Log($Shipping_{it}$)	0.0911* (0.0468)		0.0984** (0.0475)
Log ($R\&D_{it}$)	0.147*** (0.0474)	0.233*** (0.0429)	0.139*** (0.0481)
Log($Electricity_{it}$)	1.898*** (0.332)	1.914*** (0.327)	1.642*** (0.330)
Tariff $Rate_{it}$	-0.0162* (0.00830)	-0.0177** (0.00818)	-0.0127 (0.00838)
FDI_{it}	0.000582** (0.000255)	0.000562** (0.000245)	0.000644** (0.000258)
Constant	15.26*** (1.580)	15.50*** (1.543)	16.99*** (1.533)
Observations	446	511	446
R^2	0.53	0.52	0.51

*** : Significant at 1 per cent level. ** Significant at 5 per cent level.
* Significant at 10 per cent level.
Note: Standard errors in parentheses.
Source: RBI staff calculations.

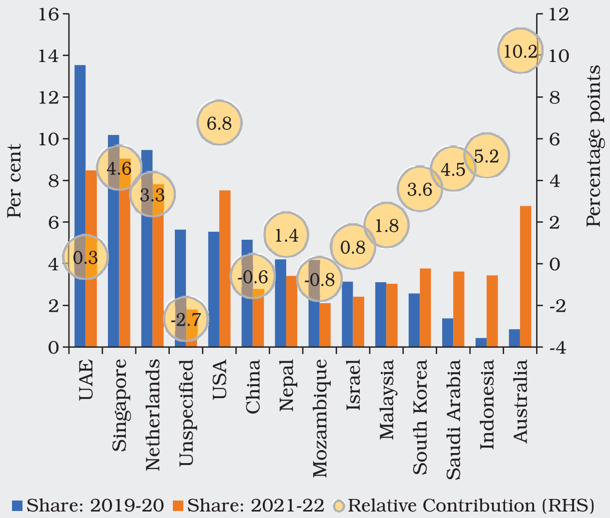
References:

1. Osakwe, P. N. and Jean-Marc Kilolo (2018), 'What Drives Export Diversification? New Evidence from a Panel of Developing Countries', *UNCTAD Research Paper* No.3/2018, UNCTAD.
2. OECD (2020), 'Trade Policy Implications of Global Value Chains', *OECD Trade Policy Brief*.

2021-22. Australia and Saudi Arabia have become the fifth and seventh largest export destinations for India's petroleum exports. Destination and product-wise diversification underscore the competitiveness of Indian refiners, indicating higher value addition and reduction in concentration risk (Chart II.6.6).

II.6.11 Agricultural exports, including geographical indication (GI) products, recorded impressive growth for the second successive year in 2021-22. India's wheat exports reached highest-ever levels in 2021-22, largely benefitting from elevated freight costs and lower inventories in major global exporting countries, *viz.*, Canada and Russia. Rice exports achieved record levels and grew to 1.5 times over their levels in 2019-20. Within rice, exports of non-Basmati varieties have seen a remarkable rise drawing strength

Chart II.6.6: Destination-wise Profile of India's Petroleum Exports



Source: DGCI&S and RBI staff calculations.

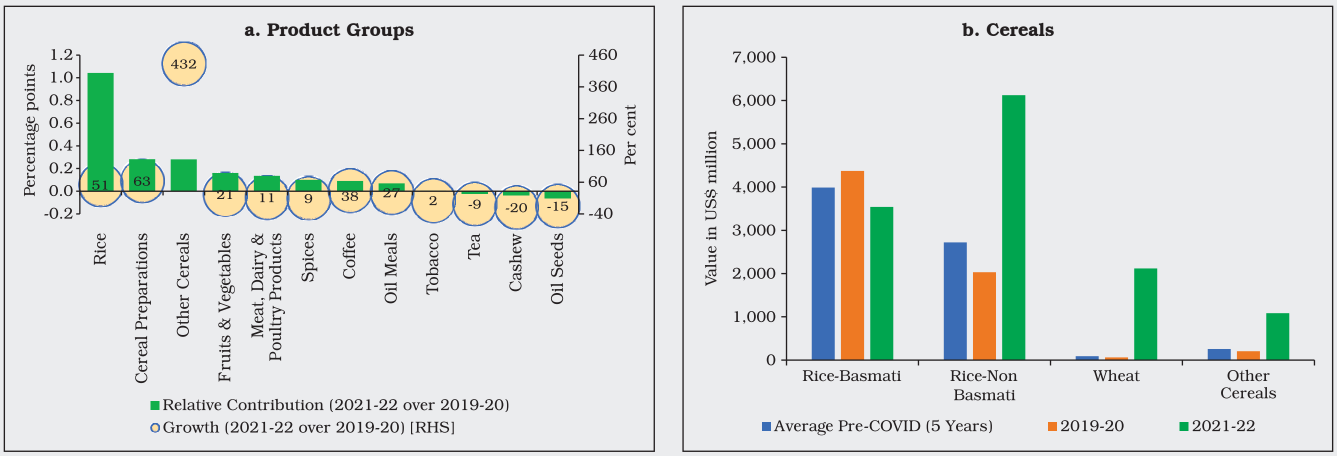
from rising price competitiveness, especially in markets such as Bangladesh, China and Vietnam (Chart II.6.7a and Chart II.6.7b).

II.6.12 Gems and jewellery exports, which have been on a downward trend for past four years, registered a growth of around 50 per cent during 2021-22. This renewed strength was driven by exports of pearls and precious stones and strong demand from the US, the largest export market of Indian diamonds. On the other hand, exports to the UAE remain at almost 50 per cent of their pre-pandemic levels (Chart II.6.8a and II.6.8b).

II.6.13 Globally, the automotive industry accounts for 11 per cent of semiconductor demand. Although automotive exports from India witnessed an average growth of 17.5 per cent during 2021-22 compared to 2019-20 (pre-pandemic), persisting global semiconductor shortages led to production cuts and temporary closure of factories (Chart II.6.9a and II.6.9b).

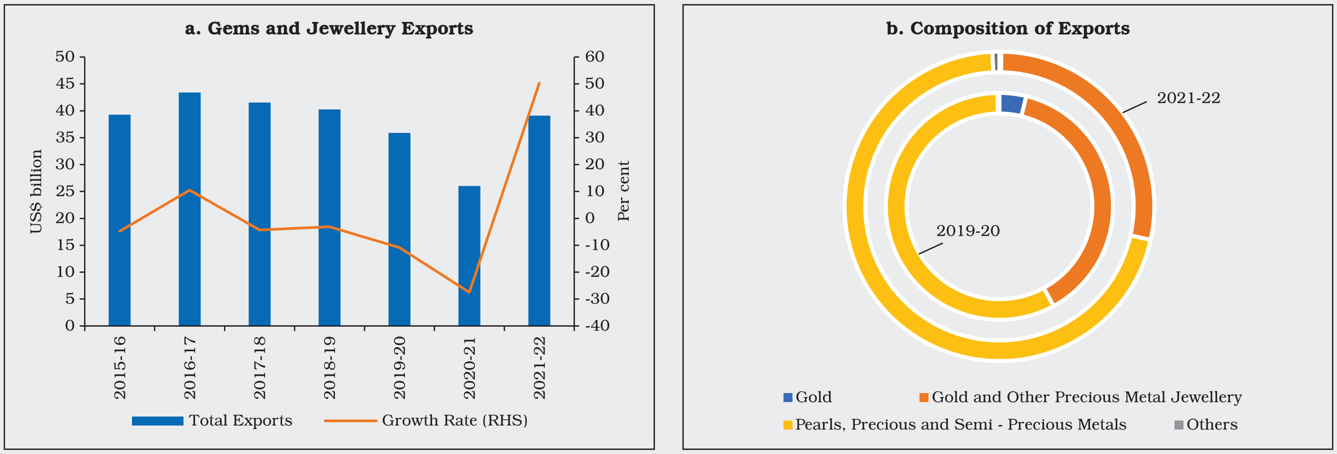
II.6.14 A major key impediment to global trade has been disruptions in the shipping industry, impacting maritime logistics. The schedule reliability of ships covering 34 different trade lanes and 60 plus carriers averaged 35.0 per cent in 2021-22 as against 76.5 per cent in the pre-pandemic times (2019-20). Consequently, the global average delay for vessel arrival stood at 7.1 days during 2021-22 as against 4.3 days prior to the pandemic in 2019-20. The Freightos Baltic Global Container Index, which reflects ocean container transport spot across 12 global trade

Chart II.6.7: Composition of Agricultural Export Growth



Source: DGCI&S and RBI staff calculations.

Chart II.6.8: Gems and Jewellery Exports



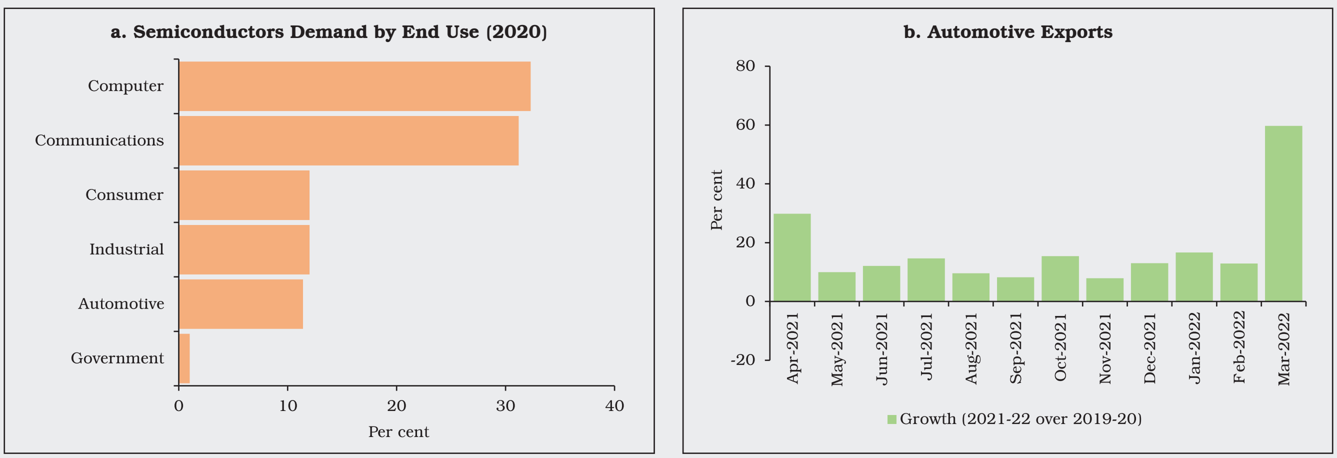
Source: DGCI&S.

lanes, reached its historical high in October 2021 and remains well above pre-pandemic levels.

II.6.15 Merchandise imports witnessed a broad-based expansion, aided by robust domestic demand, to US$ 612.0 billion during 2021-22, surpassing pre-COVID levels by 28.9 per cent. In terms of volume, merchandise imports have expanded by 14.4 per cent during 2021-22 over pre-COVID levels. At a disaggregated level, POL was the major driver of imports, followed by electronic goods and gold (Chart II.6.10a and II.6.10b).

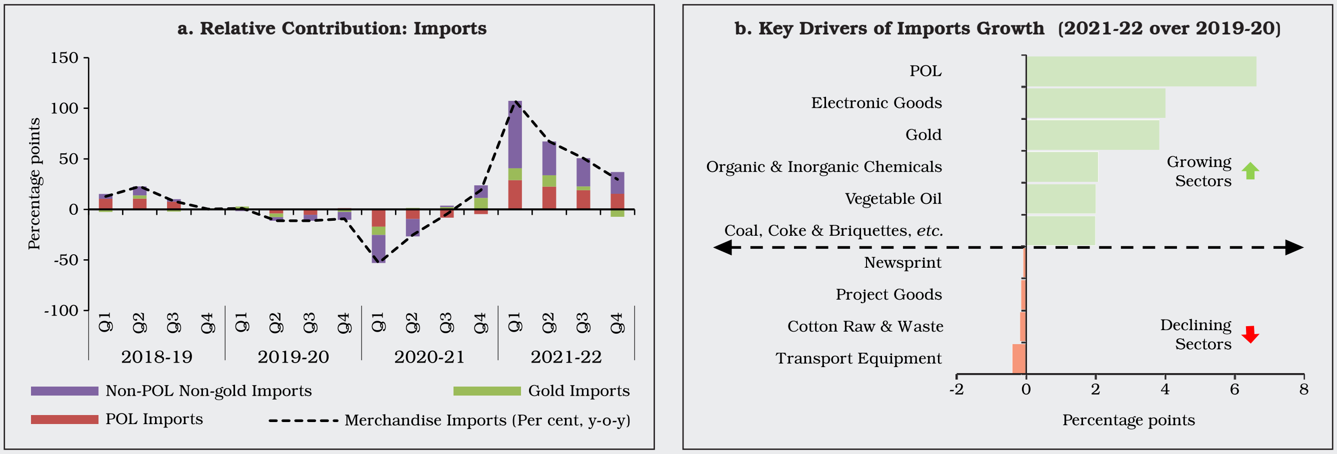
II.6.16 More recently, brent crude oil prices, which witnessed volatility amidst Russia-Ukraine crisis, softened to US$ 108 per barrel on March 31, 2022 from its recent high of US$ 128 per barrel (March 8, 2022). Oil demand was dampened on account of expectations of a rate increase by the US Fed and stringent lockdown in China due to the recent increase in

Chart II.6.9: Impact of Semiconductor Shortage on Automotive Sector



Source: Semiconductor Industry Association and CEIC.

Chart II.6.10: Relative Contribution in Import Growth



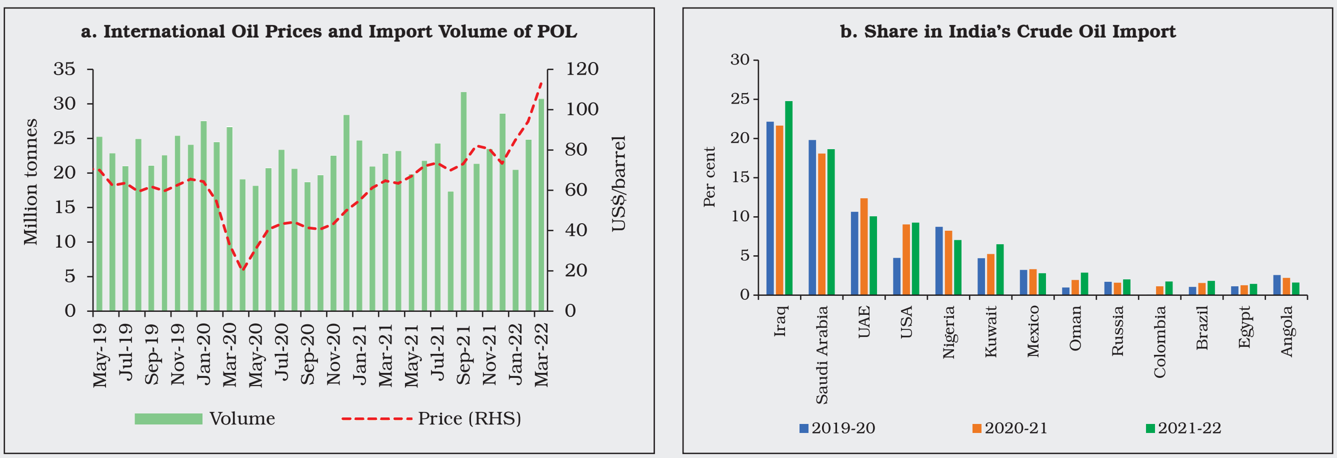
Source: RBI staff calculations based on DGCI&S data.

number of COVID-19 cases. Source-wise, Iraq and Saudi Arabia remained the major source of crude oil imports for India. The diversification of India's import basket for POL in 2021-22 reflects a conscious policy measure to diversify suppliers (Chart II.6.11a and II.6.11b).

II.6.17 India's gold imports at US$ 46.2 billion in 2021-22 exceeded the pre-COVID levels. In terms of volume, demand surged since July 2021 on the back of decline in COVID-19 cases, easing of restrictions following acceleration in vaccination drive and festival/wedding demand (Chart II.6.12). However, imports of gold fell amid rising global inflation concerns since January 2022. Gold prices fell short of only about 1 per cent in March 2022 to reach US$ 1,947.8 per troy ounce against a multi-year high of US$ 1,968.6 per troy ounce recorded in August 2020.

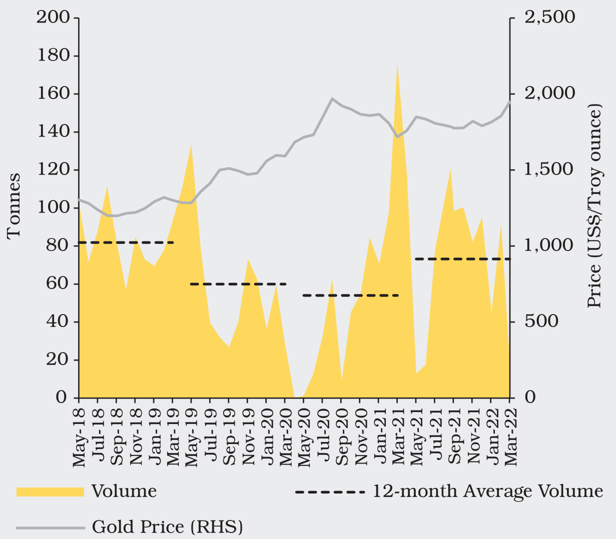
II.6.18 India imports around 10 per cent of its total gold imports from the UAE, which is likely to increase in the wake of the successful implementation of a Free Trade Agreement (FTA).

Chart II.6.11: Dynamics of India's Oil Imports



Source: DGCI&S and Ministry of Petroleum, GoI.

Chart II.6.12: India's Gold Import Volume



Source: Calculations based on DGCI&S and World Gold Council.

II.6.19 Non-oil non-gold imports witnessed strong growth in 2021-22, expanding by 47.1 per cent on a y-o-y basis and by 28.0 per cent over pre-pandemic levels. Sectors such as electronic goods, vegetable oil, organic and inorganic chemicals and coal, coke and briquettes contributed to the growth in non-oil non-gold imports.

II.6.20 India is the largest importer of vegetable oil. The import bill expanded from US$ 9.7 billion in 2019-20 to US$ 19.0 billion during 2021-22, reflecting a surge in import prices. Composition-wise, palm oil constitutes the major share, accounting for about 62.0 per cent of the total edible oil imports in India. International prices of palm oil remained high due to tight migrant labour conditions in major palm oil suppliers like Malaysia[34] and increased export levy on palm oil in Indonesia.[35] The Government of India rationalised import duty on edible oils, including palm oil, and imposed stock limits to avoid hoarding and to reduce the inflationary pressures.[36]

II.6.21 Pearls and precious stone imports, which had witnessed a revival at the end of 2020, strengthened further in 2021 on the back of strong export demand for the gems and jewellery sector during this period. The import of pearls and precious stones at US$ 31.0 billion expanded by 38.1 per cent during 2021-22 over pre-pandemic levels. Around two-thirds of this growth was driven by unworked non-industrial diamonds (the largest component with 60 per cent share). The UAE, the USA and Belgium remained the top import sources (Chart II.6.13a and II.6.13b).

II.6.22 India's fertiliser imports also registered an increase (89.7 per cent in value terms and 3.2 per cent in volume terms) during 2021-22 from pre-pandemic levels, reflecting the surge in global fertiliser prices. Global prices of urea, the major constituent of India's fertiliser imports (with a 40.0 per cent share), witnessed the sharpest increase of 124.1 per cent during 2021-22, on a y-o-y basis.

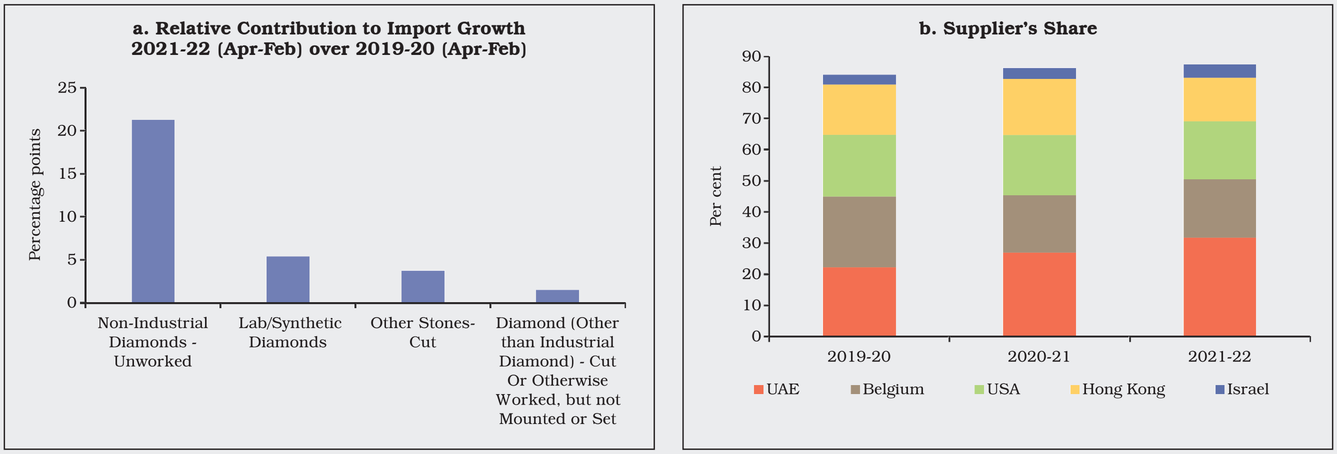
II.6.23 Capital goods imports, contributing more than one-fourth of India's total imports, expanded by 15.6 per cent during 2021-22 compared to pre-pandemic levels, reflecting a surge in

[34] Oilseed, Oil and Monthly Price Update, Food and Agriculture Organisation (FAO), United Nations (December 2021).

[35] Oilseeds: World Markets and Trade, United States Department of Agriculture (USDA) [December 2021].

[36] For instance, import duty has been reduced from 2.5 per cent to nil on crude palm/soybean/sunflower oil; from 32.5 per cent to 17.5 per cent on refined soybean/sunflower oil; and from 17.5 per cent to 12.5 per cent on refined palm oil, as per March 23, 2022 press release.

Chart II.6.13: Pearls and Precious Stone Imports

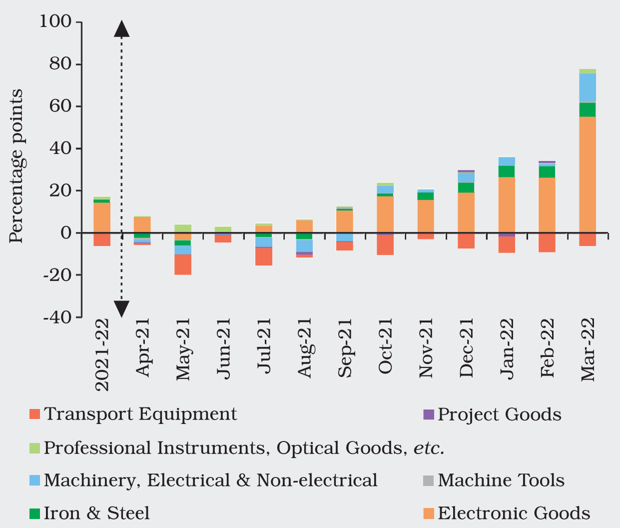


Source: RBI staff calculations based on DGCI&S and MOC&I data.

investment demand. Electronic goods were the largest contributor (Chart II.6.14).

II.6.24 Reflecting the developments, India's trade deficit expanded to US$ 190.1 billion in 2021-22 from US$ 161.4 billion during 2019-20, with oil deficit accounting for half of the total deficit (Chart II.6.15a). On a bilateral basis, the deficit with China widened while the trade surplus with the USA and Bangladesh expanded significantly (Chart II.6.15b).

Chart II.6.14: Relative Contribution of Capital Goods Import Growth (2021-22 Over Pre-COVID Period)



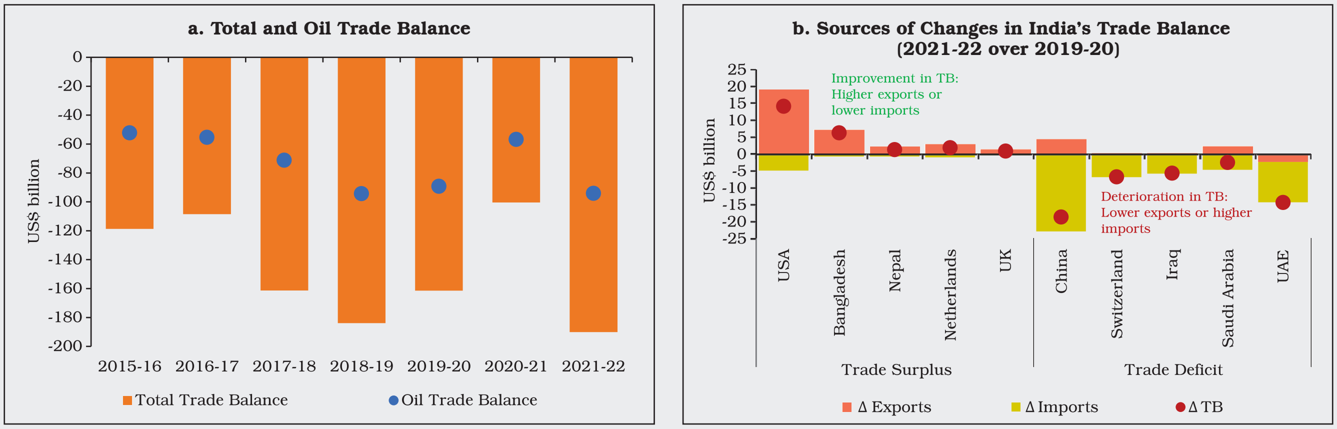
Source: Calculations based on DGCI&S.

4. Invisibles

II.6.25 Net receipts from invisibles, reflecting cross-border transactions of services, income and transfers, displayed resilience during April-December 2021-22 (Chart II.6.16). While demand for software services exports surged sequentially since Q2:2020-21, remittances receipts also remained strong. Further, the net outgo on primary income account increased marginally following a rise in net investment income outflows.

II.6.26 Alongside the recovery in global trade in services (Chart II.6.17), services exports remained resilient during 2021-22, primarily on the back of surging software exports, followed by transportation and business services.

Chart II.6.15: India's Merchandise Trade Deficit

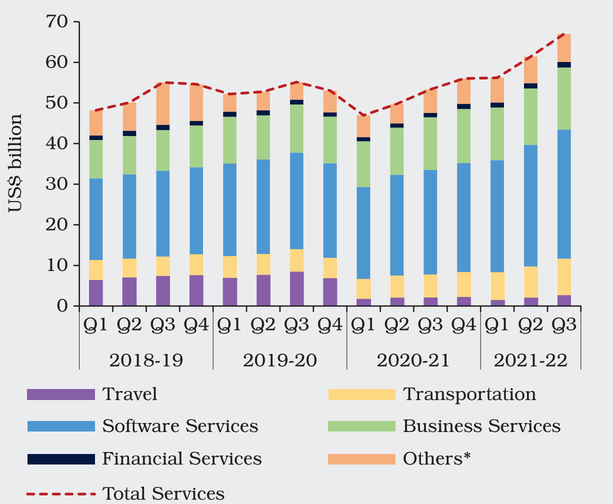


Note: A positive Δ imports implies lower imports and *vice versa*. TB: Trade Balance.
Source: DGCI&S and RBI staff calculations.

II.6.27 Software services account for more than 40 per cent of India's total services exports. Travel and transportation services, which were hit hard by the pandemic, showed a weak recovery (Charts II.6.18a and II.6.18b).

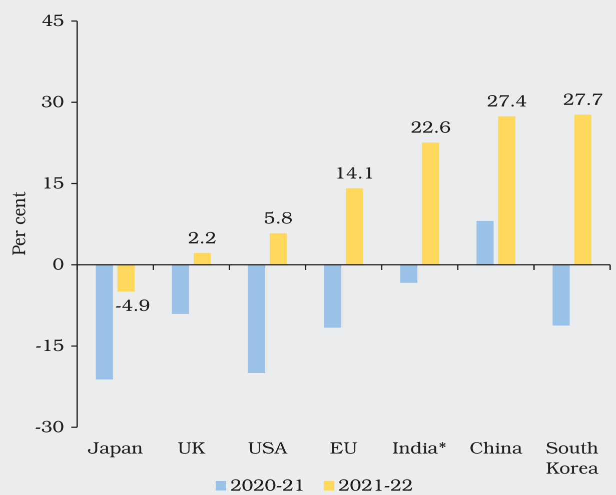
II.6.28 Remittances to India fully recovered to pre-pandemic levels by H1:2021-22 (Chart II.6.19a). To facilitate cheaper cross-border payments, in September 2021, the Reserve Bank and the Monetary Authority of Singapore announced a project to link their fast payment systems, *viz.*, Unified Payments Interface and PayNow. The World Bank estimates that the average cost of sending remittances of US$ 200 to India declined

Chart II.6.16: Composition of India's Services Exports



*: Includes communication services and government not included elsewhere.
Source: RBI.

Chart II.6.17: Country-wise Export of Services



*: Data for 2021-22 relate to April-February, barring India. Figure pertaining to India for 2021-22 is for the full year, comprising provisional data for January-March 2022.
Source: WTO and RBI.

Chart II.6.18a: Travel Receipts in Major Travel Destinations

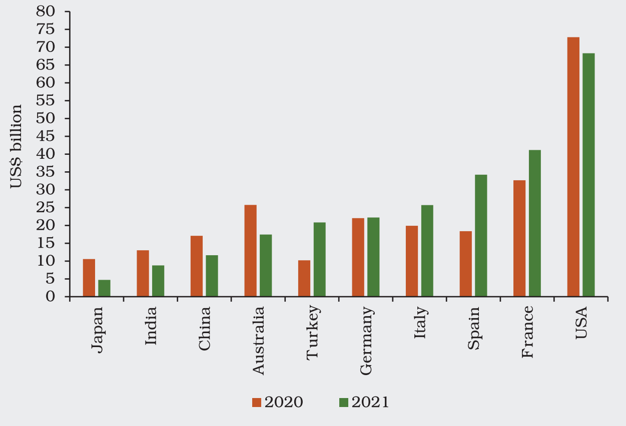
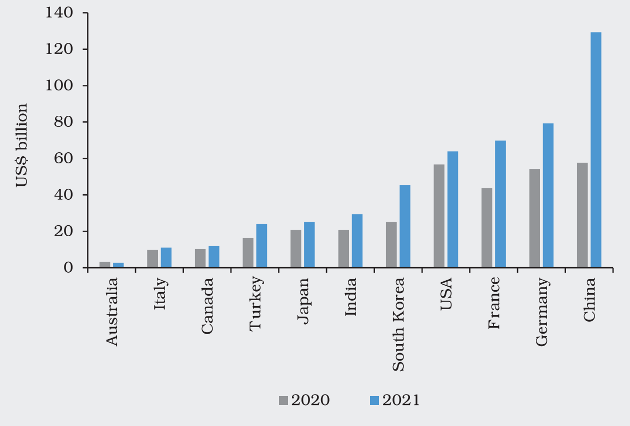


Chart II.6.18b: Transportation Receipts in Major Economies



Source: WTO and RBI.

from 5.51 per cent in Q4:2020 (highest since Q1:2019) to 4.94 per cent in Q4:2021. India remained the top recipient of global remittances during the year (Chart II.6.19b).

II.6.29 Under the income account, both receipts and payments relating to income on cross-border investments and compensation of employees that domestic resident entities earn from (or pay to) the rest of the world were higher than a year ago.

II.6.30 Led by recovery in domestic demand and rise in international crude oil prices, India's current account balance recorded a deficit of 1.2 per cent of GDP in April-December 2021 as against a surplus of 1.7 per cent a year ago (Chart II.6.20a). Intra-year, a surplus of 0.9 per cent of GDP in Q1:2021-22 was followed by deficits in Q2 and Q3:2021-22. Negative net terms of trade owing to upsurge in crude oil prices and

Chart II.6.19a: Inward Remittances to India

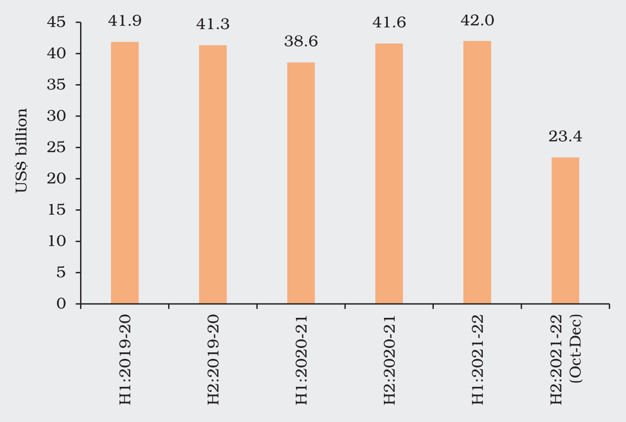
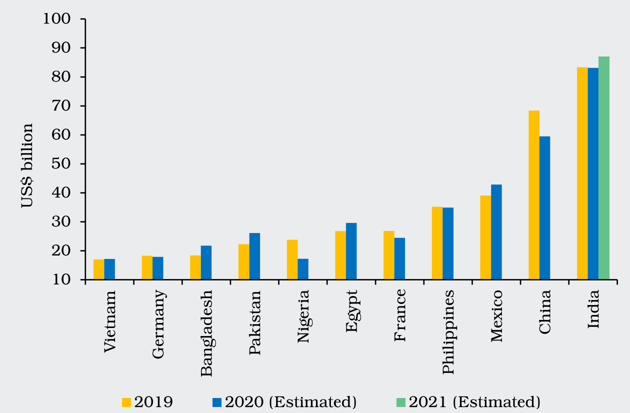


Chart II.6.19b: Inward Remittances across Major Recipient Countries



Source: RBI and World Bank.

Chart II.6.20a: Composition of India's Current Account Balance

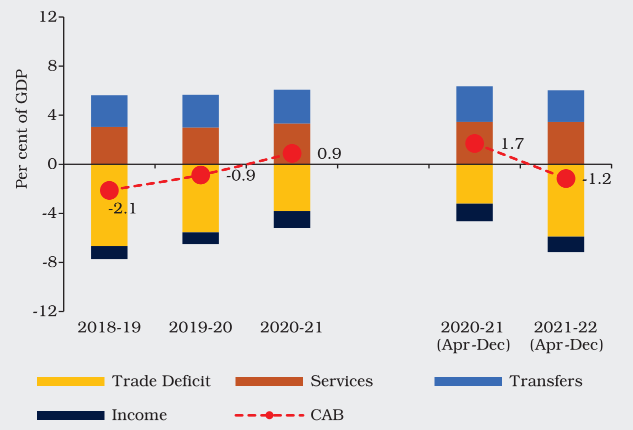
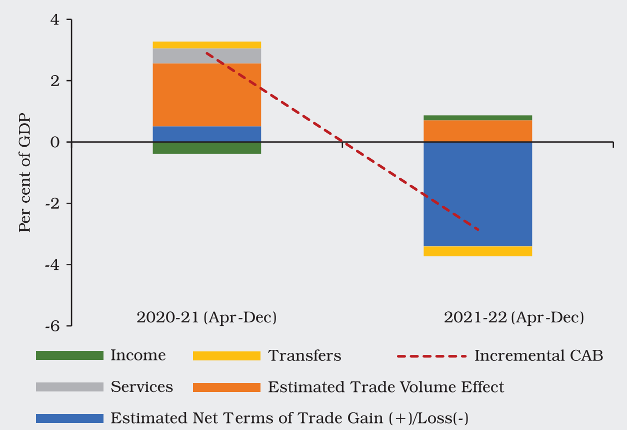


Chart II.6.20b: Sources of Incremental Current Account Balance



Source: RBI and IMF.

the consequent widening of trade deficit mainly contributed to the current account deficit in April-December 2021-22 (Chart II.6.20b).

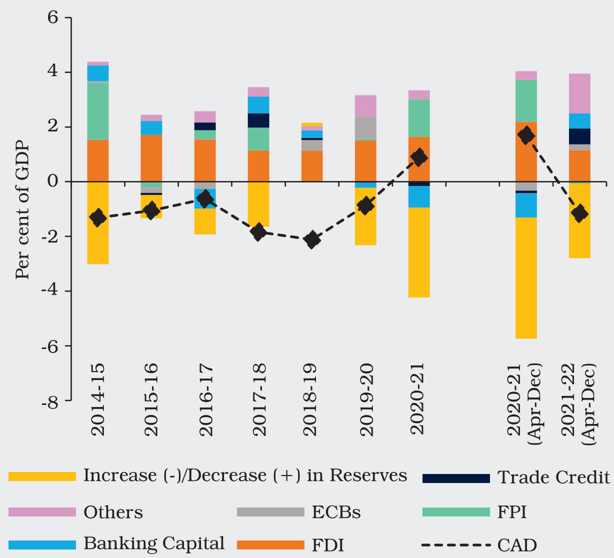
II.6.31 The upsurge in global inflation, driven by sharp rise in crude oil prices and supply chain disruptions, has emerged as a major policy challenge for most economies, including India, leading to potential erosion of external competitiveness *via* real appreciation of local currencies.

5. External Financing

II.6.32 In 2021-22, India's external financing needs were modest, given the moderate level of the current account deficit. Among the major components of financial flows, net FDI remained robust, while foreign portfolio investment (FPI) witnessed significant volatility during the year. Moreover, loans in the form of external commercial borrowings (ECBs), trade credit and banking capital recorded net inflows. Amid robust net capital inflows, there was an accretion of US$ 63.5 billion to the foreign exchange reserves on a balance of payment (BoP) basis (excluding valuation changes) in April-December 2021 [Chart II.6.21 and Appendix Table 8].

II.6.33 Capital flows were dominated by FDI during 2021-22, *albeit* with a rise in outward FDI during the period (Table II.6.2). During the year, policy norms for FDI in select sectors, including pension fund management companies, oil and

Chart II.6.21: Financing of Current Account Deficit



Source: RBI.

Table II.6.2: Foreign Direct Investment Inflows

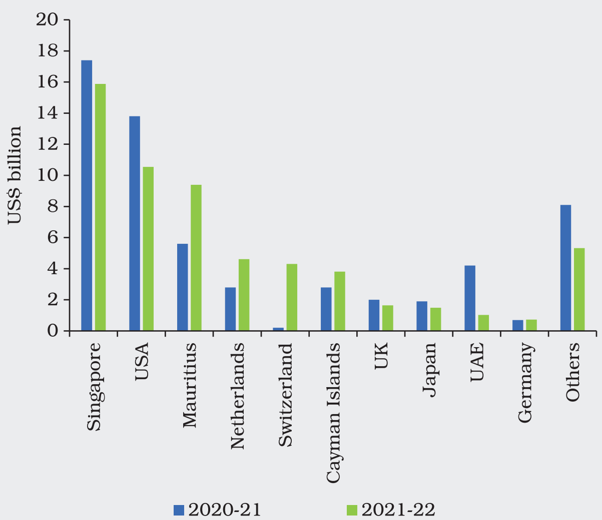
(US$ billion)

	2018-19	2019-20	2020-21	2021-22
1	2	3	4	5
1. Net FDI (1.1 - 1.2)	30.7	43.0	44.0	39.3
1.1 Net Inward FDI (1.1.1 - 1.1.2)	43.3	56.0	54.9	55.0
1.1.1 Gross Inflows	62.0	74.4	82.0	83.6
1.1.2 Repatriation/Disinvestment	18.7	18.4	27.0	28.6
1.2 Net Outward FDI	12.6	13.0	11.0	15.7

Source: RBI.

gas PSUs and telecom services, were further eased. While gross inward FDI at US$ 83.6 billion in 2021-22 was comparable to its level a year ago, net FDI (*i.e.*, net inward *minus* net outward) at US$ 39.3 billion moderated from US$ 44.0 billion a year ago. The top FDI investor countries were Singapore, the US, Mauritius, the Netherlands, and Switzerland, contributing 76 per cent of the total FDI equity during the period (Chart II.6.22). Sector-wise, the services sector, including computer services, communication services and financial services, accounted for a major share of FDI equity in India during 2021-22, followed by the manufacturing sector, retail and wholesale trade, education, and R&D (Appendix Table 9).

Chart II.6.22: Source Country-wise Inflow of FDI (Equity)



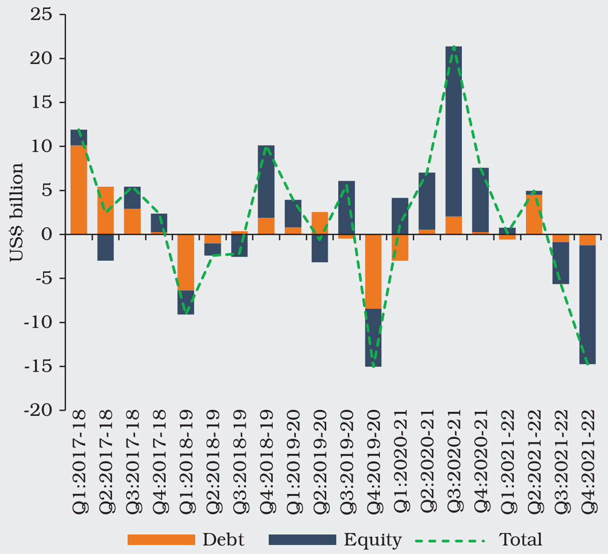
Source: RBI.

II.6.34 Higher outward FDI from India during the year was mainly towards destinations such as Singapore, the US, the UK, Mauritius, the Netherlands and the Philippines. Financial, insurance and business services, manufacturing, wholesale and retail trade, and restaurants and hotels were the major sectors attracting India's overseas direct investment during the year.

II.6.35 In contrast to FDI flows, net foreign portfolio investment (FPI) flows ebbed after record net inflows in 2020-21. After making net purchases during H1:2021-22, FPIs withdrew in H2, primarily from the equity segment (Chart II.6.23).

II.6.36 In terms of the investment route of FPIs in the equity market, the stock exchange channel recorded a significant decline during 2021-22. However, FPIs maintained their investment interest in the primary market segment (Chart II.6.24). In fact, a large chunk of flows was diverted by FPIs from secondary to primary market during November-December period when big ticket initial public offering (IPO) issues hit the capital market. FPIs were allowed to acquire debt securities issued by infrastructure investment

Chart II.6.23: Net Foreign Portfolio Flows to India

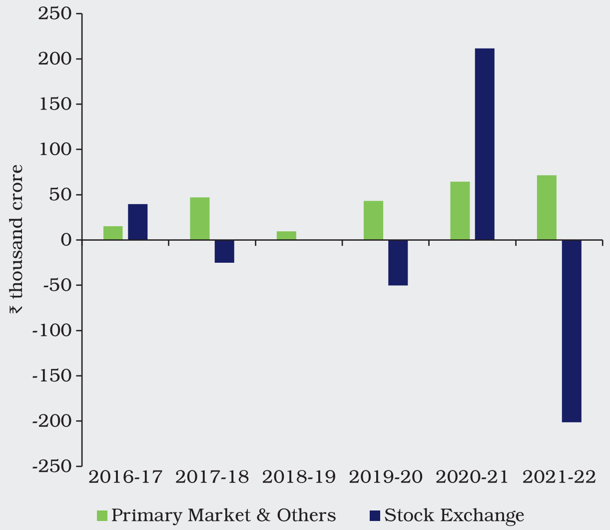


Source: NSDL and SEBI.

trusts (InvITs) and real estate investment trusts (REITs) under the Medium-Term Framework (MTF) or the Voluntary Retention Route (VRR).

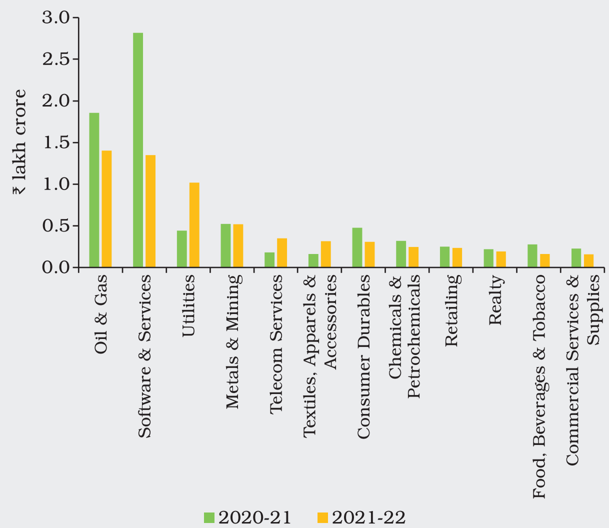
II.6.37 Around 74 per cent of the FPI inflows in the equity market was recorded in top five sectors, *viz.,* oil and gas (22.3 per cent), software and services (21.4 per cent), utilities (16.2 per cent), metals and mining (8.2 per cent) and telecom services (5.5 per cent) [Chart II.6.25]. Notwithstanding the modest level of net purchases by FPIs in the debt market during the year, investment limits (general route) remained underutilised. As on March 31, 2022, only 26.3 per cent of the limits in central government securities were utilised (33.7 per cent as at end-March 2021), while the utilisation rate for SDLs remained abysmally low at one per cent. In contrast, given the positive response under the VRR, the investment limit for the same was raised by ₹1,00,000 crore to ₹2,50,000 crore with effect from April 1, 2022. Of the total value of specified categories of central government securities opened fully for non-resident investors without any restrictions under the Fully Accessible Route (FAR), 2.6 per cent was held by FPIs as on March 31, 2022. In the corporate bond segment, FPIs' interest remained subdued, *inter alia,* due to credit rating downgrades of companies and rise in

Chart II.6.24: Investment Route-wise FPIs in Equity Market



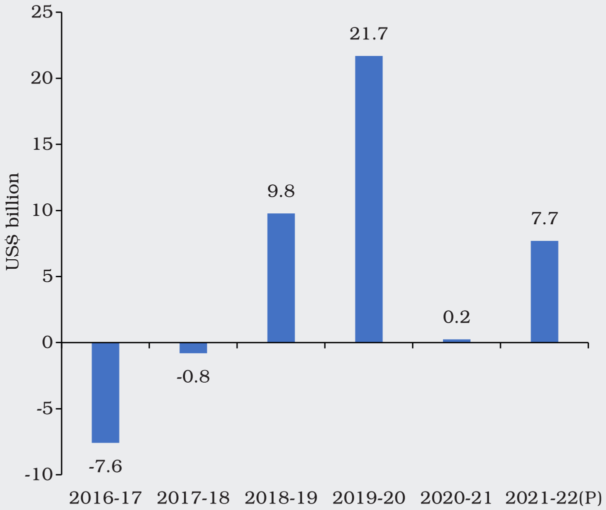
Source: NSDL.

Chart II.6.25: Major Recipient Sectors of FPI in Equity Market



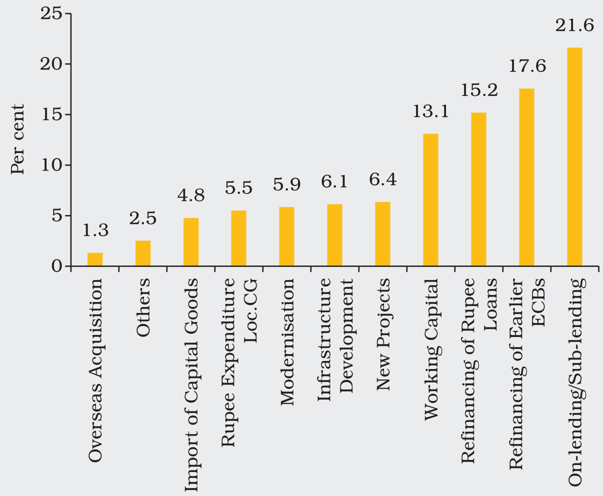
Source: NSDL.

Chart II.6.26: External Commercial Borrowings to India (Net)



P: Provisional.
Source: RBI.

Chart II.6.27: End Use of External Commercial Borrowings during 2021-22



Loc.CG: Local capital goods.
Source: RBI.

yield rates in the US. Only around 20.0 per cent of the limit for FPIs in corporate bonds (in absolute terms) was utilised as on March 31, 2022, down from 24.5 per cent as at end-March 2021.

II.6.38 ECBs recorded a rise, both in terms of the number of ECB agreements and the agreement amount, during 2021-22 (Chart II.6.26). In terms of policy measures, a relaxation for parking of unutilised ECB proceeds in term deposits was extended till March 1, 2022. Further, in view of the discontinuation of LIBOR and to take into account differences in credit risk and term premia between LIBOR and the alternative reference rates (ARRs), the all-in-cost ceiling for new foreign currency overseas borrowings and trade credit transactions was increased by 50 bps to 500 bps and 300 bps, respectively, over the benchmark rates.

II.6.39 Besides repayment of earlier borrowings, disbursements were largely used for on-lending/sub-lending, refinancing of earlier ECBs, refinancing of rupee loans, working capital requirements, new projects and infrastructure development (Chart II.6.27). Within ECBs, rupee denominated loans and rupee denominated bonds (RDBs) accounted for 8.4 per cent of the total agreement amount during 2021-22 as compared with 6.0 per cent a year ago. Furthermore, the share of hedged foreign exchange loans stood at 51.6 per cent during the year, marginally higher than 51.3 per cent during 2020-21.

II.6.40 Short-term trade credit also increased during the year in line with the recovery in imports. The net inflow of short-term credit stood at US$ 13.3 billion in April-December 2021-22 as against a net outflow of US$ 1.8 billion a year ago. Around 35 per cent of the trade credit was raised for imports of crude oil, gold, coal and copper.

II.6.41 Non-Resident (External) Rupee (NRE) deposits, which constituted around 72 per cent of total outstanding Non-Resident Indian (NRI) deposits, witnessed net inflows of US$ 3.3 billion during 2021-22, much lower than US$ 8.8 billion a year ago (Table II.6.3). Redemptions from FCNR(B) accounts and sharp fall in NRE deposits contributed to lower net accretions in non-resident deposits. Sizeable redemptions were reported in

Table II.6.3: Flows under Non-Resident Deposit Accounts

(US$ billion)

	2018-19	2019-20	2020-21	2021-22
1	2	3	4	5
1. Non-Resident External (Rupee) Account	7.3	5.6	8.8	3.3
2. Non-Resident Ordinary Account	1.9	2.0	2.3	3.5
3. Foreign Currency Non-Resident(B) Account	1.1	1.1	-3.8	-3.6
Non-Resident Deposits (1+2+3)	**10.4**	**8.6**	**7.4**	**3.2**

Source: RBI.

deposits held by non-residents from the UAE, the US and the UK.

6. Vulnerability Indicators

II.6.42 India's external debt (as a ratio to GDP) remained lower than most emerging market peers. Mainly led by general special drawing right (SDR) allocations by the IMF in August 2021, external debt recorded an increase of US$ 41.2 billion (*i.e.,* 7.2 per cent) at end-December 2021 over end-March 2021; as a ratio to GDP, however, it moderated to 20.0 per cent from 21.2 per cent during the same period (Table II.6.4). Commercial borrowings remained the largest component of external debt, with a share of 36.8 per cent, followed by non-resident deposits (23.1 per cent) and short-term trade credit (18.0 per cent). The accretion to foreign exchange reserves induced an improvement in reserve adequacy indicators. This augurs well for mitigating external risks and spillovers. Foreign exchange reserves at end-March 2022 provided cover of 10 months of imports projected for 2022-23.

Table II.6.4: External Vulnerability Indicators (End-March)

(Per cent, unless indicated otherwise)

Indicator	2013	2020	2021	End-Dec 2021
1	2	3	4	5
1. External Debt to GDP Ratio	22.4	20.9	21.2	20.0
2. Ratio of Short-term Debt (Original Maturity) to Total Debt	23.6	19.1	17.6	18.6
3. Ratio of Short-term Debt (Residual Maturity) to Total Debt	42.1	42.4	44.1	44.4
4. Ratio of Concessional Debt to Total Debt	11.1	8.8	9.0	8.2
5. Ratio of Reserves to Total Debt	71.3	85.6	100.6	103.0
6. Ratio of Short-term Debt (Original Maturity) to Reserves	33.1	22.4	17.5	18.1
7. Ratio of Short-term Debt (Residual Maturity) to Reserves	59.0	49.6	43.8	43.1
8. Reserve Cover of Imports (in months)*	7.0	12.0	17.4	13.1
9. Debt Service Ratio (Debt Service to Current Receipts)	5.9	6.5	8.2	4.9
10. External Debt (US$ billion)	409.4	558.3	573.7	614.9
11. Net International Investment Position (NIIP) (US$ billion)	-326.7	-375.4	-355.3	-357.9
12. NIIP/GDP Ratio	-17.8	-14.1	-13.2	-11.7
13. CAB/GDP Ratio	-4.8	-0.9	0.9	-1.2

***:** Based on merchandise imports of latest four quarters, published in balance of payments statistics.
Note: CAB/GDP ratio in column 5 pertains to April-December 2021.
Source: RBI and Government of India.

II.6.43 India's foreign exchange reserves at US$ 607.3 billion at end-March 2022 were bolstered by the IMF's general SDR allocations of SDR 12.57 billion to India in August 2021. In 2021-22, India's reserve accumulation (including valuation changes) was to the tune of US$ 30.3 billion.

7. *Conclusion*

II.6.44 Going forward, the outlook for India's external sector is beset with both headwinds and tailwinds. Under the latter, exports, which have shown resilience in a hostile trade environment, may derive further strength as external demand and price conditions turn favourable with the abatement of geopolitical tensions. Domestic policy measures are also primed to achieve the target set for the year. Downside risks emanate from likely slowing of growth in major AEs and EMEs, elevated energy prices and added supply-side disruptions in a conflict-ridden geopolitical environment. Faster monetary policy tightening in major economies on the back of high inflation in these economies can also impact financial conditions in emerging markets. Yet, external vulnerability indicators exhibit resilience and strengthening domestic macroeconomic fundamentals would help the economy withstand spillovers from potential global adverse macro-financial shocks.

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

III MONETARY POLICY OPERATIONS

The conduct of monetary policy in 2021-22 was guided by the objective of reviving and sustaining growth on a durable basis and continuing to mitigate the impact of COVID-19 on the economy, while ensuring that inflation remains within the target going forward. The Reserve Bank maintained surplus liquidity in consonance with this stance. Monetary transmission improved during the year, supported by surplus liquidity and the external benchmark-based regime for loan pricing.

III.1 Against the backdrop of a sharp contraction of 6.6 per cent in real gross domestic product (GDP) in 2020-21 and the uneven and fragile recovery in 2021-22 interrupted by a second wave of the pandemic in the first quarter and a third wave commencing in late December 2021, the conduct of monetary policy was challenging. Intermittent inflationary pressures from food price spikes, domestic and global supply chain disruptions and global spillovers purveying imported inflation despite a large slack in demand complicated the setting of monetary policy in consonance with the accommodative stance. The monetary policy committee (MPC) decided to look through these supply shocks and kept the policy repo rate unchanged during 2021-22. The MPC also decided to maintain its state-contingent accommodative stance through the year.

III.2 The Reserve Bank maintained abundant liquidity in the banking system in consonance with this stance. A secondary market G-sec acquisition programme (G-SAP) was implemented to ensure orderly evolution of the yield curve and facilitate monetary transmission across financial instruments. Liquidity measures targeted at sectors ravaged by the second wave of the pandemic such as contact-intensive services, the health sector, small business units, micro and small industries, and other unorganised sector entities were also put in place. As financial conditions eased, a calibrated restoration of the revised liquidity management framework instituted in February 2020 was set in motion through rebalancing liquidity in a non-disruptive manner away from the fixed rate reverse repo operations to market based auctions of variable rate reverse repos (VRRRs).

III.3 The external benchmark-linked framework incentivised banks to transmit these monetary policy signals, contributing to a decline in banks' marginal cost of funds-based lending rates (MCLRs), strengthening monetary transmission.

III.4 Against this backdrop, section 2 presents the implementation status of the agenda set for 2021-22 along with major developments during the year, while section 3 sets out the agenda for 2022-23. Concluding observations are given in the last section.

2. Agenda for 2021-22

III.5 In the Annual Report for 2020-21, the following goals were set for the conduct of monetary policy and liquidity management:

- Understanding the common and idiosyncratic components of inflation (Paragraph III.6);
- Upgrading GDP nowcasting and the forecasting framework using high-frequency data (Paragraph III.6);
- Implementing the augmented and recalibrated quarterly projection model (QPM) to achieve precision in medium-term forecasts and risk assessment *(Utkarsh)* [Paragraph III.6];
- Refining liquidity forecasting and exploring additional tools for liquidity management (Paragraph III.6);
- Examining the behaviour of credit cycles in India (Paragraph III. 6);
- Strengthening nowcasts of food inflation (Paragraph III.7); and
- Improving data management by migration of returns to an XBRL[1] reporting format (Paragraph III.7).

Implementation Status

III.6 The QPM – the workhorse model to generate medium-term forecasts and undertake policy scenarios – was augmented by including an external sector block with capital flows while capturing macroeconomic linkages and feedbacks. Nowcasting techniques for contemporaneous assessment of underlying economic activity were upgraded by fine-tuning dynamic factor approaches. Announcement effects of open market operations (OMOs) on financial markets were examined in an event study framework. Growth-inflation trade-offs, yield curve behaviour, monetary transmission, drivers of sectoral bank credit cycles and leverage and investment in the corporate sector were examined to strengthen the underpinning of monetary policy analysis.

III.7 A customised data template of commodities was created using data from *Agmarknet,* based on empirically tested relationships with corresponding consumer price index (CPI) items. The migration of returns to an XBRL reporting format was completed during the year.

Major Developments

Monetary Policy

III.8 The MPC's first meeting for the financial year 2021-22 in early April 2021 was held against the backdrop of a renewed surge in COVID-19 infections in some states, imparting uncertainty to the macroeconomic outlook. Headline inflation had firmed up to 5.0 per cent in February 2021 from 4.1 per cent in January 2021, with double-digit inflation in a majority of food sub-groups. The projection of real GDP growth for 2021-22 was retained at 10.5 per cent, as set out in the February 2021 meeting of the MPC, while recognising that the resurgence in COVID-19 infections and the associated uncertainty are risks to the growth outlook.

III.9 Headline inflation was projected at 5.0 per cent in Q4:2020-21; 5.2 per cent in Q1:2021-22 and Q2; 4.4 per cent in Q3 and 5.1 per cent in Q4. The MPC noted that supply side pressures could persist, although demand-side pull remained moderate, and urged the Centre and states to mitigate domestic input costs emanating

[1] eXtensible Business Reporting Language.

from taxes on petrol and diesel and high retail margins. Confronted by the ferocity of the second wave and the associated localised lockdowns, the MPC unanimously decided to keep the repo rate at 4 per cent and continue with an accommodative stance.

III.10 By the time of the June 2021 meeting, the second wave of COVID-19 had started showing signs of waning and the adoption of COVID-compatible occupational models by businesses cushioned the hit to economic activity. Inflation moderated from 5.5 per cent in March 2021 to 4.3 per cent in April 2021, but the rising trajectory of international commodity prices, especially of crude, together with logistics costs were adjudged to be posing upside risks to the inflation outlook, warranting, in the MPC's view, reductions in excise duties, cess and taxes imposed by the Centre and states to contain input cost pressures. The projection of real GDP growth for 2021-22 was revised downwards to 9.5 per cent while CPI inflation was projected at 5.1 per cent during 2021-22 – 5.2 per cent in Q1; 5.4 per cent in Q2; 4.7 per cent in Q3; and 5.3 per cent in Q4. The MPC decided to retain the prevailing repo rate at 4 per cent and continue with the accommodative stance set out in its April meeting.

III.11 By August 2021, coinciding with the third meeting of the MPC for the year, the domestic economy was exhibiting signs of revival with the ebbing of the second wave and the easing of containment measures. Taking stock of resilient agricultural production and rural demand, pent-up urban demand, buoyant exports and rising government expenditure, the projection of real GDP was retained at 9.5 per cent for 2021-22.[2] By this time, however, inflationary pressures had intensified, with CPI inflation breaching the upper tolerance level during May-June on the back of surging prices of food and fuel items. Accordingly, the CPI inflation projection was revised upwards to 5.7 per cent for 2021-22. The MPC assessed these inflationary pressures to be largely driven by adverse supply shocks and that the nascent and hesitant recovery needed to be nurtured through fiscal, monetary and sectoral policy levers. Accordingly, the committee unanimously voted to keep the repo rate at 4 per cent and to continue with the accommodative stance with a 5-1 vote.

III.12 In the MPC's fourth bi-monthly meeting in October, it noted that domestic economic activity was gaining traction, supported by record *kharif* foodgrains output and bright *rabi* prospects. Acceleration in the pace of vaccination, a sustained decline in new infections, and rebound in the pent-up demand for contact intensive services brightened the prospects of the recovery. Global semiconductor and chip shortages, elevated commodity prices and input costs, logistics disruptions and potential global financial market volatility were viewed as key downside risks to domestic growth prospects. Inflation outcomes turned out to be more favourable than anticipated, with CPI inflation softening during July-August 2021 and moving back into the tolerance band. The inflation projection was revised to 5.3 per cent during 2021-22 and the MPC recommended measures to further ameliorate supply and cost pressures for a more durable reduction in inflation and anchoring of inflation expectations. The MPC also observed that even as the domestic economy was showing signs of mending, the external environment was turning more uncertain

[2] The projection of 9.5 per cent real GDP growth for 2021-22 was also retained in the subsequent meetings (October and December 2021). The NSO's First Advances Estimates released in January 2022 estimated the 2021-22 growth at 9.2 per cent, broadly in line with the Reserve Bank's projection made in June 2021.

and challenging. Hence, the domestic recovery needed to be nurtured assiduously through all policy channels. The MPC, therefore, decided unanimously to keep the policy repo rate unchanged at 4 per cent. It voted 5 to 1 to continue with the accommodative stance.

III.13 By the MPC's December 2021 meeting, the global situation had altered and risks shifted to the downside with a surge in infections across countries due to the emergence of the Omicron variant. While domestic economic activity was evolving in line with the MPC's October assessment, CPI inflation had edged up in October on account of an increase in vegetable prices due to unexpected rainfall that damaged crops in several states. The reduction of taxes on petrol and diesel announced in November was welcomed as it would bring about a durable reduction in inflation going forward through both direct and indirect effects. Taking these factors into account, CPI inflation projection was retained at 5.3 per cent for 2021-22, noting that inflation prints may remain elevated in Q4:2021-22 but soften thereafter. With domestic activity just about catching up with pre-pandemic levels, however, the MPC considered it appropriate to wait for growth signals to become more entrenched in view of the likely tightening of global financial conditions, the potential resurgence in COVID-19 infections with new mutations, persisting shortages and bottlenecks and the widening divergences in policy actions and stances across the world. Accordingly, the MPC unanimously decided to keep the policy repo rate unchanged at 4 per cent and to continue with the accommodative stance with a 5 to 1 vote.

III.14 In the run up to the sixth bi-monthly policy of February 2022, CPI inflation had moved along the expected trajectory during November-December 2021. Food prices were expected to benefit from fresh winter crop arrivals, strong supply side interventions by the government, increase in domestic production, and prospects of a good *rabi* harvest. However, crude oil prices were seen to be imparting uncertainty to the outlook. The projection for CPI inflation was retained at 5.3 per cent for 2021-22. For 2022-23, CPI inflation was forecast at 4.5 per cent – Q1 at 4.9 per cent, Q2 at 5.0 per cent, Q3 at 4.0 per cent and Q4 at 4.2 per cent – with risks broadly balanced. Aggregate demand was expected to benefit from the improved outlook for *rabi* crop, the pick-up in non-food bank credit, supportive monetary and liquidity conditions, sustained buoyancy in merchandise exports, improving capacity utilisation, and the announcements in the Union Budget 2022-23 on boosting public infrastructure through enhanced capital expenditure. Global financial market volatility, elevated international commodity prices, especially crude oil, and continuing global supply-side disruptions were seen as downside risks to the outlook. Taking into account these considerations, real GDP growth for 2022-23 was projected at 7.8 per cent – Q1 at 17.2 per cent, Q2 at 7.0 per cent, Q3 at 4.3 per cent and Q4 at 4.5 per cent. The MPC noted that the expected moderation in inflation in H1:2022-23 and thereafter provided room to remain accommodative. With COVID-19 continuing to impart some uncertainty to the outlook amidst global headwinds, the MPC judged that the ongoing domestic recovery was still incomplete and needed continued policy support. Accordingly, the MPC unanimously decided to keep the policy repo rate unchanged at 4 per cent and continue with the accommodative stance with a 5 to 1 vote.

The Operating Framework: Liquidity Management

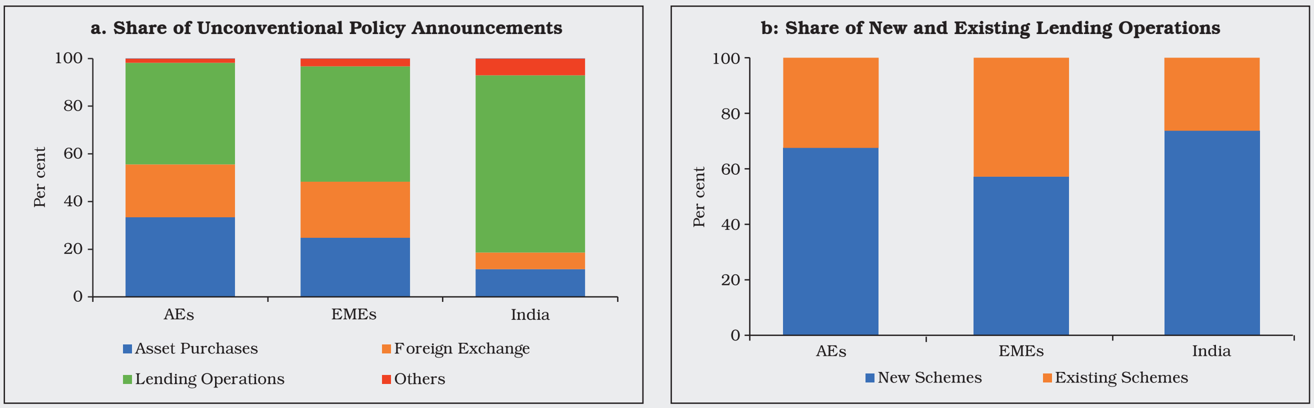
III.15 The operating framework of monetary policy aims at aligning the operating target – the weighted average call rate (WACR) – with the policy repo rate through proactive liquidity management. The Reserve Bank maintained surplus liquidity in the banking system during 2021-22 in consonance with the accommodative stance of monetary policy. In response to the second wave of the pandemic, the Reserve Bank announced additional liquidity measures amounting to ₹3.61 lakh crore during 2021-22, taking the total announced amount of primary liquidity offered since February 2020 to ₹17.2 lakh crore (8.7 per cent of nominal GDP of 2020-21). Across the world, US$16.9 trillion or 16.4 per cent of global GDP was pledged as fiscal support and US$19.0 trillion or 18.4 per cent of global GDP as monetary support (Box III.1).

Box III.1
Extraordinary Central Bank Lending Facilities during the Pandemic

Alongside large policy rate cuts, central banks' conventional and unconventional liquidity support became the main line of defence against the deleterious impact of the pandemic in almost all jurisdictions.[3] The Reserve Bank has taken about 100 odd measures since March 2020, creating congenial monetary and financial conditions and providing regulatory support to mitigate stress and nurture the recovery process (Das, 2021). G-20 central banks' experience reveals that lending operations topped the hierarchy of policy intervention tools (share of 35-40 per cent in total monetary support) along with asset purchases, foreign exchange interventions and other policy measures, with 60 per cent of these lending operations entailing newly established programmes (Chart 1). In the case of India, the share of lending operations was higher than the average of emerging market economies (EMEs), with three-fourth being new measures.

Lending support of central banks in the initial days of the pandemic was not targeted and essentially involved increasing the amount and lengthening the maturities of existing repurchase agreements (Canada, Japan, USA, and India). This was supplemented by targeted lending operations, broadening eligible collaterals to include corporate bonds (Chile and Israel) and/or increasing eligible counterparties such as insurance companies (Czech Republic), pension funds (Columbia) and mutual funds (USA). Central banks started with new targeted lending facilities aimed at protecting the vulnerable and small and medium enterprises (SMEs), mostly in coordination with banks/financial institutions (USA, Japan, UK, Mexico, Thailand and India) and sometimes in coordination with government (Brazil and Singapore). Targeted lending operations for health, medical supplies and contact intensive sectors were a feature of some of the EME central banks, namely, China and India.

Chart 1: Cross-country Experience of Lending Operations during COVID-19



AEs: Advanced Economies. EMEs: Emerging Market Economies.
Note: New schemes include schemes not active before the COVID-19 crisis and introduced subsequently during the pandemic and tools/measures used in the past but inactive at the time of the outbreak of the pandemic.
Source: Cantú *et. al.* (2021).

(Contd.)

[3] The Reserve Bank of India also undertook several unconventional measures in the wake of COVID-19. For detailed assessment refer to "Unconventional Monetary Policy in Times of COVID-19", RBI Bulletin, March 2021.

Table 1: India's Unconventional Lending Operations during COVID-19

Lending Operations	Announced Amount (₹ crore)			
	2019-20	2020-21	2021-22	Total
1	2	3	4	5
I. LTRO/TLTROs/SLTROs[4]	2,25,000	2,25,000	10,000	4,60,000
II. Lending to Mutual Funds/ NBFCs	-	80,000	-	80,000
III. Lending to Emergency Health Services/ Contact-intensive Sectors	-	-	65,000	65,000
IV. Refinancing to AIFIs	-	75,000	66,000	1,41,000
Total	**2,25,200**	**3,80,000**	**1,41,000**	**7,46,200**

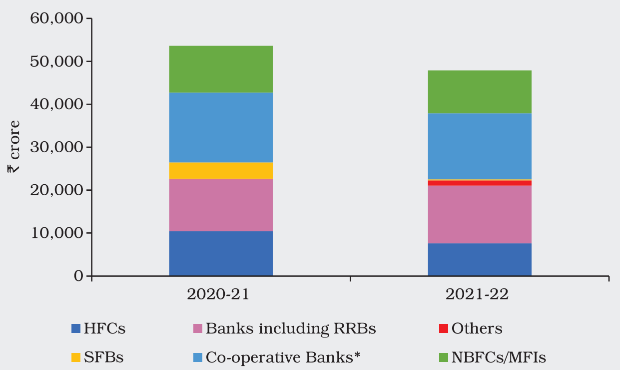
Source: RBI.

Central banks also reopened refinancing schemes to provide pure liquidity support. While these schemes were mostly common among EMEs including India (Table 1), they were also undertaken elsewhere – the Euro area (long term refinancing operations) and Switzerland (standing COVID-19 refinancing facility). Usage of large-scale targeted lending operations seems to have worked well with maximum lending operations benefitting the targeted borrowers – especially the MSMEs (Casanova *et al.,* 2021).

A notable feature of India's pandemic response is the special liquidity support provided by the Reserve Bank to All India Financial Institutions (AIFIs) in the face of acute risk aversion among banks hindering on-lending of central bank liquidity to pandemic affected entities. These lines of credit were channelised to more than 500 financial intermediaries/entities (as on March 31, 2022) [Chart 2], including co-operative banks, regional rural banks (RRBs), housing finance companies (HFCs), microfinance institutions (MFIs) and small finance banks (SFBs).[5] Moreover, taking advantage of the Reserve Bank's special liquidity schemes of ₹65,000 crore for emergency health and contact-intensive services, banks deployed their own funds to the tune of ₹15,663 crore during 2021-22 towards COVID-19 related emergency health services and contact intensive sectors, which effectively expanded bank credit to the economy at a time when credit growth was subdued. Thus, while in normal times the Reserve Bank abstains from the use of sector specific lending facilities, the usage of refinance during crisis times served well in meeting the funding needs of targeted entities.

Chart 2: Refinancing through AIFIs: Loan Disbursements during 2020-2022

a. Aggregate Loan Disbursements: Institution-wise



*: State Co-operative Agriculture and Rural Development Banks.

b. Beneficiary Financial Entities (Number)

Liquidity Support	2020-21	2021-22
1	2	3
SLF	226	-
ASLF	81	-
SLF-2	-	218
SLF-3	-	19
Total Entities Benefitted	**307**	**237**

SLF: Special Liquidity Facility.
ASLF: Additional Special Liquidity Facility.

Source: SIDBI, NHB and NABARD.

References:

1. Cantú, C., P. Cavallino, F. D. Fiore and J. Yetman (2021), 'A Global Database on Central Banks' Monetary Responses to COVID-19", *BIS Working Paper no. 934.*

2. Casanova C., B. Hardy and M. Onen (2021), 'COVID-19 Policy Measures to Support Bank Lending', *BIS Quarterly Review.*

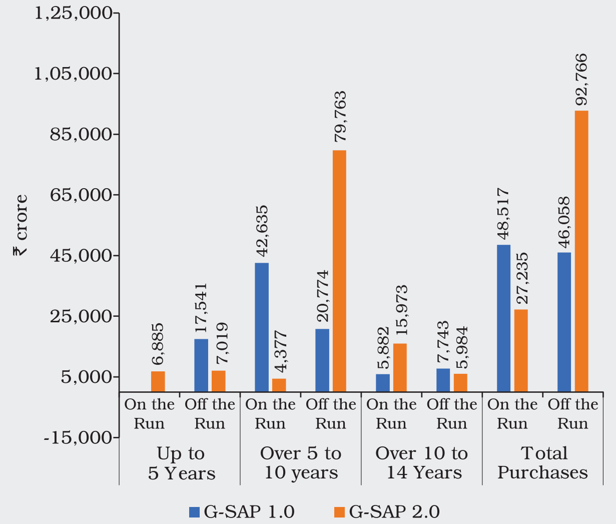
3. Das, Shaktikanta (2021), 'Interview with CNBC Asia', Singapore, *Reserve Bank of India*, August 26.

[4] Long-term repo operations/targeted long-term repo operations/special long-term repo operations.

[5] As per NABARD's Annual Report 2020-21, standing facilities extended to it by the Reserve Bank fuelled initiative to improve the financial health of Rural Financial Institutions (RFIs) by liberalising its refinance policy to cover RFIs that were otherwise ineligible.

III.16 With a view to improving monetary policy transmission and enabling a stable and orderly evolution of the yield curve, the Reserve Bank implemented a secondary market G-sec acquisition programme (G-SAP) in April-September 2021. Under the G-SAP, the Reserve Bank provided an upfront commitment on the size of G-sec purchases. The G-SAP allayed market fears and indicated Reserve Bank's continued support to the market in the face of an enlarged market borrowing programme. Similar to the regular OMOs, G-SAP was confined to the purchase of government papers from the secondary market. During Q1, the Reserve Bank conducted three auctions under G-SAP 1.0 and purchased G-secs [including state development loans (SDLs)] of ₹1.0 lakh crore, in line with the announced amount. In Q2, six auctions were conducted under G-SAP 2.0 aggregating to ₹1.2 lakh crore. The G-SAP 2.0 auctions conducted on September 23 and September 30, 2021 for ₹15,000 crore each were accompanied by simultaneous sales of G-secs of identical amount. Under the G-SAP, the Reserve Bank purchased both on the run (liquid) and off the run (illiquid) securities across the maturity spectrum. About two-thirds of the purchases were made in the belly of the curve, impacting yields in a manner that imparted liquidity to most parts of the yield curve, thus benefitting the entire term structure of interest rates (Chart III.1). By ensuring an orderly evolution of the yield curve, G-SAP facilitated monetary transmission across financial instruments. Overall, net liquidity injected through OMO purchases, including G-SAP, amounted to ₹2.1 lakh crore during 2021-22. In conjunction with the special OMO [operation twist (OT)] auction of ₹10,000 crore conducted on May 6, 2021, OTs amounted to ₹40,000 crore during 2021-22.

Chart III.1: G-SAP – Maturity Profile



Note: Residual maturity of securities is as on the date of auction.
Source: RBI.

III.17 To provide further liquidity support to the pandemic-impacted sectors, first, an on-tap liquidity window of ₹50,000 crore was opened in May 2021 – initially available till end-March 2022 but later extended up to end-June 2022 – with tenors of up to three years at the repo rate to boost provision of immediate liquidity for ramping up COVID-19 related healthcare infrastructure and services in the country. Second, the Reserve Bank announced a special three-year long-term repo operation (SLTRO) of ₹10,000 crore at the repo rate for the small finance banks (SFBs) in May 2021 to provide further support to small business units, micro and small industries, and other unorganised sector entities. Third, a liquidity window of ₹15,000 crore was opened in June 2021 (initially available till end-March 2022 but later extended up to end-June 2022), with tenors of up to three years at the repo rate to alleviate stress in contact-intensive sectors. Finally, to ensure continued flow of credit to the real economy, the

Reserve Bank announced additional liquidity support of ₹66,000 crore for fresh lending during April and June 2021 to select AIFIs.

Drivers and Management of Liquidity

III.18 In Q1:2021-22, purchases under the G-SAP and net forex purchases in the wake of continued capital inflows augmented banking system liquidity, while increase in currency in circulation (CiC), build-up of Government of India (GoI) cash balances and the restoration of the CRR to its pre-pandemic level drained liquidity (Table III.1).

III.19 In Q2, surplus liquidity got further enhanced by the usual return of CiC, renewed vigour of capital inflows and liquidity injections through G-SAP 2.0. In Q3 and Q4, increased government spending partly compensated for liquidity drainage emanating from festival-related expansion in CiC, net forex sales and OMO sales. Overall, the liquidity outflow on account of CiC expansion (₹2.8 lakh crore) and build-up of government cash balances (₹0.7 lakh crore) was more than offset by injection through OMO purchases (including G-SAP) and forex purchases (₹2.0 lakh crore), resulting in increased absorption (₹1.2 lakh crore) during 2021-22.

Rebalancing of Liquidity

III.20 The gradual restoration of liquidity management operations in sync with the revised liquidity management framework instituted in February 2020 was a key objective during 2021-22. The CRR was restored to its pre-pandemic level of 4.0 per cent of net demand and time liabilities (NDTL) in two phases of 0.5 percentage point each, effective the fortnights beginning March 27, 2021 and May 22, 2021. Furthermore,

Table III.1: Liquidity – Key Drivers and Management

(₹ crore)

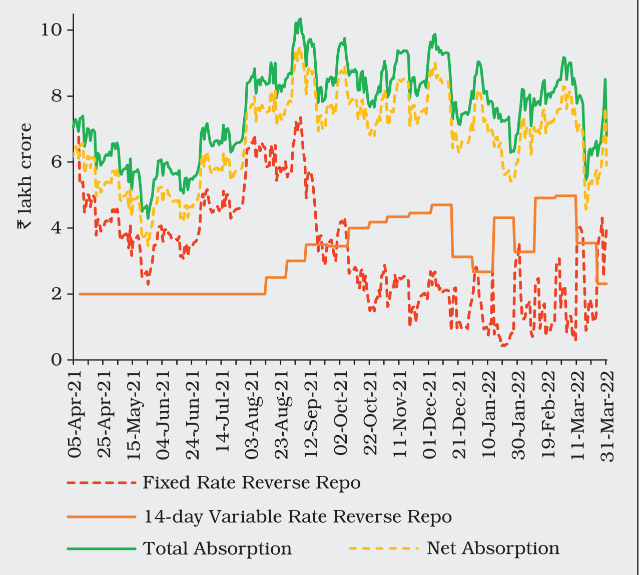
	2020-21	Q1:2021-22	Q2: 2021-22	Q3: 2021-22	Q4: 2021-22
1	2	3	4	5	6
Drivers					
(i) CiC	-4,06,452	-1,26,266	54,921	-61,794	-1,48,748
(ii) Net Forex Purchases	5,10,516	1,60,843	1,42,395	-17,242	-79,136
(iii) GoI Cash Balances	-1,81,999	-2,23,740	-5,600	1,34,537	19,430
Management					
(i) Net OMO Purchases	3,13,295	1,38,965	97,960	-15,060	-7,880
(ii) CRR Balances	-1,46,617	29,392	-16,470	-77,606	32,996
(iii) Net LAF Operations	-1,52,302	-60,759	-2,86,162	60,823	1,65,269
Memo Items					
1. Average Daily Injection (LTRO, TLTRO, On tap TLTRO, SLTRO and MSF)	1,58,491	82,948	84,487	87,298	91,894
2. Average Daily Total Absorption (i+ii)	6,54,645	5,93,181	8,10,096	8,57,638	7,69,234
(i) Fixed Rate Reverse Repo	6,13,700	4,10,747	5,18,241	2,16,635	1,76,706
(ii) Variable Rate Reverse Repo (VRRR)	40,945	1,82,434	2,91,855	6,41,003	5,92,528
3. Average Daily Net Absorption during the Period (2-1)	4,96,154	5,10,233	7,25,609	7,70,340	6,77,340

Note: 1. Inflow (+)/Outflow (-) from the banking system.
2. Data on drivers and management pertain to the last Friday of the respective period.
Source: RBI.

facilities such as MSF relaxation, on-tap TLTRO and SLTRO, which were announced with finite end dates, were terminated as scheduled. In an endeavour to re-establish the 14-day VRRR as the main liquidity management tool, the Reserve Bank progressively enhanced the size of the VRRR auctions through a pre-announced schedule from ₹2.0 lakh crore during April-July 2021 to ₹7.5 lakh crore by end-December 2021. These operations were complemented by the 28-day VRRRs and fine-tuning operations of 3-8 day maturity. Reflecting these developments, the amount absorbed under the fixed rate reverse repo reduced significantly, averaging ₹2.0 lakh crore during H2:2021-22 as compared with ₹4.6 lakh crore during H1:2021-22 (Chart III.2).

III.21 In December 2021, the Reserve Bank provided one more option to banks to prepay the outstanding amount of funds availed under the targeted long-term repo operations in addition to the option provided in November 2020. Accordingly, banks returned ₹2,434 crore of TLTRO funds in addition to ₹37,348 crore paid earlier in November 2020. Given the limited recourse to the marginal standing facility (MSF) window due to surplus liquidity conditions, the borrowing limit under the MSF was restored to the pre-pandemic level of 2 per cent of NDTL from 3 per cent, effective January 1, 2022.

Chart III.2: Surplus Liquidity - Absorption under LAF



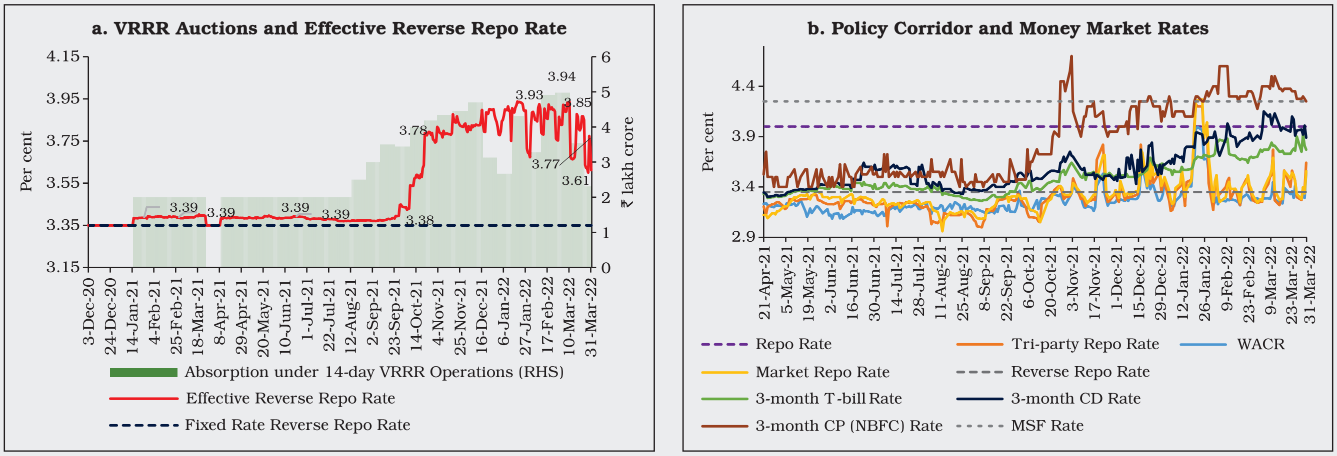
Source: RBI.

III.22 Temporary liquidity tightness on account of larger than anticipated collections under the goods and services (GST) tax resulted in the overnight rates breaching the repo rate on January 21, 2022. To assuage market concerns, the Reserve Bank conducted three variable rate repo (VRR) auctions of 1-3-day maturity, cumulatively injecting ₹2.0 lakh crore during January 20-24, 2022 which eased overnight rates. These operations exemplify the flexibility and agility of the revised liquidity management framework instituted in February 2020.

III.23 With increased amount absorbed under the VRRR auctions at higher cut-offs, the effective reverse repo rate[6] moved higher, from an average of 3.38 per cent in Q2 to 3.83 per cent in Q4 (Chart III.3a). The higher cut-offs in the VRRR auctions nudged money market rates upwards across the spectrum. The overnight segment rates – the weighted average call rate (WACR), the tri-party repo rate and the market repo rate – which traded below the reverse repo rate during H1:2021-22, gradually moved upwards in H2. Similarly, the rates on the 3-month T-bill, certificates of deposits (CDs) and commercial paper issuances by non-banking financial companies (CP-NBFCs) evolved in sync with the weighted average reverse repo

[6] The weighted average of the fixed rate reverse repo rate and the VRRR auctions of varying maturity with the weights being the amounts absorbed under the fixed and variable rate windows.

Chart III.3: VRRR Auctions and Movement in Money Market Rates



Source: RBI, Bloomberg and RBI staff calculations.

rate, with their spreads over the reverse repo rate ruling higher by 26 bps, 38 bps and 83 bps, respectively, during H2:2021-22 as against 1 bp, 8 bps and 28 bps during H1:2021-22 (Chart III.3b).

III.24 With the progressive return of normalcy, including transient demand for liquidity from the Reserve Bank, and in order to make the revised liquidity management framework more flexible and agile, it was decided in February 2022 that (i) variable rate repo (VRR) operations of varying tenors will be conducted as and when warranted by the evolving liquidity and financial conditions within the CRR maintenance cycle; (ii) VRRs and VRRRs of 14-day tenor will operate as the main liquidity management tool based on liquidity conditions and will be conducted to coincide with the CRR maintenance cycle; (iii) these main operations will be supported by fine-tuning operations to tide over any unanticipated liquidity changes during the reserve maintenance period while auctions of longer maturity will also be conducted, if required; and (iv) effective March 1, 2022, the window for fixed rate reverse repo and the MSF operations would be available only during 17.30-23.59 hours on all days as against 09.00-23.59 hours instituted earlier (from March 30, 2020) to deal with the pandemic. Accordingly, market participants were advised to shift their balances out of the fixed rate reverse repo into VRRR auctions and avail the automated sweep-in and sweep-out (ASISO) facility in the *e-Kuber* portal for operational convenience.[7]

Monetary Policy Transmission

III.25 Monetary transmission is the process through which changes in the policy repo rate are transmitted through the structure of interest rates across various market segments to changes in banks' deposit and lending rates, which, in turn, influence aggregate spending behaviour, and eventually to the final goals – inflation and growth. Monetary transmission to deposit and lending rates improved further in 2021-22, facilitated by

[7] To provide greater flexibility to banks in managing their day-end CRR balances, ASISO was introduced in August 2020 as an optional facility under which banks pre-set a specific (or range) amount that they wish to maintain at the end of the day. Any shortfall or excess balances maintained will automatically trigger MSF or reverse repo bids, as the case may be, under the ASISO facility.

Table III.2: Transmission to Deposit and Lending Interest Rates

(Variation in basis points)

Period	Repo Rate	Term Deposit Rates		Lending Rates		
		Median Term Deposit Rate – Fresh Deposits	WADTDR – Outstanding Deposits	1-Year Median MCLR	WALR - Outstanding Rupee Loans	WALR - Fresh Rupee Loans
1	2	3	4	5	6	7
April 2019 to March 2020	-185	-48	-51	-60	-31	-99
April 2020 to March 2021	-40	-137	-110	-90	-82	-78
April 2021 to March 2022	0	0	-25	-5	-36	-26
Easing Cycle						
February 2019 to March 2022	-250	-208	-188	-155	-150	-229
Memo:						
February 2019 to September 2019 (Pre-External Benchmark Period)	-110	-9	-8	-30	0	-43
October 2019 to March 2022 (External Benchmark Period)	-140	-180	-180	-128	-150	-186

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.

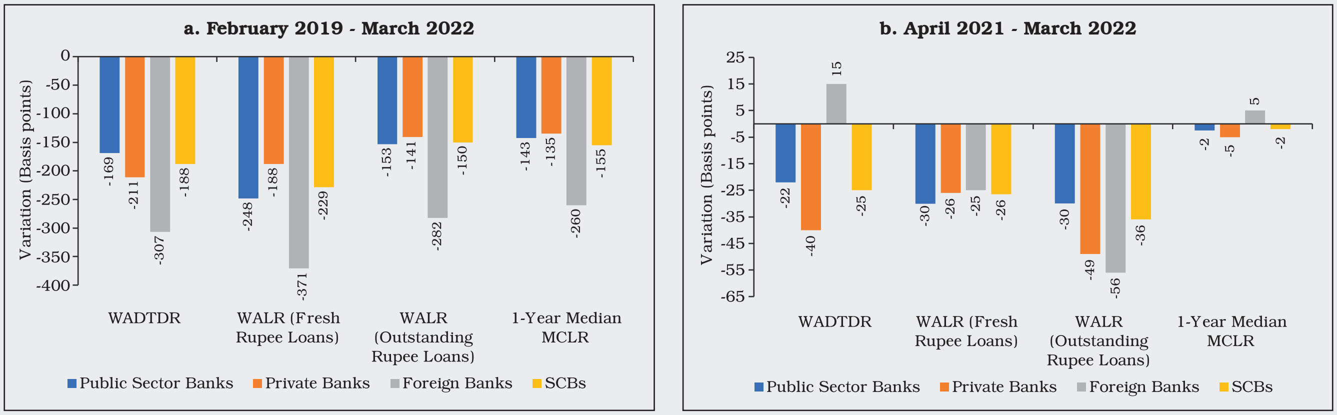
the large systemic surplus liquidity and subdued credit demand (Table III.2).

III.26 The external benchmark-based loan pricing[8] has also hastened the pace of transmission to deposit rates and other lending rates. As banks are required to reduce their lending rates in accordance with the movement in the benchmark rates, this necessitates a downward adjustment in their deposit rates for protection of their net interest margins (NIMs). This brings forth a softening of banks' cost of funds, contributing to a moderation in their MCLRs and loans linked to MCLRs. Thus, the impact of introduction of external benchmark-based pricing of loans on monetary transmission has also encompassed sectors not directly linked to external benchmark for loan pricing. The share of external benchmark-linked loans in total outstanding floating rate loans has increased from 9.3 per cent in March 2020 to 39.2 per cent in December 2021 and augurs well for more efficient transmission going ahead.

III.27 Bank-group wise analysis indicates that public sector banks exhibited higher pass-through to lending rates *vis-à-vis* private sector banks in the easing cycle, *i.e.,* February 2019 to March 2022 (Chart III.4). Transmission to lending and deposit rates was higher in the case of foreign banks, as a greater proportion of lower duration deposits in their liabilities enabled relatively quicker adjustments in these rates in response to policy rate changes.

8 The Reserve Bank mandated all SCBs (excluding regional rural banks) to link all new floating rate personal or retail loans and floating rate loans to micro and small enterprises (MSEs) to the policy repo rate or 3-month T-bill rate or 6-month T-bill rate or any other benchmark market interest rate published by Financial Benchmarks India Private Ltd. (FBIL), effective October 1, 2019. It was extended to medium enterprises, effective April 1, 2020.

Chart III.4: Variation in Deposit and Lending Rates of SCBs across Bank Groups



WADTDR: Weighted Average Domestic Term Deposit Rate. WALR: Weighted Average Lending Rate. SCBs: Scheduled Commercial Banks.
Source: RBI.

Sectoral Lending Rates

III.28 During 2021-22, the decline in WALR on outstanding loans has been broad-based across sectors, with sharp declines observed for the credit card segment followed by other personal loans, infrastructure, vehicles and large industry (Table III.3).

External Benchmark

III.29 Among the available options for external benchmark, a majority of banks, *i.e.*, 39 out of 76 banks, have adopted the Reserve Bank's policy repo rate as the external benchmark for floating rate loans to the retail and MSME sectors as at end-March 2022 (Table III.4). Twelve banks have adopted sector-specific benchmarks.

Table III.3: Sector-wise WALR of SCBs (Excluding RRBs) - Outstanding Rupee Loans

(Per cent)

End-Month	Agriculture	Industry (Large)	MSMEs	Infrastructure	Trade	Professional Services	Personal Loans					Rupee Export Credit
							Credit Card	Education	Vehicle	Housing	Other$	
1	2	3	4	5	6	7	8	9	10	11	12	13
Mar-20	10.07	9.22	10.51	9.67	8.92	9.90	28.90	10.53	10.01	8.59	12.05	7.31
Mar-21	9.68	8.27	9.73	8.87	8.51	8.44	31.90	9.47	9.59	7.55	10.94	6.76
Jun-21	9.58	8.24	9.61	8.68	8.38	8.23	30.49	9.47	9.38	7.56	10.98	6.51
Dec-21	9.42	7.99	9.33	8.51	8.20	8.26	30.67	9.32	9.24	7.52	10.53	6.95
Feb-22	9.38	7.93	9.27	8.33	8.15	8.06	30.54	9.32	9.10	7.48	10.40	7.14
Mar-22	9.35	7.76	9.28	8.31	8.14	8.11	30.51	9.30	9.06	7.46	10.22	6.55
Variation (Percentage points)												
2020-21	-0.39	-0.95	-0.78	-0.80	-0.41	-1.46	3.00	-1.06	-0.42	-1.04	-1.11	-0.55
2021-22	-0.33	-0.51	-0.45	-0.56	-0.37	-0.33	-1.39	-0.17	-0.53	-0.09	-0.72	-0.21

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

Table III.4: External Benchmarks of Scheduled Commercial Banks - March 2022

Bank Group	Policy Repo Rate	CD	OIS	MIBOR	3-Month T Bill	Sector Specific Benchmark*	Total
1	2	3	4	5	6	7	8
Public Sector Banks (12)	12	-	-	-	-	-	12
Private Banks (21)	17	1	-	-	-	3	21
Foreign Banks (43)#	10	-	1	2	6	9	28
SCBs (76)#	**39**	**1**	**1**	**2**	**6**	**12**	**61**

CD: Certificate of Deposit. OIS: Overnight Index Swaps. -: Nil.
MIBOR: Mumbai Inter-Bank Overnight Rate.
*: Sector specific benchmarks include MIBOR, OIS, 10-year G-sec, and CD rates.
#: Fifteen foreign banks reported nil.
Note: Figures in parentheses refer to the number of banks that responded to the survey.
Source: RBI.

III.30 In the case of loans linked to the policy repo rate, the spread in respect of fresh rupee loans (*i.e.*, WALR over the repo rate) was the highest for education loans, followed by MSME loans (Table III.5). Among the domestic bank groups, the spreads charged by public sector banks (PSBs) for housing, education and other personal loans were lower than those of private sector banks, while for vehicle and MSME loans,

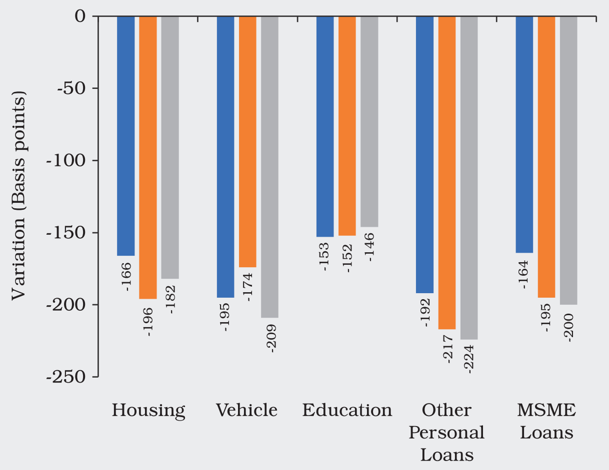
Table III.5: Loans Linked to External Benchmark – Spread of WALR (Fresh Rupee Loans) over Repo Rate (March 2022)

(Percentage points)

Bank Group	Personal Loans				MSME Loans
	Housing	Vehicle	Education	Other Personal Loans	
1	2	3	4	5	6
Public Sector Banks	2.85	3.23	4.28	3.17	4.32
Private Sector Banks	3.47	2.79	5.45	6.06	4.12
Domestic Banks	3.15	3.06	4.51	3.36	4.23

Source: RBI.

Chart III.5: Transmission to WALR (Fresh Loans) on Personal Loans and Loans to MSMEs (October 2019 - March 2022)



Source: RBI.

the spreads charged were lower for private sector banks than for PSBs.

III.31 A significant improvement has been observed in transmission since October 2019 in sectors where new floating rate loans have been mandatorily linked to the external benchmark (Chart III.5). The decline was the sharpest in the case of other personal loans (224 bps), followed by vehicle loans (209 bps) and MSME loans (200 bps). Over the same period, the decline in WALR on fresh rupee loans across all sectors was lower at 186 bps.

3. Agenda for 2022-23

III.32 The Department would support the conduct and formulation of monetary policy with high quality analysis of inflation and growth dynamics and their outlook, liquidity, and credit conditions. Against this backdrop, the Department would undertake the following:

- Prepare an economy-wide credit conditions index and anlyse its relationship with key macroeconomic variables;

- Evaluate drivers of inflation expectations and their role in inflation dynamics; and
- Study the investment behaviour of corporates/firms to understand constraints on investment.

4. Conclusion

III.33 Looking ahead, the conduct of monetary policy will continue to be guided by the objective of achieving the medium-term target for consumer price index (CPI) inflation of 4 per cent within a band of +/- 2 per cent, while supporting growth. Evolving uncertainties on the horizon, particularly on account of the future course of the COVID-19 virus, the pace of monetary policy normalisation in major advanced economies, global commodity price dynamics and the fallout of geopolitical tensions will continue to shape the trajectory of policy going forward. The Reserve Bank will continue to manage and rebalance liquidity in a manner that is conducive to entrenching the recovery and fostering macroeconomic and financial stability, while maintaining adequate liquidity to meet the needs of the productive sectors of the economy.

IV CREDIT DELIVERY AND FINANCIAL INCLUSION

The Reserve Bank continued to take further strides in line with the National Strategy for Financial Inclusion (NSFI) making specific efforts to improve credit delivery and financial inclusion. It also scaled up the Centre for Financial Literacy (CFL) project by establishing 1,107 Centres for Financial Literacy besides helping in the inclusion of financial education in the school curriculum. It is also planning to strengthen the ecosystem for digital financial services that will support provision of last mile access and expand the bouquet of financial products at affordable cost with ease of use. These efforts are being complemented by strengthening consumer protection for redressal of customer grievances. The Reserve Bank also introduced a Financial Inclusion Index (FI-Index) that will help monitor progress in terms of access, usage, and quality.

IV.1 The Reserve Bank continued its endeavour of ensuring ease of access to banking services for all sections of people across the country, and further strengthening the credit delivery system to cater to the needs of all productive sectors of the economy, particularly agriculture and micro and small enterprises (MSEs). A number of initiatives were taken during 2021-22 to improve credit delivery and promote financial inclusion.

IV.2 As announced in the Statement on Developmental and Regulatory Policies in the first bi-monthly Monetary Policy Statement for 2021-22 (April 7, 2021), the Reserve Bank has constructed a composite Financial Inclusion Index[1] (FI-Index) to capture the extent of financial inclusion across the country and also to serve as a tool for calibrating future policy interventions for greater financial inclusion. The index is responsive to ease of access, availability and usage of services, and quality of services. The FI-Index has been constructed without any 'base year' and as such it reflects the cumulative efforts of all stakeholders over the years toward financial inclusion. The annual FI-Index for the period ending March 2021 stood at 53.9 as against 43.4 for the period ending March 2017, capturing the progress made in this area. The FI-Index will be published annually in July every year.

IV.3 The National Strategy for Financial Inclusion (NSFI): 2019-24 lays down several milestones and action plans to be implemented for enhancing financial inclusion during the period of coverage. The key achievement under NSFI during the year was ensuring the availability of a banking outlet within a 5 km radius of every village/hamlet of 500 households in hilly areas, in 99.94 per cent of the identified villages.

IV.4 The National Strategy for Financial Education (NSFE): 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 recommendations in the strategy document are being implemented by the National Centre for Financial Education (NCFE) in consultation with various stakeholders. The progress made thereof is periodically monitored by the Sub-Committee of the Financial Stability and Development Council (FSDC-SC). The key achievements under the NSFE during the year, include developing financial

[1] Reserve Bank's press release dated August 17, 2021 on '*Reserve Bank of India Introduces the Financial Inclusion Index*'.

literacy content on basic financial education by the NCFE, involving the community in disseminating financial literacy in a sustainable manner and leveraging technology and social media to disseminate financial education and awareness, apart from effective inter-regulatory coordination.

IV.5 Against this backdrop, the rest of the chapter is organised into three sections. The implementation status of the agenda for 2021-22 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 2022-23 is provided in section 3. The chapter has been summarised at the end.

2. Agenda for 2021-22

IV.6 Last year, the Department had set out the following goals under *Utkarsh*:

- Implementation of the milestones under NSFI: 2019-24 (Paragraph IV.7-IV.8);
- Monitor implementation of recommendations of the "Expert Committee on Micro, Small and Medium Enterprises (MSMEs)" [Paragraph IV.9];
- Expansion of the CFL project by setting up 1,199 Centres for Financial Literacy (CFLs) covering 3,592 blocks across the country and increasing financial education levels across the country (Paragraph IV.10); and
- Complete the end-line impact assessment survey of the pilot project on CFL (Paragraph IV.10 and IV.27).

Implementation Status

IV.7 The NSFI was developed in consonance with all the concerned stakeholders to deepen and sustain the financial inclusion process at the national level. The NSFI lays down action plans and milestones, with specific timelines, and suggests broad recommendations to achieve the same in a holistic manner, with six recommendations required to be implemented during 2021-22. The recommendations, *inter alia*, focused on creation of necessary infrastructure to support the digital ecosystem, strengthening inter-regulatory coordination for customer grievance redressal, while leveraging technology platforms and creating innovative approaches.

IV.8 Significant headway has been made in the area of strengthening digital infrastructure by way of institutionalising the Payment Infrastructure Development Fund (PIDF), launch of Digital Payment Index (DPI), implementation and scaling up the pilot project on expanding and deepening of digital payments ecosystem and laying of Optical Fibre Cable (OFC) under the *Bharat* Net project of the Government of India (GoI) to provide broadband connectivity to all 2.5 lakh *Gram Panchayats* across the country. With regard to inter-regulatory coordination relating to customer grievances, *Sachet* portal, having representation of all the sectoral regulators and the government, provides a common platform for such coordination. In a further impetus to redressal of grievances, all sectoral regulators have set up toll-free helpline numbers.

IV.9 The Expert Committee on MSMEs (Chair: Shri U. K. Sinha) had made 37 broad recommendations. Out of 21 recommendations pertaining to the Reserve Bank, 13 have been implemented, six have not been found feasible for implementation after examination and two are under consideration by the Reserve Bank and the government. The two major recommendations implemented during the year, include (i) increase in the limit of collateral free loans to self-help groups (SHGs) under *Deendayal Antyodaya Yojana*-National Rural Livelihoods Mission (DAY-NRLM) from ₹10 lakh to ₹20 lakh; and (ii) issuance of guidelines on Scale-Based Regulation (SBR) for Non-Banking Financial Companies (NBFCs).

IV.10 The key findings of the end-line survey of the pilot CFL project, conducted across 80 blocks during the year to assess its efficacy, are covered in paragraph IV.26. As on March 31, 2022, a total of 1,107 CFLs were set up across the country, details of which are presented in Box IV.1.

Major Developments

Credit Delivery

Priority Sector

IV.11 The priority sector lending (PSL) for scheduled commercial banks (SCBs) stood at 42.8 per cent as on March 31, 2022. All bank groups achieved the prescribed PSL target of 40 per cent during 2021-22 (Table IV.1). In case any bank falls short in achieving priority sector targets/ sub-targets, they are advised to contribute towards the Rural Infrastructure Development Fund (RIDF) and other funds administered by the National Bank for Agriculture and Rural Development (NABARD), Small Industries Development Bank of India, Micro Units Development & Refinance Agency Ltd. and National Housing Bank.

Table IV.1: Achievement of Priority Sector Lending Targets

(₹ crore)

Financial Year	Public Sector Banks	Private Sector Banks	Foreign Banks
1	2	3	4
2020-21	24,16,750 (41.06)	14,33,674 (40.62)	1,99,969 (41.02)
2021-22*	26,23,666 (42.45)	16,87,138 (43.27)	1,94,031 (42.28)

*: Data are provisional.

Note: Figures in parentheses are percentage to adjusted net bank credit (ANBC) or credit equivalent of off-balance sheet exposure (CEOBE), whichever is higher.

Source: Priority sector returns submitted by SCBs.

IV.12 The total trading volume of priority sector lending certificates (PSLCs) registered a growth of 12.4 per cent and stood at ₹6.62 lakh crore in 2021-22 as compared to 25.9 per cent growth during the previous year. Among the four PSLC categories, the highest trading was observed in PSLC-general and PSLC-small and marginal farmers with the transaction volumes being ₹2.70 lakh crore and ₹2.29 lakh crore, respectively, in 2021-22.

Lending by Banks to NBFCs for On-Lending

IV.13 Recognising the role played by NBFCs in providing credit to the sectors at the bottom of the pyramid, which contribute significantly in terms of exports and employment, and with a view to augmenting the liquidity position of the NBFCs, the dispensation provided to banks to classify their lending to NBFCs [other than microfinance institutions (MFIs)] for 'on-lending' to the agriculture and MSE sectors as PSL was extended up to March 31, 2022.

PSL - Lending by Small Finance Banks (SFBs) to NBFC-MFI for On-Lending

IV.14 In view of the pandemic and to address the liquidity concerns of smaller MFIs, fresh credit extended by SFBs to registered NBFC-MFIs and other MFIs (societies, trusts, *etc.*) was allowed to be classified under PSL, provided these institutions are members of the Reserve Bank recognised Self-Regulatory Organisation (SRO). The above benefit is applicable to MFIs having a gross loan portfolio of up to ₹500 crore as on March 31, 2021. Under the scheme which extended up to March

Table IV.2: Targets and Achievements for Agricultural Credit

(₹ crore)

Financial 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
2020-21	10,81,978	11,94,704	2,25,946	1,90,682	1,92,076	1,90,012	15,00,000	15,75,398
2021-22*	12,05,488	12,91,454	2,30,543	2,17,848	2,13,968	2,00,590	16,50,000	17,09,893

*: Data are provisional.
Source: NABARD.

31, 2022, SFBs were permitted to lend up to 10 per cent of their total PSL portfolio as on March 31, 2021.

PSL - Increase in Limits for Bank Lending against Negotiable Warehouse Receipts (NWRs)/ electronic Negotiable Warehouse Receipts (eNWRs)

IV.15 In order to ensure a greater flow of credit to the farmers against pledge/hypothecation of agricultural produce and to encourage the use of NWR/eNWR issued by warehouses registered and regulated by Warehouse Development and Regulatory Authority, the PSL limit for loans against NWRs/eNWRs, for a period not exceeding 12 months was increased from ₹50 lakh to ₹75 lakh per borrower.

Flow of Credit to Agriculture

IV.16 The GoI sets the agricultural credit target every year for SCBs, regional rural banks (RRBs) and rural co-operative banks. During 2021-22, against the target of ₹16.5 lakh crore, banks achieved 104 per cent of the target (₹17.09 lakh crore) as on March 31, 2022, of which, SCBs, RRBs and rural co-operative banks achieved 107 per cent, 93.7 per cent and 94.5 per cent, respectively, of their targets (Table IV.2).

IV.17 The Kisan Credit Card (KCC) provides adequate and timely bank credit to farmers under a single window for cultivation and other requirements, including consumption, investment, and insurance (Table IV.3).

Relief Measures for Natural Calamities

IV.18 Currently, the National Disaster Management Framework of the GoI covers 12 types of natural calamities under its ambit, *viz.*, cyclone; drought; earthquake; fire; floods; *tsunami*; hailstorm; landslide; avalanche; cloud burst; pest

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

(Number in lakh, Amount in ₹ crore)

Financial Year	Number of Operative KCCs	Outstanding Crop Loan	Outstanding Term Loan	Outstanding Loan for Animal Husbandry & Fisheries	Total
1	2	3	4	5	6
2020-21	306.96	4,13,903	36,161	6,673	4,56,736
2021-22*	268.71#	4,33,413	29,309	13,561	4,76,283

*: Data are provisional.

#: The number of operative KCC accounts does not include non performing asset (NPA) accounts. As NPA accounts have increased during the year *vis-à-vis* last year, the number of operative KCCs has come down.

Source: Public sector banks, private sector banks and small finance banks.

Table IV.4: Relief Measures for Natural Calamities

(Number in lakh, Amount in ₹ crore)

Financial Year	Loans Restructured/ Rescheduled		Fresh Finance/ Relending Provided	
	No. of Accounts	Amount	No. of Accounts	Amount
1	2	3	4	5
2020-21	1.58	2,486	11.77	18,377
2021-22*	0.26	6,500	0.10	12,758

*: Data are provisional.
Source: State Level Bankers' Committees (SLBCs).

attack; and cold wave/frost. Accordingly, the Reserve Bank has mandated banks to provide relief where the crop loss assessed is 33 per cent or more in the areas affected by these calamities. The relief measures by banks, *inter alia*, include restructuring/rescheduling of existing loans and sanctioning fresh loans as per the emerging requirement of the eligible borrowers. During 2021-22, natural calamities were declared by three states, *viz*., Maharashtra, Karnataka and Rajasthan, where financial assistance in terms of fresh loans and some dispensation by way of loan restructuring were made available to the affected people (Table IV.4).

Bank Credit to the MSME Sector

IV.19 Increasing credit flow to the MSMEs has been a policy priority for the Reserve Bank and the government. On a year-on-year basis, the outstanding credit to MSMEs by SCBs increased by 13.4 per cent in March 2022 (10.6 per cent a year ago) [Table IV.5].

Financial Inclusion

Assignment of Lead Bank Responsibility

IV.20 The assignment of lead bank responsibility to a designated bank in every district is undertaken by the Reserve Bank. As at end March 2022, 12 public sector banks and one private sector bank were assigned lead bank responsibility, covering 734 districts across the country.

Universal Access to Financial Services in Every Village

IV.21 Providing banking access to every village within a 5 km radius/ hamlet of 500 households in hilly areas is one of the key objectives of the NSFI: 2019-24. The milestone has been fully achieved in 25 states and 7 UTs as on March 31, 2022 and 99.94 per cent of the identified villages/hamlets across the country have been covered. Efforts are on to achieve the target for the remaining villages/ hamlets.

Financial Inclusion Plan

IV.22 To ensure a systematic approach towards increasing the level of financial inclusion in a

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
2020-21	387.93	8,21,027.77	27.82	6,62,998.50	4.44	2,99,898.53	420.19	17,83,924.80
2021-22*	239.81	8,87,800.05	22.07	7,25,822.77	3.23	4,09,011.46	265.10#	20,22,634.29

*: Data are provisional.
#: There is a significant decrease in number of accounts due to mandatory registration on *Udyam* portal under new MSME definition.
Source: Priority sector returns submitted by SCBs.

sustainable manner, banks were advised to put in place Financial Inclusion Plans (FIPs). These FIPs capture banks' achievements on parameters such as the number of banking outlets [branches and business correspondents (BCs)], basic savings bank deposit accounts (BSBDAs), overdraft (OD) facilities availed in these accounts, transactions in KCCs and general credit cards (GCCs) and transactions through the Business Correspondents - Information and Communication Technology (BC-ICT) channel. The progress made on these parameters as at the end of December 2021 is set out in Table IV.6.

Financial Inclusion Index (FI-Index)

IV.23 To capture the extent of financial inclusion across the country, the Reserve Bank has constructed a composite FI-Index with three sub-indices, *viz.*, FI-Access, FI-Usage and FI-Quality, incorporating details of banking, investments, insurance, postal as well as the pension sector in consultation with the government and respective sectoral regulators. The FI-Index computed for end-March 2021 stood at 53.9 as against 43.4 for end-March 2017, registering a compound annual growth rate (CAGR) of 5.5 per cent. Of the three sub-indices, the sub-index for Access has increased over the same period, from 61.7 to 73.3. Although, the sub-index for Usage and Quality have risen in value from 30.8 to 43.0 and from 48.5 to 50.7, respectively, these have remained below the overall FI-Index. The index values indicate the scope for improvement under usage and quality dimensions of financial inclusion.

Financial Literacy

Inclusion of Financial Education in the School Curriculum

IV.24 Developing financial literacy content for school children is one of the strategic goals of NSFE: 2020-25. The content for the financial education workbooks for classes VI-X was prepared by Central Board of Secondary

Table IV.6: Financial Inclusion Plan: A Progress Report

Particulars	Mar 2010	Dec 2020	Dec 2021$
1	2	3	4
Banking Outlets in Villages-Branches	33,378	55,073	53,249
Banking Outlets in Villages>2000*-BCs	8,390	8,49,955	15,18,496^
Banking Outlets in Villages<2000*-BCs	25,784	3,44,685	3,26,236
Total Banking Outlets in Villages – BCs	34,174	11,94,640	18,44,732^
Banking Outlets in Villages - Other Modes	142	3,464	2,542
Banking Outlets in Villages -Total	**67,694**	**12,53,177**	**19,00,523**
Urban Locations Covered Through BCs	447	3,24,507	14,12,529^
BSBDA - Through Branches (No. in lakh)	600	2,712	2,712
BSBDA - Through Branches (Amt. in crore)	4,400	1,21,219	1,18,625
BSBDA - Through BCs (No. in lakh)	130	3,672	3,919
BSBDA - Through BCs (Amt. in crore)	1,100	78,284	95,021
BSBDA - Total (No. in lakh)	**735**	**6,384**	**6,631**
BSBDA - Total (Amt. in crore)	**5,500**	**1,99,503**	**2,13,646**
OD Facility Availed in BSBDAs (No. in lakh)	2	59	64
OD Facility Availed in BSBDAs (Amt. in crore)	10	505	556
KCC - Total (No. in lakh)	240	490	473
KCC - Total (Amt. in crore)	1,24,000	6,79,064	6,93,596
GCC - Total (No. in lakh)	10	198	87
GCC - Total (Amt. in crore)	3,500	1,75,053	1,99,145
ICT-A/Cs-BC-Total Transactions (No. in lakh)#	270	23,289	21,095
ICT-A/Cs-BC-Total Transactions (Amt. in crore)#	700	6,14,987	6,62,211

*: Village population. #: Transactions during the year.
$: Provisional data.
^: There is a significant increase in data reported by few private sector banks.
Source: FIP returns submitted by public sector banks, private sector banks and regional rural banks.

Education (CBSE) in consultation with National Institute of Securities Markets (NISM), NCFE and all the four financial sector regulators[2]. So far, 19 state educational boards have included/ partially included modules on financial education in their school curriculum. Efforts are being made by NCFE in coordination with the regional offices of the Reserve Bank to cover the remaining state educational boards.

Activities Conducted by Financial Literacy Centres (FLCs)

IV.25 As at the end of December 2021, there were 1,495 financial literacy centres (FLCs)[3] in the country. A total of 73,900 financial literacy activities were conducted by the FLCs during 2021-22 (up to December 31, 2021). With a view to ensuring continued dissemination of financial education across the country during the pandemic, regional offices of the Reserve Bank undertook financial education programmes through virtual mode and leveraged local cable TV and community radio to spread financial awareness messages.

End-line Survey of Pilot CFL Project

IV.26 The end-line survey of the pilot CFL project across 80 blocks was conducted to assess its efficacy. The key findings were as follows:

- Households that were exposed to the programme showed a statistically significant higher score for financial literacy than those who were not exposed to the programme.
- Respondents who have had any exposure to the activities conducted under the CFL programme were more likely to use savings accounts in banks; this effect was stronger for individuals attending the CFL programme (*i.e.,* having "active" exposure).
- Households' need for training is primarily in aspects that can be regarded as "first order" business – opening an account, filling forms, accessing bank services and government programmes and financial planning. By comparison, a very small number expressed a desire for training to use Automated Teller Machines (ATMs), online transactions, understanding investments, *etc*.

Expanding the Reach of CFL Project Across the Country

IV.27 Consequent to the implementation of the pilot CFL project in 100 blocks (including 20 CFLs in tribal blocks), steps were initiated during the year to expand the reach of CFLs to all blocks in the country in a phased manner (Box IV.1).

Observing Financial Literacy Week 2022

IV.28 The Financial Literacy Week (FLW) is an initiative of the Reserve Bank to promote awareness among the masses/various sections of the population on key topics through a focused campaign during the week every year. In 2021-22, FLW was observed during February 14 -18, 2022 on the theme of "Go Digital, Go Secure", with focus on convenience of digital transactions,

2 The workbooks have also been placed on the website of NCFE.

3 FLCs are established by banks and are manned by the financial literacy counsellors. The CFL project is the Reserve Bank's endeavour to bring together non-government organisations (NGOs) and banks to enable innovative and community led participative approaches to strengthen financial literacy at the grassroot levels. The CFL project was piloted in 2017 (also refer to Box IV.1). Based on the experience gathered through a rigorous impact assessment exercise, the CFL project is being scaled up across the country in a phased manner.

Box IV.1
Expanding the Reach of CFL Project Across the Country

The CFL pilot project on financial literacy was initiated by the Reserve Bank in 2017 in nine states across 80 blocks in collaboration with eight sponsor banks and six NGOs for a three-year period, with funding support from Financial Inclusion Fund (FIF) of NABARD and the respective sponsor banks. The objective was to adopt community led innovative and participatory approaches to financial literacy. The project was subsequently extended to 20 tribal/economically backward blocks in three states in 2019 with funding from the Depositor Education and Awareness (DEA) Fund and sponsor banks.

Based on the experience gained from the pilot project, through feedback received from the stakeholders (banks and NGOs) and to promote financial literacy at grassroot level in a sustainable and participative manner, in line with NSFI: 2019-24, the project is being scaled up across the country in a phased manner to cover the entire country by 2024 with each CFL covering three blocks. Under Phase I of the scaled-up CFL project, 10 NGOs are associated with operationalisation with funding support from DEA Fund, FIF and 13 sponsor banks. As on March 31, 2022, a total of 1,107 CFLs were operationalised across the country.

Source: RBI.

security of digital transactions and protection of customers. During this week, banks were advised to disseminate information and create awareness amongst their customers and the general public. Further, the Reserve Bank also undertook a centralised mass media campaign during February 2022 to disseminate essential financial awareness messages on the theme to the general public.

3. Agenda for 2022-23

IV.29 The Department will pursue the following goals towards achieving greater financial inclusion and credit delivery:

- Implementation of milestones under NSFI: 2019-24 by leveraging on the developments in the FinTech space to encourage financial service providers to adopt innovative approaches for strengthening outreach (*Utkarsh*);
- Implementation of the milestones under NSFE: 2020-25 by undertaking capacity building of intermediaries involved in dissemination of financial education; and
- Scaling up of CFLs to cover the entire country (*Utkarsh*).

4. Conclusion

IV.30 In sum, during the year, the Reserve Bank continued with its focus towards financial inclusion by scaling up the CFL project across the country and taking forward the NSFI goals by working in close coordination with the stakeholders concerned. The FI-Index was developed as a metric to measure progress on financial inclusion. Going ahead, the implementation of the various milestones under NSFI and NSFE would continue to be pursued to sustain the momentum of financial inclusion.

V FINANCIAL MARKETS AND FOREIGN EXCHANGE MANAGEMENT

The Reserve Bank continued its efforts to develop and deepen various segments of the financial markets by broadening participation, easing access, strengthening the regulatory framework, and improving the financial market infrastructure. Measures to enhance the ease of doing business and to reduce compliance burden through rationalisation of various regulations relating to foreign exchange were also undertaken during the year.

V.1 During 2021-22, the Reserve Bank continued with its endeavour to develop financial markets in terms of easing access, broadening participation, and also designing a principle-based regulatory framework for the over the counter (OTC) derivatives market, while enabling a safe and sound transition from the London Interbank Offered Rate (LIBOR) regime through a roadmap. Liquidity management operations involved both conventional and unconventional measures for ensuring the availability of adequate liquidity in the system. The Reserve Bank continued to facilitate external trade and payments and promote orderly development of the foreign exchange markets, with ongoing efforts to enhance the ease of doing business and also reduce the compliance burden for regulated entities. Several policy measures were also undertaken to alleviate stress caused on external trade and payments due to COVID-19.

V.2 Against this backdrop, the rest of the chapter is structured into four sections. The development and regulation of financial markets are covered in section 2. The Reserve Bank's market operations are discussed in section 3. In section 4, the focus is on external trade and payments and measures relating to liberalisation and development. Concluding observations are set out in the last section.

2. FINANCIAL MARKETS REGULATION DEPARTMENT (FMRD)

V.3 The Financial Markets Regulation Department (FMRD) is entrusted with the development, regulation and surveillance of money, government securities (G-secs), interest rate derivatives, foreign exchange and credit derivatives markets. The Department undertook several measures in pursuance of this mandate to fulfil the objectives set out for 2021-22.

Agenda for 2021-22

V.4 The Department had set out the following goals for 2021-22:

- Issue of draft directions for implementing the exchange of initial margin on non-centrally cleared derivatives (NCCDs) in India by the second quarter of 2021-22 (*Utkarsh*) [Paragraph V. 5];
- Launch of a government securities lending and borrowing mechanism (GSLBM) to augment 'special repos' by the Clearing Corporation of India Ltd. (CCIL) in the second quarter of 2021-22 (Paragraph V.6); and
- Strengthening of aggregation and transparency under the Legal Entity Identifier (LEI) requirements for reporting

of derivative transactions by implementing the Unique Transaction Identifier (UTI) framework in India in line with the progress made internationally in this regard (Paragraph V.7).

Implementation Status

V.5 The Directions for mandating margin requirements for NCCDs will be phased in during 2022-23 taking cognisance of the extension in timelines by one year for the implementation of margin requirements globally in the wake of the pandemic.

V.6 Directions to enable the GSLBM will be issued after completion of the ongoing market consultations and completion of the development of certain aspects of legal and market infrastructure.

V.7 Globally, the progress with regard to the implementation of the UTI has been gradual on account of certain evolving standards. The implementation of UTI in India has accordingly been calibrated to take cognisance of the progress made internationally in this regard.

Major Initiatives

Easing Access and Broadening Participation in the Money Market

V.8 Several measures were undertaken during the year to develop money markets such as for call/notice/term money, commercial papers (CPs), certificates of deposit (CDs) and non-convertible debentures (NCDs) of original maturity of less than a year. Regulations were reviewed after due consultation with the public/ stakeholders, with a view to bringing greater consistency across these instruments in terms of issuers, investors and participants. The participant base was expanded by permitting regional rural banks (RRBs) to access the call, notice and term money markets and to issue CDs. Participants were allowed the flexibility of setting their own lending limits in the call, notice and term money markets within extant prudential regulatory norms. Issuers were permitted to buy back their CDs before maturity to provide them with greater flexibility in liquidity management. A separate prudential limit of 225 per cent of net owned fund as at the end of the previous financial year was stipulated for borrowings by standalone primary dealers in the term money markets. Revised Directions on the call, notice and term money markets and CDs were issued on April 1, 2021 and June 4, 2021, respectively.

Ease of Doing Business for Foreign Portfolio Investors in the Debt Market

V.9 The regulatory framework for non-resident investment in the debt market was fine-tuned to encourage greater participation and to facilitate long term stable debt flows:

- On June 4, 2021, Authorised Dealer (AD) category-1 banks were permitted to lend to Foreign Portfolio Investors (FPIs) for placing margins with the CCIL for the settlement of transactions in government securities within their credit risk management frameworks. On June 7, 2021, FPIs/custodian banks were provided with an extended time window for reporting their government securities transactions to Negotiated Dealing System-Order Matching (NDS-OM).
- In pursuance of announcement in the Union Budget 2021-22, directions were issued on November 8, 2021 to permit FPIs to invest in debt securities issued by Infrastructure Investment Trusts (InvITs) and Real Estate Investment Trusts (REITs).

- Directions were issued on February 10, 2022, increasing the investment limit under the Voluntary Retention Route (VRR) by ₹1,00,000 crore to ₹2,50,000 crore with effect from April 1, 2022.

Creating Principle-based Regulatory Framework for Over the Counter (OTC) Derivative Market

V.10 The "Comprehensive Guidelines on Derivatives (CGD)" were reviewed during the year with the objectives of (i) creating a principle-based regulatory framework; (ii) addressing overlaps between the CGD and other Directions; and (iii) adding new provisions to cater to the increasing sophistication of derivative markets in line with international best practices. After taking into account feedback from the public/stakeholders, the Reserve Bank of India (Market-makers in OTC Derivatives) Directions, 2021, were issued on September 16, 2021. The Directions set out the regulatory requirements pertaining to governance arrangements, risk management and customer suitability and appropriateness for OTC derivative business.

Review of Credit Default Swaps (CDS) Guidelines

V.11 Guidelines for Credit Default Swaps (CDS) were reviewed, and revised Directions (Credit Derivatives) were issued on February 10, 2022. The Guidelines permit non-retail users such as regulated financial entities and FPIs to sell protection. They also allow non-retail users to buy protection for hedging or expressing their views on credit risk while retail users are permitted to buy protection only for hedging.

Permitting Banks to Deal in Offshore Foreign Currency Settled Rupee Derivatives Market

V.12 With a view to further deepening the interest rate derivatives market in the country, removing the segmentation between onshore and offshore markets and improving the efficiency of price discovery, Directions were issued on February 10, 2022, allowing market-makers having Authorised Dealer Category-I (AD Cat-I) licence under FEMA, 1999 to undertake transactions in the offshore Foreign Currency Settled Overnight Indexed Swap (FCS-OIS) market with non-residents and other market-makers through their branches in India, foreign branches or International Financial Services Centre (IFSC) Banking Units.

Roadmap for LIBOR Transition

V.13 With a view to enabling an orderly, safe and sound transition from the LIBOR regime, banks and other Reserve Bank-regulated entities were advised on July 8, 2021 to (i) cease entering into new financial contracts that reference LIBOR and instead use any widely accepted alternative reference rate (ARR) as soon as practicable and in any event by December 31, 2021; (ii) incorporate provisions for fallbacks to ARRs in financial contracts that reference LIBOR and the maturity of which falls after the cessation of the LIBOR setting; (iii) undertake a comprehensive review of all direct and indirect LIBOR exposures and put in place a framework to mitigate risks arising from such exposures; and (iv) continue efforts to sensitise clients about the transition. The details relating to the roadmap of LIBOR transition are presented in Box V.1.

Agenda for 2022-23

V.14 For the year 2022-23, the Department has set the following goals:

- Directions for introducing variation margin requirements for NCCDs in India will be issued in the first half of 2022-23 *(Utkarsh);* and

Box V.1
Roadmap for LIBOR Transition

The year 2022 marks the beginning of the cessation of publication of LIBOR, the financial benchmark which has been used widely so far in the global financial system. Extensive consultations and discussions across the globe and in India have ensured a reasonably smooth transition into a post-LIBOR regime. All non-USD LIBOR settings, and USD LIBOR settings of 1-week and 2-months ceased to be published after December 31, 2021. The publication of remaining USD LIBOR settings will cease on June 30, 2023.

Alternative reference rates (ARRs) [*e.g.,* Secured Overnight Financing Rate (SOFR) and Sterling Overnight Index Average (SONIA)] are overnight secured/unsecured rates and unlike LIBOR (which was poll based), they are based on transacted verifiable rates with a wide participant base (both banks and non-banks). Unlike the forward-looking LIBOR, ARRs are backward-looking as they are obtained by compounding the daily overnight rates.

Contracts referencing LIBOR and whose maturity extend beyond the cessation of the LIBOR will have to adopt fallbacks. Fallback templates published by various industry bodies such as the International Swaps and Derivatives Association (ISDA), Asia Pacific Loan Markets Association (APLMA) and Indian Banks' Association (IBA) typically include a spread adjustment to ensure comparability between the term LIBOR and term ARR[1].

Regulatory Initiatives in India

With respect to the LIBOR benchmark, the challenges for India are similar to those faced by other jurisdictions. The Reserve Bank and other authorities have taken various regulatory steps to ensure a smooth LIBOR transition. The Reserve Bank issued an advisory on July 8, 2021 to its regulated entities to (a) ensure adoption of fallbacks in financial contracts that reference LIBOR [including Mumbai Interbank Forward Outright Rate (MIFOR)] and which mature after the cessation of LIBOR; (b) cease entering into new financial contracts that reference LIBOR as a benchmark (including MIFOR) and transact in widely accepted ARR as soon as practicable and in any event by December 31, 2021, and (c) ensure client sensitisation on issues around LIBOR transition. Certain specific transactions referenced to USD LIBOR are permitted after December 31, 2021 for the purpose of managing the risks around the LIBOR transition.

Reform of MIFOR

MIFOR, the domestic benchmark that references USD LIBOR, has been reformed by the Financial Benchmarks India Pvt. Ltd. (FBIL) in consultation with the rates and methodology workstream of IBA. Publication of adjusted MIFOR (which can be used as a fallback for legacy contracts that reference MIFOR) and the modified MIFOR (which can be used for new financial contracts) has commenced. The modified MIFOR has been included in the ISDA definitions. Market participants have started using modified MIFOR in transactions. Adjusted MIFOR has also been included in the ISDA IBOR fallback protocol/supplement.

Other regulatory initiatives include measures to make provision for use of ARRs in export credit, FCNR (B) deposits, external commercial borrowings (ECBs) and trade credit. To take into account differences in credit and term premia between LIBOR and the ARRs, the all-in-cost ceiling has been revised upwards by 100 basis points (bps) for existing ECBs/trade credits (TCs) and by 50 bps for new ECBs/TCs. As the change in reference rate from LIBOR is a "*force majeure*" event, it has been clarified that changes in the terms of a derivative contract on account of changes in reference rate from LIBOR/LIBOR-related benchmarks to an ARR will not be treated as restructuring.

Source: RBI.

- Revised Directions on Rupee Interest Rate Derivatives (IRD) will be issued in 2022-23, after reviewing the feedback obtained from public with a view to allow greater product innovation, ease non-resident access to the domestic market and rationalise procedures.

[1] Unlike LIBOR, term ARR does not include a term premia and credit premia.

3. FINANCIAL MARKETS OPERATIONS DEPARTMENT (FMOD)

V.15 The Financial Markets Operations Department (FMOD) is entrusted with two primary responsibilities: conduct of the liquidity management operations of the Reserve Bank consistent with the stance of monetary policy; and ensuring orderly conditions in the forex market through operations in onshore and offshore markets.

Agenda 2021-22

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

- To carry out liquidity management operations effectively using all available liquidity management tools, in line with the stance of monetary policy (*Utkarsh*) [Paragraph V.17];
- To continue to conduct foreign exchange operations in an effective manner to curb undue volatility in the USD/INR exchange rate (Paragraph V.18 - V.19); and
- To undertake policy-oriented research on financial markets (Paragraph V.20).

Implementation Status

Liquidity Management

V.17 Details relating to liquidity management operations encompassing money and G-sec markets are covered in Chapter III of this Report.

Foreign Exchange Market

V.18 During the year, the rupee traded with a depreciating bias, reflecting broad-based gains by the US dollar. A rally in crude prices and bouts of risk-off sentiments due to the spread of new COVID-19 variants also weighed on the rupee. While robust foreign portfolio investment inflows into Indian equity markets supported the rupee towards the start of the year, these flows moderated towards the second half due to drying up of overall flows to emerging market economies in response to rising prospects of tightening of monetary conditions in the US, besides renewed uncertainty associated with the Omicron variant of COVID-19.

V.19 The Reserve Bank engaged in the forex market through operations in the onshore/offshore OTC and exchange traded currency derivatives (ETCD) segments in order to maintain orderly market conditions by containing excessive volatility in the exchange rate.

Research/Analytical Studies

V.20 The Department carried out research/ analytical studies on several topical issues such as management of exchange rate volatility during COVID-19; impact of the pandemic on factors determining the spread of weighted average call rate (WACR) from repo rate; fixed price open market operations; and barometer for financial markets.

Agenda for 2022-23

V.21 During the year 2022-23, the Department plans to achieve the following goals:

- To carry out liquidity management operations effectively using all available liquidity management tools as may be necessary, in line with the stance of monetary policy (*Utkarsh*);
- To continue to conduct foreign exchange operations in an effective manner to curb undue volatility in the USD/INR exchange rate; and
- To undertake policy-oriented research on financial markets.

4. FOREIGN EXCHANGE DEPARTMENT (FED)

V.22 The Foreign Exchange Department (FED) is entrusted with the responsibility of fulfilling the objectives envisaged under the Foreign Exchange Management Act (FEMA), 1999. With its ongoing efforts to enhance the ease of doing business and reduce the compliance burden, the Department strives to facilitate external trade and payments and also promote orderly development of the foreign exchange markets.

V.23 During the year, the Department continued its efforts to review/rationalise the extant regulations/rules/notifications issued under the FEMA as part of the ongoing process of aligning the regulatory framework with prevailing macroeconomic conditions and the evolving business practices and models. The Department also took several steps and measures to alleviate stress caused on external trade and payments due to COVID-19.

Agenda for 2021-22

V.24 The Department had set out the following goals for 2021-22:

- Continue rationalisation of the FEMA regulations by consolidating existing regulations of similar subjects, remove hard-coding to obviate frequent issuance of amendment notifications and aligning definitions across notifications/regulations (Paragraph V.25 - V.26);
- Take the exercise of rationalising the overseas investment regulations forward (Paragraph V.27);
- Timely completion of ongoing software projects, *viz.,* Software Platform for External Commercial Borrowings and Trade Credits Reporting and Approval (SPECTRA) and Authorised Person (AP) connect *(Utkarsh)* [Paragraph V.28];
- Issue a revised Master Direction on Foreign Investment in India as Foreign Exchange Management (Non-debt Instruments) Rules have been notified by the Government (Paragraph V.29); and
- Conduct awareness programmes and create digital content on an ongoing basis (*Utkarsh*) [Paragraph V.30].

Implementation Status

Rationalisation of FEMA Guidelines

V.25 During the year, a review of the existing guidance note on computation matrix for calculation of compounding amount under FEMA was initiated with a view to have a simple and standard guidance matrix. A proposal to amend Foreign Exchange (Compounding Proceedings) Rules with a view to enable electronic and other online modes of payment of compounding fees is under consideration and is in line with *Utkarsh* 2022, which, *inter alia*, emphasises deepening of digital payments.

V.26 While setting up of Alternative Investment Funds (AIFs) in an overseas jurisdiction, including International Financial Services Centres (IFSCs) in India, is under the automatic route as per the overseas direct investment (ODI) guidelines, the status of sponsor contribution to these AIFs under ODI guidelines was not well-defined. To provide clarity in this regard, financial contribution from an Indian sponsor to an AIF set up in an overseas jurisdiction, including IFSCs in India, is now treated as overseas direct investment.

Rationalisation of Overseas Investment Regulations

V.27 The overseas investment regulations were reviewed during the year. The draft rules/ regulations were placed on the Reserve Bank's website for public comments. Based on the feedback/suggestions received, the modified draft has been forwarded to the Government of India for its finalisation.

Ongoing Software Projects, viz., SPECTRA and AP Connect

V.28 In its endeavour to automate the complete lifecycle of external commercial borrowings (ECBs) and trade credits, the Department is in the process of implementing the SPECTRA project. SPECTRA would encompass the lifecycle of ECB/trade credits, from receipt of application to approval stage either at the level of Authorised Dealer (AD) Bank or the Reserve Bank, as well as reporting of transactions. It will incorporate all policy provisions related to ECBs and trade credits. The development of the software has since been completed and the user acceptance testing (UAT)[2] is near completion. Also, the software project, 'AP Connect', relating to licensing, renewal, reporting, cancellation, and inspection of full-fledged money changers (FFMCs)/upgraded FFMCs, has been developed and UAT has been completed.

Master Direction on Foreign Investment in India

V.29 The Master Direction on Foreign Investment in India has been updated in view of the Foreign Exchange Management (Non-debt Instruments) Rules, 2019 (NDI Rules) issued by the Government of India.

Conducting Awareness Programmes and Creation of Digital Content

V.30 With a view to familiarise the public and stakeholders on FEMA, 1999, a circular has been issued to the regional offices (ROs) on conduct of various financial literacy programmes, exhibitions, seminars and conferences, for different target groups.

Major Initiatives

Redefining Benchmark Rate for External Borrowings

V.31 In view of the imminent discontinuance of LIBOR as a benchmark rate, the benchmark rate in case of foreign currency external commercial borrowings (FCY ECB) and trade credit (TC) has been redefined. The benchmark rate now refers to any widely accepted interbank rate or alternative reference rate (ARR) of 6-month tenor, applicable to the currency of borrowing (also refer to Box V.1). Further, AD category-I banks have been permitted to use any other widely accepted/ARR in the currency in place of LIBOR in respect of import/export transactions.

Legal Entity Identifier (LEI)

V.32 For ease of identification of parties undertaking cross border financial transactions, AD category-I banks have been directed to obtain legal entity identifier (LEI) number from the resident entities (non-individuals) in respect of capital or current account transactions of ₹50 crore and above (per transaction) under FEMA, 1999, with effect from October 1, 2022. Banks have also been advised to encourage concerned entities to voluntarily furnish LEI, while undertaking transactions even before October 1, 2022. Further, to avoid disruptions, the banks have been directed to process cross-border financial transactions even in case of non-availability of LEI information, in respect of non-resident counterparts/overseas

[2] User Acceptance Test is a phase subsequent to completion of development of a software project. The end-users test the software in terms of functionalities and can flag defects or give suggestions for improving the software, especially the critical components.

entities. The LEI, once obtained by an entity, is required to be reported in all transactions of that entity, irrespective of transaction size.

Measures to Alleviate COVID-19 Related Stress

V.33 Borrowers are permitted to park unutilised ECB proceeds in term deposits with AD category-I banks in India for a maximum period of 12 months. To provide relief to borrowers, a one-time relaxation was provided on April 7, 2021, allowing unutilised ECB proceeds drawn down on or before March 1, 2020 to be parked in term deposits with AD category-I banks in India prospectively up to March 1, 2022.

Authorised Persons and Remittances

V.34 The Reserve Bank, in public interest and in consultation with the central government, has decided that Indian passport holders as well as persons of Indian origin carrying the Overseas Citizen of India Card along with their passports travelling to Gurdwara Darbar Sahib, Kartarpur, Narowal, Pakistan through the Sri Kartarpur Sahib Corridor, shall be allowed to carry outside and bring into India at the time of his/her return, only Indian currency notes and/or foreign currency in USD, the total value of which should not exceed ₹11,000.

Agenda for 2022-23

V.35 The Department's strategy for 2022-23 is to focus on consolidating and carrying forward all the above initiatives. The emphasis will remain on ensuring that the FEMA operating framework is in conformity with the needs of the evolving macroeconomic environment. Accordingly, the Department has formulated the following strategic action plan for 2022-23:

- Continue rationalisation of the FEMA regulations by consolidating existing regulations of similar subjects, remove hard-coding to obviate frequent issuance of amendment notifications and aligning definitions across notifications/regulations;
- Implementation of the revised computation matrix for compounding of contraventions under FEMA 1999 *(Utkarsh)*;
- A comprehensive review of the Liberalised Remittance Scheme (LRS) to address various issues and inconsistencies in the scheme;
- To continue with automation of process of submission of various returns for regulatory compliance by leveraging technology;
- Conducting awareness programmes and creation of digital content on an ongoing basis *(Utkarsh);* and
- To continue to delegate more powers to AD banks and regional offices (ROs) for faster implementation of policy changes.

5. CONCLUSION

V.36 In sum, the Reserve Bank employed several conventional and unconventional measures to provide adequate liquidity to aid economic recovery that was interrupted by successive waves of the pandemic. Apart from targeting liquidity to specific sectors and rebalancing of surplus liquidity, the Reserve Bank also ensured stable and orderly evolution of the yield curve through committed purchases of pre-announced quantum of G-secs in the secondary market. The liquidity measures along with the Reserve Bank's forward guidance and comfortable foreign exchange reserve cover engendered stability in financial markets. At the same time, the Reserve Bank pushed the financial market development agenda forward, keeping also in view global developments in market practices, such as LIBOR transition. Going forward, the Reserve Bank has set an agenda for furthering financial market reforms, covering money, government securities and foreign exchange market, focusing on derivatives and bond markets. It also plans to further rationalise foreign exchange regulations and make strides in strengthening market infrastructure. The financial market operations will continue to be aligned with the stance of the monetary policy, while the foreign exchange operations will continue to curb undue volatility in the exchange rate of the rupee.

VI REGULATION, SUPERVISION AND FINANCIAL STABILITY

Building a resilient and stable financial system remained the primary objective during the year that was marked by the re-emergence of successive waves of the COVID-19 pandemic. Accordingly, several regulatory and supervisory measures were fine-tuned to address transient issues with due consideration to the normalising economic activity. Further, in alignment with the long-term objective, the regulatory and supervisory framework was streamlined across regulated/supervised entities and strengthened to maintain conformity with global best practices. Also, consistency in enforcement actions was ensured during the year, helped by engaging with all stakeholders. Harnessing technology for customer service/grievance redressal, strengthening fraud risk management 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 to preserve financial stability. As part of the overall objective of aligning the regulatory/supervisory framework with global best practices, important strides in the areas of risk management, compliance function, consumer education and protection in banks were made during the year. Regulatory response to the COVID-19 pandemic has been further fine-tuned to incorporate the evolving challenges. A Sustainable Finance Group (SFG) was set up within the Department of Regulation (DoR) in May 2021 to lead the Reserve Bank's efforts and regulatory initiatives on climate risk and sustainable finance. Smooth transition from the LIBOR benchmark was facilitated during the year, and some of the recommendations of the Internal Working Group on ownership and capital structure of private sector banks have been accepted while others are under examination. The process of submitting statutory returns and supervisory disclosures by banks witnessed further automation during the year. A new FinTech Department was set up, effective January 4, 2022, to exclusively focus on the evolving FinTech segment and to identify opportunities and challenges while promoting innovations.

VI.2 In other areas, a revised regulatory framework for non-banking financial companies (NBFCs) - called the 'scale-based regulation' - has been put in place, considering their growing size, complexity and interconnectedness. The new regulatory structure for NBFCs comprises of four layers based on their size, activity, and perceived riskiness, and encompasses different facets of regulation covering capital requirements, governance standards and prudential regulation, amongst others, and will be effective from October 1, 2022. To introduce activity-based regulation in the microfinance sector and to further strengthen the customer protection measures for microfinance borrowers, a comprehensive regulatory framework for microfinance loans of all regulated entities (REs) of the Reserve Bank was issued on March 14, 2022 which has become effective from April 1, 2022. Moreover, guidelines on the distribution of dividends by NBFCs were finalised during the year.

VI.3 In order to facilitate development of a robust market in credit risk transfer and greater investor participation in stressed loans, revised guidelines on 'Securitisation of Standard Assets' and 'Transfer of Loan Exposures' were issued on September 24, 2021.

VI.4 In the supervisory sphere, the Reserve Bank continued with its endeavour of strengthening the existing frameworks under a unified Department of Supervision (DoS) in which the supervision of banks, urban cooperative banks (UCBs), and NBFCs is being undertaken in a holistic manner. Technology has been effectively leveraged in several aspects across off-site surveillance, on-site assessment, development of Early Warning Signals (EWS) and fraud risk management. Additionally, a technology vision document for UCBs was released, laying out a five-pillared strategic approach. For NBFCs, the supervisory reporting system has been rationalised and redesigned. The data capabilities of the Reserve Bank will be further upgraded through the revamped data warehouse, *viz.,* Centralised Information Management System (CIMS). On the other hand, the College of Supervisors (CoS) organised a wide range of programmes to enhance the skill sets of supervisory and regulatory resources during the year.

VI.5 The process of setting up an Umbrella Organisation (UO) for the UCBs is crystallising in the cooperative banking space. Other initiatives taken during the year, such as the adoption of 'One Nation - One Ombudsman' system under the "Reserve Bank – Integrated Ombudsman Scheme" (RB-IOS), 2021 and the amendment to the Deposit Insurance and Credit Guarantee Corporation (DICGC) Act, 1961, are expected to enhance customer protection and also facilitate maintaining financial stability.

VI.6 The rest of this chapter is divided into five sections. Section 2 deals with the mandate and functions of the Financial Stability Unit (FSU). Section 3 addresses various regulatory measures undertaken by the DoR along with activities of the newly created FinTech Department during the year. Section 4 covers several supervisory measures undertaken by the DoS and enforcement actions carried out by the Enforcement Department (EFD) 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 2022-23 in their respective sections. Concluding observations are set out in the last section.

2. FINANCIAL STABILITY UNIT (FSU)

VI.7 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 early warning information and analysis through the Financial Stability Report (FSR). It also functions as the 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 2021-22

VI.8 The Department had set out the following goals for 2021-22:

- Strengthening the stress testing framework/methodology by incorporating evolving best practices (*Utkarsh*) [Paragraph VI.9];
- Conducting macro-prudential surveillance (Paragraph VI.10);

- Publishing the FSR on a timely and updated basis (Paragraph VI.10); and
- Conducting meetings of the FSDC Sub-Committee (FSDC-SC) [Paragraph VI.11].

Implementation Status

VI.9 As part of strengthening the current stress testing framework, a revised framework for multi factor macro prudential stress test was developed. This involved modifying and testing the satellite models for projection of gross non-performing assets (GNPA) ratios, components of profit after tax and sectoral probability of default. Refining the stress testing framework with real-time data is in progress.

VI.10 Two editions of the FSR, reflecting the collective assessment of the Sub-Committee of the FSDC on the balance of risks around financial stability, were released during the year. The 23rd issue of the FSR, brought out on July 1, 2021 highlighted global policy responses of regulators and governments to contain the severity of the pandemic's toll on financial markets and institutions. It emphasised the need for augmenting capital in the domestic banking sector to support investment demand in the economy, going forward. The 24th edition of the FSR was released on December 29, 2021. It drew attention to persistent inflationary pressures and shifts in monetary policy stances globally. Noting the relatively improved health of the domestic banking sector, it pointed to emerging signs of stress in the micro, small and medium enterprises (MSMEs) and microfinance segments. The macro stress test results in both editions of the FSR indicated that scheduled commercial banks (SCBs) have sufficient capital buffers, at the aggregate as well as individual level, even in severe stress scenarios.

VI.11 The FSDC-Sub Committee held two meetings in 2021-22, both in the virtual format owing to the second and third waves of the COVID-19 pandemic. In the meeting held in April 2021, the Sub-Committee discussed major developments in the domestic and global economy against the backdrop of the second wave of COVID-19 pandemic. It also deliberated on various inter-regulatory issues, reviewed the activities of the technical groups under its purview and evaluated the functioning of the State Level Coordination Committees (SLCCs) in various states/union territories (UTs). The members committed to remain watchful and proactive in the face of evolving challenges brought on by the resurgence of the pandemic. The Sub-Committee, in its meeting held in January 2022, reviewed major developments in global and domestic economy as well as in various segments of the financial system and discussed the assessments of members about the scenario emerging from the third wave of the COVID-19 pandemic. The Sub-Committee also discussed the use of *Aadhaar* based e-KYC and *Aadhaar* Enabled Payment System by REs.

Agenda for 2022-23

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

- Implementation of the revised stress testing framework and publication of the results in FSR (*Utkarsh)*;
- Carrying out sensitivity analyses, covering the impact of housing price movements on bank capital;
- Conduct of macro-prudential surveillance;
- Publication of half-yearly FSRs; and
- Conduct of meetings of the FSDC-SC.

3. REGULATION OF FINANCIAL INTERMEDIARIES

Department of Regulation (DoR)

VI.13 The Department of Regulation (DoR) is the nodal Department for regulation of commercial banks, cooperative banks, NBFCs, Credit Information Companies (CICs) and All India Financial Institutions (AIFIs), for ensuring a healthy and competitive financial system, which provides cost effective and inclusive financial services. The regulatory framework is fine-tuned as per the requirements of the Indian economy, while adapting to international best practices.

Agenda for 2021-22

VI.14 The Department had set out the following goals in 2021-22:

- Issuing draft guidelines on capital charge for credit risk (standardised approach), market risk, operational risk and output floor, as part of convergence of the Reserve Bank's regulations with Basel III standards (Paragraph VI.15);
- Issue of final guidelines on securitisation of standard assets and issue of final guidelines on transfer of loan exposures (Paragraph VI.16);
- *Setting up of an Umbrella Organisation (UO) for UCBs*: The Reserve Bank had advised National Federation of Urban Cooperative Banks and Credit Societies Limited (NAFCUB) to establish UO for UCBs. Accordingly, a company named National Cooperative Finance and Development Corporation Limited (NCFDC) was incorporated on April 18, 2020 as a non-government public limited company under the Companies Act 2013, having its registered office in New Delhi to act as UO. The UO is required to apply to the Reserve Bank for obtaining certificate of registration as NBFC *(Utkarsh)* [Paragraph VI.17];
- *Discussion Paper on Consolidation of UCB Sector*: An expert committee on UCBs, set up in February 2021, is examining, *inter alia*, the prospects of consolidation in the UCB sector as one of its terms of reference. Further action in the matter will be taken based on the recommendations of the committee *(Utkarsh)* [Paragraph VI.18];
- Finalise scale-based regulatory framework for NBFCs given the increasing significance of NBFCs in the financial system (Paragraph VI.19);
- Review of regulatory framework applicable to Non-Banking Financial Company-Microfinance Institutions (NBFC-MFIs) and harmonising the regulatory frameworks for various regulated lenders in the microfinance space (Paragraph VI.20); and
- Comprehensive review of the regulatory and legal framework of Asset Reconstruction Companies (ARCs) so as to realise their potential in resolving stressed assets of the financial sector (Paragraph VI.21).

Implementation Status

VI.15 As part of convergence of its regulations with Basel III standards, the Reserve Bank issued the draft 'Master Direction on Minimum Capital Requirements for Operational Risk' for public comments on December 15, 2021. Further, draft guidelines on the other risk categories and output floor are expected to be issued by June 2022, followed by final guidelines in September 2022.

VI.16 Master Direction - Reserve Bank of India (Transfer of Loan Exposures) Directions, 2021 and Master Direction - Reserve Bank of India (Securitisation of Standard Assets) Directions, 2021 were issued on September 24, 2021.

Setting up of an Umbrella Organisation (UO) for UCBs

VI.17 National Cooperative Finance and Development Corporation Limited (NCFDC) has been advised to resubmit its application for registration as NBFC along with details of the capital raising plan.

Discussion Paper on Consolidation of UCB Sector

VI.18 The issue of consolidation in the UCB sector was one of the terms of the reference of the Expert Committee on UCBs. The Committee has, however, recommended consolidation of UCBs to be primarily voluntary. The Committee has further recommended that scale in the UCB sector may be achieved by networking of the smaller UCBs through the UO, for which the Reserve Bank has already given 'in principle' regulatory approval to the NAFCUB. The work of setting up the UO by the NAFCUB is in progress.

VI.19 An integrated circular was issued on October 22, 2021 regarding "Scale Based Regulation (SBR): A Revised Regulatory Framework for NBFCs". This circular contains regulatory instructions on matters relating to capital requirements, governance standards, prudential regulation, and disclosures applicable to NBFCs in different layers.

VI.20 A comprehensive regulatory framework for microfinance loans was issued on March 14, 2022 which has been made applicable to all regulated entities lending in the microfinance sector.

VI.21 A Committee under the chairmanship of Shri Sudarshan Sen, former Executive Director, Reserve Bank of India was constituted to undertake a comprehensive review of the regulatory and legal framework of ARCs. The Committee's report was released for public comments on November 2, 2021. Recommendations of the Committee are being examined.

Major Developments

Regulatory Response to the COVID-19 Pandemic

VI.22 *Resolution Framework 2.0* : In order to address the financial difficulties arising from the second wave of COVID-19 in the first quarter of 2021-22 on small borrowers, the Reserve Bank had announced the Resolution Framework 2.0 dated May 5, 2021, subsequently revised on June 4, 2021, which permitted lending institutions to restructure personal loans as well as loans to individuals for business purposes, MSMEs, and other small businesses with aggregate exposure up to ₹50 crore, without a downgrade in the asset classification, subject to certain conditions. The facility, available to eligible borrowers who did not restructure their accounts under earlier restructuring schemes, was to be invoked up to September 30, 2021.

VI.23 *Resolution Framework for COVID-19-related Stress – Financial Parameters – Revised Timelines for Compliance:* In view of the resurgence of the COVID-19 pandemic in 2021 and recognising the difficulties it may pose for the borrowers in meeting the operational parameters, it was decided to defer the target date to October 1, 2022 for meeting the specified thresholds in respect of the four operational parameters, *viz.,* total debt/earnings before interest, taxes, depreciation and amortisation (EBITDA), current ratio, debt service coverage ratio (DSCR), and average DSCR (ADSCR), as part of resolution plan in respect of eligible borrowers under the Resolution Framework for COVID-19 related stress issued on August 6, 2020. However, the target date for achieving the total outside liabilities to adjusted tangible net worth (TOL/ATNW) ratio, as crystallised in terms of the resolution plan, remained unchanged as on March 31, 2022.

Prudential Norms on Income Recognition, Asset Classification and Provisioning (IRACP) Pertaining to Advances

VI.24 In order to ensure uniformity in the implementation of IRACP norms across all lending institutions, certain aspects of the extant regulatory guidelines were clarified and/or harmonised *vide* circular dated November 12, 2021. The circular elucidated the following: specification of due date/repayment date; operational aspect of classification of an account as special mention account (SMA) and non-performing asset (NPA); definition of 'out of order'; aligning 90 days delinquency norm for NPA classification in case of interest payments; upgradation of accounts classified as NPAs; and income recognition policy for loans with moratorium on payment of interest. Subsequently, *vide* circular dated February 15, 2022, NBFCs were allowed time up to September 30, 2022 to put in place the necessary systems to implement the provision relating to upgrade of NPA accounts. Also, clarifications on certain queries received from various stakeholders regarding applicability of ‘out of order’ definition to overdraft (OD) accounts given for non-business purposes, upgradation of NPAs in case of borrowers having multiple credit facilities from a lending institution, impact of November 12, 2021 circular on reporting of credit information to Central Repository of Information on Large Credits (CRILC) and on the implementation of Indian Accounting Standards (Ind-AS) by NBFCs, have also been provided therein.

VI.25 Further, in order to increase awareness amongst the borrowers on the concept of asset classification of loan accounts, the circular dated November 12, 2021 also required lending institutions to put in place consumer education literature on their websites, explaining with examples, the concepts of date of overdue, SMA and NPA classification and upgradation, with a specific reference to day-end process. Lending institutions were also advised to consider displaying such consumer education literature in their branches by means of posters and/or other appropriate media. Additionally, they were also advised to ensure that their front-line officers educate borrowers about all these concepts, with respect to loans availed by them at the time of sanction/disbursal/renewal of loans. These instructions shall be complied with at the earliest, but not later than March 31, 2022.

Guidelines on Securitisation of Standard Assets

VI.26 The directions on ‘Securitisation of Standard Assets’ issued on September 24, 2021, focusing on traditional securitisation structures, have rationalised the regulatory framework. The requirements on minimum holding period and minimum retention requirement have been considerably simplified, while the capital requirements for securitisation exposures have been converged with the Basel III requirements, including the concessional capital regime in case of simple, transparent, and comparable (STC) securitisations. The guidelines also stipulate requirements for various facility providers to provide a robust support ecosystem for securitisation.

Guidelines on Transfer of Loan Exposures

VI.27 A robust secondary market in loans can be an important mechanism for management of credit exposures by lending institutions. It also creates additional avenues for raising liquidity. The Master Directions on Transfer of Loan Exposures issued on September 24, 2021 lay down the comprehensive regulatory framework for transfer of loan exposures by banks, NBFCs and AIFIs. In particular, an enabling framework has been put in place for transfer of stressed loan exposures to a wider set of market participants, subject to specified conditions.

Scale Based Regulation - A Revised Regulatory Framework for NBFCs

VI.28 The contribution of NBFCs towards supporting real economic activity and acting as a supplemental channel of credit intermediation alongside banks is well recognised. Higher risk appetite of NBFCs has, however, contributed over time to their size, complexity, and interconnectedness, thus, making some of the entities systemically significant that pose potential threat to financial stability. Pursuant to the announcement made in the Statement on Developmental and Regulatory Policies dated December 4, 2020 on the issue, a discussion paper titled 'Revised Regulatory Framework for NBFCs – A Scale-based Approach' was issued for public comments on January 22, 2021. Based on the inputs received from various stakeholders, a revised regulatory framework for NBFCs was put in place on October 22, 2021. The revised regulatory framework provides for a layered structure for NBFCs based upon their size, activity, and perceived riskiness, and will be applicable from October 1, 2022.

Large Exposure Framework (LEF) - Credit Risk Mitigation (CRM)

VI.29 In the absence of a formal cross-border resolution regime, there was a need to ring-fence the operations of branches of a foreign bank in India. Against this background, Large Exposure Framework (LEF) was made applicable to exposures of foreign bank branches on their Head Office (HO). In order to address the issue of additional capital burden on such banks due to the introduction of LEF, instructions on a Credit Risk Mitigation (CRM) mechanism for the foreign bank branches were issued on September 9, 2021, which allowed the gross exposure of foreign bank branches to HO (including overseas branches) to be offset with the CRM, while reckoning LEF limits, subject to certain conditions. The CRM can comprise cash/unencumbered approved securities held under Section 11(2)(b)(i) of the Banking Regulation Act,1949, the sources of which should be interest-free funds from HO or remittable surplus retained in the Indian books (reserves). Foreign bank branches were permitted to exclude all derivative contracts executed prior to April 1, 2019 (grandfathering), while computing derivative exposure on the HO.

Opening of Current Accounts by Banks - Need for Discipline

VI.30 In order to enforce credit discipline amongst the borrowers as well as to facilitate better monitoring by the lenders, instructions on the manner of opening of cash credit/overdraft (CC/OD) and current/collection accounts by banks were issued on August 6, 2020. The guidelines were revised on October 29, 2021, thereby allowing borrowers, to whom the exposure of the banking system is less than ₹5 crore, to open current accounts and CC/OD accounts without any restrictions. Further, a borrower with CC/OD facility is permitted to maintain current accounts with any one of the banks with which it has CC/OD facility. Other lending banks were permitted to open collection accounts for such customers.

Report of the Working Group on Digital Lending including Lending through Online Platforms and Mobile Apps

VI.31 The Report of the Working Group (WG) on 'Digital Lending including Lending through Online Platforms and Mobile Applications' was placed in public domain on November 18, 2021. It offers a holistic roadmap for development of digital lending ecosystem, based on the principles of technology neutrality, principle-backed regulation while addressing regulatory arbitrage. The key recommendations of the report include (i) restricting balance sheet lending by Digital Lending Apps (DLAs) only to REs of the Reserve Bank or entities registered under any other law for specifically undertaking lending business; (ii) enacting a separate legislation to prevent illegal digital lending activities; (iii) treating Buy Now Pay Later (BNPL) as part of balance sheet lending and prohibition on unregulated entities from offering First Loss Default Guarantee (FLDG); (iv) setting up of a Self-Regulatory Organisation (SRO) for the digital lending ecosystem; (v) setting up of a Digital India Trust Agency (DIGITA) to verify the DLAs and maintain a public register of all the verified apps; (vi) loan servicing and re-payments mandatorily through bank account/fully KYC compliant pre-paid instrument (PPI) account; (vii) prescription of baseline technology standards for DLAs; (viii) use of explainable and ethical artificial intelligence (AI); (ix) informed and explicit consent for data collection; (x) key fact statement for loan in standardised format; (xi) anti-predatory lending policy; and (xii) code of conduct for recovery. The report has elicited feedback from a range of stakeholders. The implementation framework would require close inter-agency coordination, including the government.

Review of Instructions on Gold Metal Loan

VI.32 Gold (Metal) Loans (GML) are extended by nominated/designated banks to exporters or domestic manufacturers of gold jewellery. So far, borrowers had no option to use physical gold to repay the outstanding loan as they were required to repay the amount only in INR representing the value of the borrowed gold. The guidelines in this regard were reviewed and banks are now required to provide an option to borrowers to repay a part of the GML in physical gold in lots of one kilogram (kg) or more, provided the GML was extended out of locally sourced/gold monetisation scheme (GMS)-linked gold and the gold used for repayment conforms to the prescribed standards, and is delivered on behalf of the borrower to the lending bank directly by a refiner or a central agency acceptable to the bank, without the borrower's involvement. Banks were also advised to suitably incorporate the above aspects into their lending policy and continue to monitor the end-use of funds lent under GML.

Foreign Currency (Non-Resident) Accounts (Banks) Scheme [FCNR (B)] – LIBOR Transition

VI.33 The Financial Conduct Authority (FCA), UK had announced the cessation of LIBOR benchmark effective December 31, 2021. Globally, financial markets are moving towards the adoption of Alternative Reference Rates (ARRs) like SOFR (USD), SONIA (GBP), TONAR (JPY), ESTR (Euro) and SONAR (CHF), as the new benchmark in place of LIBOR. These ARRs are administered/supported by the central banks of the respective countries. In view of the imminent cessation of LIBOR benchmark, the extant instructions were amended to permit banks to offer interest rates on FCNR (B) deposits using widely accepted 'Overnight ARR for the respective currency' with upward revision in the interest rates' ceiling by 50 bps.

Export Credit in Foreign Currency - Benchmark Rate

VI.34 In view of the impending discontinuance of LIBOR as a benchmark rate after December 2021, banks were permitted to extend export credit using any other widely accepted ARR in the currency concerned.

Restructuring of Derivative Contracts – LIBOR Transition

VI.35 For derivative contracts, as per extant instructions, a change in any of the parameters of the original contract is treated as restructuring and the resultant change in the mark-to-market value of the contract on the date of restructuring is required to be cash settled. Since the change in reference rate from LIBOR is a *"force majeure"* event, banks were advised that change in reference rate from LIBOR/LIBOR-related benchmarks to an ARR would not be treated as restructuring.

Report of the Committee to Review the Working of Asset Reconstruction Companies (ARCs)

VI.36 Against the backdrop of a significant build-up of non-performing assets in the financial system and concerns over the performance of ARCs, the Reserve Bank had set up an external Committee (Chairman: Shri Sudarshan Sen, former Executive Director, RBI) to review, *inter alia*, the existing legal and regulatory framework applicable to ARCs and recommend measures to enhance their efficacy and to improve liquidity in and trading of security receipts. The Committee after extensive deliberations with stakeholders, submitted its report, which was released on the Reserve Bank's website on November 2, 2021 for public comments. The recommendations of the Committee are being examined.

Notification of Housing Finance Companies (HFCs) as 'Financial Institution' under Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest (SARFAESI) Act, 2002

VI.37 Earlier, for notification as 'Financial Institution' under Section 2(1)(m)(iv) of SARFAESI Act, 2002 for the purpose of enforcement of security interest in secured debts, HFCs complying with certain prescribed norms such as compliance with minimum supervisory rating, no adverse report from other authorities, *etc.,* were required to apply on an individual entity basis. Post simplification of the procedure of notification of HFCs as 'Financial Institution' under SARFAESI Act, 2002 by the Government of India (GoI) *vide* Gazette Notification No. S.O. 2405(E) dated June 17, 2021, all HFCs, having assets worth ₹100 crore and above, were notified as 'Financial Institution' under SARFAESI Act, 2002. Hence, the previously prescribed criteria for such notification of HFCs were withdrawn.

Notifications on Registration of Factors and Registration of Assignment of Receivables for Factoring Transactions on TReDS Platform

VI.38 Subsequent to amendment to Factoring Regulation Act, 2011, the Reserve Bank has issued requisite regulations pertaining to the manner of granting the certificate of registration (CoR) to companies which propose to undertake factoring business. In addition to NBFC-Factors, all non-deposit taking NBFC-investment and credit companies (NBFC-ICCs) with asset size of 1,000 crore and above have been allowed to undertake factoring business, subject to satisfaction of certain conditions; and other NBFCs can undertake factoring business by seeking registration as NBFC-Factors. Further, the Reserve Bank has issued regulations on registration of assignment of receivables with central registry by TReDS entities, in case of factoring transactions undertaken on TReDS platform. These steps are expected to enhance the scope of entities eligible to undertake factoring transactions and would also help in increased flow of credit to MSMEs.

Discussion Paper on Review of Prudential Norms for Investment Portfolio of Banks

VI.39 Extant regulatory instructions on classification and valuation of investment portfolio by SCBs are largely based on a framework introduced in October 2000, drawing upon the then prevailing global standards and best practices. In view of the subsequent significant developments in global standards on classification, measurement, and valuation of investments, the linkages with the capital adequacy framework as well as progress in the domestic financial markets, there is a need to review and update these norms. Accordingly, a discussion paper covering all the relevant aspects was placed in the public domain for comments on January 14, 2022. The discussion paper proposes investment portfolio to be characterised in three categories, *viz.,* Held to Maturity (HTM), Available for Sale (AFS) and Fair Value through Profit and Loss Account (FVPTL), within which the Held for Trading (HFT) will be a sub-category. It proposes, *inter alia*, symmetric recognition of unrealised gains and losses, with concerns on such recognition addressed through prudential filters on regulatory capital and dividend distribution supplemented by enhanced disclosures.

Declaration of Dividend by NBFCs

VI.40 Unlike banks, there are currently no guidelines in place with regard to the distribution of dividend by NBFCs. Keeping in view the increasing significance of NBFCs in the financial system and their inter-linkages with other segments of the financial market, it was decided to formulate guidelines on dividend distribution by NBFCs. Accordingly, a draft circular on ‘Declaration of Dividends by NBFCs’ was issued on December 9, 2020, for public comments. Based on the feedback received, final guidelines were issued *vide* circular dated June 24, 2021.

Implementation of Net Stable Funding Ratio (NSFR) Guidelines

VI.41 The final guidelines regarding ‘Basel III Framework on Liquidity Standards – Net Stable Funding Ratio (NSFR)’ were issued on May 17, 2018 and were scheduled to come into effect from April 1, 2020. However, due to uncertainty on account of COVID-19, the implementation of these guidelines was deferred progressively till October 1, 2021. Accordingly, the guidelines on NSFR have come into effect from October 1, 2021.

Review of the Threshold Limit for Small Business Customers under Liquidity Standards

VI.42 With the objective to better align the Reserve Bank’s guidelines with the Basel Committee on Banking Supervision (BCBS) standard and enable banks to manage liquidity risk more effectively, the threshold limit for deposits and other extensions of funds made by non-financial small business customers were increased from ₹5 crore to ₹7.5 crore for the purpose of maintenance of Liquidity Coverage Ratio (LCR) and NSFR.

Investment in Umbrella Organisation (UO) by Primary (Urban) Cooperative Banks

VI.43 In order to facilitate investment in capital of UO of UCB Sector by primary (urban) cooperative banks, it has been clarified that investment in UO by UCBs shall be exempted from prudential limits prescribed for investment in non-SLR securities and unlisted securities.

Developments Related to the Sustainable Finance Group

VI.44 In May 2021, the Reserve Bank set up a Sustainable Finance Group (SFG) within DoR, tasked with spearheading its efforts and regulatory initiatives in the area of climate risk and sustainable finance. The SFG would coordinate with other national and international agencies on issues relating to climate change. Moreover, the group would be instrumental in suggesting strategies and evolving a regulatory framework, including appropriate disclosures, which could be prescribed for banks and other regulated entities (REs) to propagate sustainable practices and mitigate climate related risks in the Indian context.

VI.45 The SFG represents the Reserve Bank in the bilateral India-UK Sustainable Finance Forum which was set up in 2020 to drive forward a deeper cooperation between India and the UK on sustainable finance. It also represents the Reserve Bank on the G20 Sustainable Finance Working Group, International Platform on Sustainable Finance, the Financial Stability Board's (FSB's) Working Group on Climate Risk and the Work Stream on Climate-related Disclosures. The Reserve Bank is also a member of the Task Force on Climate-related Financial Risks set up by the BCBS.

VI.46 The Reserve Bank was featured in the first Sustainable Regulation Annual Report published by the World-Wide Fund for Nature (WWF) on October 28, 2021. According to the report, with growing awareness about the financial impact of climate change, central banks are increasingly taking steps to create a more sustainable financial system.

VI.47 To assess the progress of the REs in managing climate risk and also to sensitise them to incorporate climate-related and environmental risks in their business strategies as also in their governance and risk management frameworks, the Reserve Bank is preparing a consultative discussion paper. In line with the international best practices, banks will be guided to adopt a forward-looking, comprehensive and strategic approach to climate-related risks. During January 2022, the SFG has also undertaken a survey on climate risk and sustainable finance among public sector banks, private sector banks and leading foreign banks in India. The feedback from the survey would help inform the regulatory and supervisory approach of the Reserve Bank to climate risk and sustainable finance as also help fine-tune its capacity building and awareness measures in this regard.

Simplification of the 'Periodic Updation of KYC' Process

VI.48 The periodic updation of the Know Your Customer (KYC) information is to be carried out by REs at least once in 2 years, 8 years and 10 years for high-risk, medium-risk and low-risk customers, respectively. This process has been simplified to a significant extent *vide* amendment dated May 10, 2021 to the Master Direction on KYC dated February 25, 2016. For instance, in case of no-change in KYC details, a self-declaration can be furnished by the customer. Self-declaration can be provided using various channels, including digital channels such as customer's email, mobile, ATMs, online banking/internet banking and mobile application of REs. The self-declaration provision in case of no-change in KYC details has also been introduced for Legal Entities (LEs) similar to that for individual customers. Further, in case of a change only in the address details of the individual customer, a self-declaration of the new address has been allowed. The declared address shall have to be verified by REs through positive confirmation within two months, by means such as address verification letter, contact point verification, *etc*. Certain additional measures have been introduced such as (i) verification of existing PAN number at the time of periodic updation on KYC; (ii) migration of legacy accounts opened on the basis of old documents to current norms, as per extant Prevention of Money Laundering (PML) rules; (iii) REs to provide acknowledgement to customers both at the time of submission of KYC documents (or self-declaration) and after updation of KYC documents in their record; and (iv) REs have been instructed to consider making available the facility of periodic updation of KYC at any branch. Risk-based approach for periodic updation of KYC has been mandated for REs. Therefore, any additional measures apart from the above shall have to be clearly specified by REs in their internal KYC policy, duly approved by the Board of Directors or any committee of the Board to which such power has been delegated. In addition to the above, Video based Customer Identification Process (V-CIP) has been extended for periodic updation of KYC.

VI.49 These simplified measures will not only provide convenience to the customers to comply with the requirements of periodic updation of KYC but will also enable REs to update the KYC records on time.

Aadhaar e-KYC Authentication Licence for Non-bank Entities

VI.50 In terms of Section 11A of the PML Act, 2002, entities other than banking companies may, by notification of the central government, be permitted to carry out authentication of client's *Aadhaar* number using e-KYC facility provided by the Unique Identification Authority of India (UIDAI). Such notification shall be issued only after consultation with UIDAI and the appropriate regulator.

VI.51 Accordingly, *vide* circular dated September 13, 2021, the Reserve Bank enabled all the NBFCs, payment system providers and payment system participants desirous of obtaining *Aadhaar* Authentication Licence - KYC User Agency (KUA) Licence or sub-KUA Licence (to perform authentication through a KUA), issued by the UIDAI, to submit their application to the DoR for onward submission to UIDAI after due diligence.

Recommendations of the Internal Working Group to Review Extant Ownership Guidelines and Corporate Structure for Indian Private Sector Banks

VI.52 An Internal Working Group constituted on June 12, 2020 to review extant ownership guidelines and corporate structure for Indian private sector banks has made 33 recommendations. The Reserve Bank has accepted 21 recommendations (some with partial modifications) including the recommendations on increasing the promoter holding to 26 per cent of paid-up voting equity share capital, reporting of pledge of shares by promoters, increasing minimum initial capital requirement for licensing new banks, and relaxation of listing norms for small finance banks (SFBs) to be set up in future. The remaining 12 recommendations are under examination. A press release in this regard was issued on November 26, 2021.

Corporate Governance in Banks - Appointment of Directors and Constitution of Committees of the Board dated April 26, 2021

VI.53 A discussion paper on 'Governance in Commercial Banks in India' was issued by the Reserve Bank on June 11, 2020 to review the framework for governance in the commercial banks. Based on the feedback received, a comprehensive review of the framework has been carried out, and a Master Direction on Governance will be issued in due course. In the interim, to address a few operative aspects received through such feedback, instructions regarding the chair and meetings of the board, composition of certain committees of the board, age, tenure and remuneration of directors, and appointment of the whole-time directors (WTDs) have been issued on April 26, 2021.

Guidelines on Compensation of Whole Time Directors/Chief Executive Officers/ Material Risk Takers and Control Function Staff – Clarification dated August 30, 2021

VI.54 On August 30, 2021 a clarification was issued, in respect of the share-linked instruments including employee stock ownership plans (ESOPs), granted after the accounting period ending March 31, 2021, advising that the fair value of such instruments should be recognised as an expense, beginning with the accounting period for which the approval has been granted.

Amendments in Gold Monetisation Scheme (GMS), 2015

VI.55 The Master Directions on Gold Monetisation Scheme, 2015 dated October 22, 2015 did not contain specific instructions to designated banks for calculation of interest in case of premature closure of Medium- and Long-Term Government Deposit (MLTGD) under GMS before/after lock-in period in case of death of the depositor and also in case of default of loan taken against MLTGD certificate. The requisite amendments in the Master Directions were carried out *vide* circular dated October 28, 2021 to include details of applicable interest rates, based on the actual period for which the deposit has run (divided into various time buckets). Being premature closure in nature, the applicable interest rates are lower than those applicable to MLTGD deposits in normal course. Nonetheless, in case of premature closure due to death, applicable interest rate is 0.125 per cent higher than those for premature closure due to loan default.

Submission of Form IX on eXtensible Business Reporting Language (XBRL) Live Site

VI.56 In order to improve the efficiency of Form IX return (on unclaimed deposits) submission, the hard copy/paper submission of Form IX return has been dispensed with, effective from December 31, 2021. Accordingly, all commercial banks have been advised to submit the captioned return in electronic form on XBRL live site, using digital signature of one authorised official of the bank.

Revised Instructions on Safe Deposits Locker/ Safe Custody Article Facility Provided by Banks

VI.57 The instructions on providing safe deposit locker/safe custody article facility by banks have been revised on August 18, 2021, in public interest. The revisions mainly relate to enhancement of safety/security aspects, need for a model locker agreement and disclosure of terms and conditions on the websites of banks. The revised instructions have come into force from January 1, 2022 (except where otherwise specified) and are applicable to both new and existing safe deposit lockers and safe custody articles facility with the banks. Banks have been given time till January 1, 2023 to renew their locker agreements with the existing customers.

Appointment of Chief Risk Officer in Primary (Urban) Cooperative Banks

VI.58 With the growing complexities in the cooperative sector and the increase in their size and scope of business, primary (urban) cooperative banks (UCBs) face diverse and greater degree of risks in their operations. Accordingly, UCBs having asset size of ₹5,000 crore or above have been advised *vide* circular dated June 25, 2021 to appoint a chief risk officer. They have also been advised to set up a risk management committee of the Board in order to provide the required level of attention on various aspects of risk management.

Amalgamation of District Central Cooperative Banks (DCCBs) with State Cooperative Bank (StCB)

VI.59 On May 24, 2021, the Reserve Bank issued a circular on voluntary amalgamation of DCCBs with StCB under the provisions of Section 44A, read with Section 56 of the Banking Regulation (BR) Act, 1949 as amended *vide* BR (Amendment) Act, 2020 (39 of 2020). The circular was issued for dissemination of the amended statutory provisions and consequent changes in the procedure/ indicative benchmarks for amalgamation of DCCBs with StCB.

Appointment of Managing Director (MD)/ Whole-Time Director (WTD) in Primary (Urban) Cooperative Banks

VI.60 A circular on the appointment of MD/WTD in UCBs was issued by the Reserve Bank on June 25, 2021. The circular prescribes eligibility, 'fit and proper' criteria, *etc.,* for the post of MD/WTD in UCBs. It also advises UCBs to seek the Reserve Bank's prior approval (and process thereof) for appointment/re-appointment/termination of MD/ WTD. This circular was issued to enhance the governance standards in UCBs and to give effect to the provisions of the BR (Amendment) Act, 2020.

Submission of Returns under Section 31 of the Banking Regulation Act, 1949 (AACS) – Extension of Time

VI.61 Considering the difficulties faced by cooperative banks (*i.e.,* UCBs, state cooperative banks and central cooperative banks) due to the COVID-19 pandemic, the timeline for submission of returns under Section 31 of Banking Regulation Act 1949 [As Applicable to Cooperative Societies (AACS)] for the financial year ended March 31, 2021, was extended by three months, *i.e.,* till September 30, 2021.

Caution Notice to Public on the Use of the Word "Bank/Banker/Banking" by Cooperative Societies

VI.62 Members of public were cautioned through a press release dated November 22, 2021 that some of the cooperative societies are using the word "Bank" which is in violation of Section 7 of Banking Regulation (BR) Act and are also accepting deposits from non-members/nominal members/associate members which tantamount to conducting banking business in violation of the provisions of the BR Act, 1949. The BR Act, 1949 was amended by the BR (Amendment) Act, 2020 making cooperative societies ineligible to use the words "bank", "banker", or "banking" as part of their names, except as permitted under the provisions of BR Act, 1949 or by the Reserve Bank. Accordingly, it was notified that such societies have neither been issued any licence under the BR Act, 1949 nor have they been authorised by the Reserve Bank for doing banking business. The insurance cover from the Deposit Insurance and Credit Guarantee Corporation (DICGC) is also not available for deposits placed with these societies. It was advised to exercise caution and carry out due diligence of such cooperative societies if they claim to be a bank and to look for banking licence issued by the Reserve Bank before dealing with them.

VI.63 State governments were also informed about the provisions under the BR Act, 1949 and were requested to take necessary steps/actions to refrain/stop such entities within the State from using the word "bank", "banker", or "banking" as part of their names or in connection with their business and to ensure that deposits from non-members/nominal members/associate members are not accepted by them.

Resolution of NBFCs under the Insolvency and Bankruptcy Code (IBC), 2016

VI.64 *Completion of Resolution of Dewan Housing Finance Corporation Limited (DHFL):* Post supersession of the Board of Directors of DHFL and appointment of Administrator in November 2019, the Reserve Bank had initiated Corporate Insolvency Resolution Process (CIRP) under the IBC against DHFL in December 2019. With the approval of resolution plan of Piramal Group by the National Company Law Tribunal (NCLT), Mumbai in June 2021, the resolution process has been formally completed.

VI.65 *Initiation of Resolution Process of Two SREI Group NBFCs [SREI Infrastructure Finance Limited (SIFL) and SREI Equipment Finance Limited (SEFL)]:* Due to serious supervisory concerns and default to creditors, the Reserve Bank superseded the Board of Directors of SIFL and SEFL. Post supersession and appointment of Administrator on October 4, 2021, applications for initiation of CIRP under IBC, 2016 and Insolvency and Bankruptcy (Insolvency and Liquidation Proceedings of Financial Service Providers and Application to Adjudication Authority) Rules, 2019 have been admitted by NCLT, Kolkata on October 8, 2021. Subsequently, the Administrator has moved an application for group insolvency with NCLT under the integrated Committee of Creditors (CoC). NCLT, Kolkata has approved the said application in February 2022. Presently, the CIRP is progressing as per the provisions of IBC, 2016 and related laws.

VI.66 *Initiation of Resolution Process of Reliance Capital Ltd (RCL):* Due to defaults in meeting payment obligations and supervisory concerns, in exercise of powers conferred by Section 45-IE of the Reserve Bank of India Act, 1934, in public interest, the Reserve Bank superseded the Board of Directors of RCL on November 29, 2021 and appointed an Administrator. Subsequently, the application filed by the Reserve Bank to initiate CIRP against RCL under IBC, 2016 and Insolvency and Bankruptcy (Insolvency and Liquidation Proceedings of Financial Service Providers and Application to Adjudication Authority) Rules, 2019 was admitted by NCLT, Mumbai on December 6, 2021. Presently, the CIRP is undergoing as per provisions of IBC, 2016 and related laws.

Amendment in DICGC Act

VI.67 GoI has notified the DICGC (Amendment) Act, 2021 on August 13, 2021. As per the timeline prescribed in the amended Act, DICGC is liable to pay an amount equivalent to the deposits outstanding (up to a maximum of ₹5 lakh) within 90 days of placing the bank under restrictions. The Act also provides that in case the Reserve Bank is in the process of finalising a scheme of amalgamation of the insured bank with another banking institution or a scheme of compromise or arrangement or reconstruction and the same is communicated to DICGC, then the date of repayment can be extended by a period not exceeding 90 days (also refer to Box VI.5).

Resolution of Punjab and Maharashtra Cooperative Bank Limited, Mumbai (PMC Bank Ltd.)

VI.68 The PMC Bank Ltd. had received binding offers from investors for its reconstruction, in response to the Expression of Interest (EOI) dated November 3, 2020. After careful consideration, the proposal from Centrum Financial Services Limited

(CFSL) along with Resilient Innovation Private Limited was found to be *prima facie* feasible. Accordingly, in specific pursuance to their offer dated February 1, 2021 in response to the EOI, the Reserve Bank, on June 18, 2021, granted "in-principle" approval, valid for 120 days, to CFSL to set up a SFB under its general guidelines dated December 5, 2019 for 'on tap' licensing of SFBs in the private sector. Subsequently, Unity Small Finance Bank Limited (USFB), with CFSL as the promoter, was granted banking licence on October 12, 2021, which commenced its operations effective November 1, 2021. The Reserve Bank, on November 22, 2021, placed in public domain, a draft scheme of amalgamation of the PMC Bank Ltd. with USFB, inviting suggestions from members, depositors, and other creditors of transferor bank (PMC Bank Ltd.) and transferee bank (USFB). The scheme was sanctioned and notified by the GoI under Section 45 of BR Act, effective date of amalgamation being January 25, 2022.

Regulatory Framework for Microfinance Loans

VI.69 A comprehensive regulatory framework for microfinance loans was issued on March 14, 2022 wherein uniform guidelines have been put in place for microfinance loans provided by all REs of the Reserve Bank. This framework introduces activity-based regulation in the microfinance sector and is intended to address the concerns regarding over-indebtedness of small borrowers, enhance the customer protection measures, and enable the competitive forces to bring down the interest rates by empowering the borrowers to make an informed decision (Box VI.1).

Box VI.1
Regulatory Framework for Microfinance Loans

Based on the recommendations of the Malegam Committee[1], a comprehensive regulatory framework for NBFC-MFIs was issued in 2011. This framework, *inter alia*, included certain customer protection measures for microfinance borrowers, *viz.,* limits on maximum loan amount and number of lenders, loans without collateral, no pre-payment penalty, flexibility of repayment periodicity, regulatory ceiling on interest rates, *etc*. Over the years, the landscape of microfinance sector has changed significantly due to conversion/merger of some of the large NBFC-MFIs to/with banks. Consequently, the share of NBFC-MFIs in the overall microfinance sector has now come down to 35 per cent. However, the customer protection measures as applicable to NBFC-MFIs are not applicable to other lenders extending microfinance loans to the same borrowers.

In this context, the Reserve Bank had released a consultative document on 'Regulation of Microfinance' on June 14, 2021 for feedback from all the stakeholders. Based on the feedback received, a comprehensive regulatory framework for microfinance loans applicable to all REs was issued on March 14, 2022. Besides introducing activity-based regulation in the microfinance sector, this framework is intended to deleverage the microfinance borrowers, enhance the customer protection measures, enable the competitive forces to bring down the interest rates and provide flexibility to the REs to meet the credit needs of the microfinance borrower comprehensively.

Deleveraging of Microfinance Borrowers

To address the concerns of over-indebtedness of microfinance borrowers, a common definition of 'microfinance loans' for all REs, *viz.,* collateral-free loan given to a household having annual household income up to ₹3,00,000 has been introduced to identify the target set of borrowers with certainty. Further, loan repayments

(Contd.)

[1] In the wake of Andhra Pradesh microfinance crisis, a sub-committee of the Central Board of Directors of the Reserve Bank was constituted in October 2010 to study issues and concerns in the microfinance sector under the Chairmanship of Shri Y.H. Malegam. The report was submitted to the Reserve Bank on January 19, 2011.

of the household have been capped at 50 per cent of the household income, thus linking the eligible loan amount to the borrowers' repayment capacity. Besides protecting the small borrowers from the perils of overleveraging, these measures are also expected to further financial inclusion by requiring the lenders to venture into new geographies to expand their business.

Enhancement of Customer Protection Measures

To ensure borrowers' protection from coercive recovery practices, this framework, *inter alia*, requires a mechanism by REs for engaging with borrowers facing repayment related difficulties, prohibition on harsh recovery practices, recovery at a designated/central designated place to be decided mutually by the borrower and the RE, due diligence process for engagement of recovery agents and a dedicated mechanism for redressal of recovery related grievances. Besides, certain customer protection measures applicable only to NBFC-MFIs, *viz.,* no pre-payment penalty, no requirement of collateral and flexibility of repayment periodicity for microfinance loans have been extended to all REs.

Pricing of Microfinance Loans

A standardised and simplified factsheet on pricing of microfinance loans has been introduced to enhance the borrowers' price-sensitivity, thus empowering them to make informed decisions. A uniform methodology for calculation of effective annualised interest rate has also been prescribed to maintain comparability across lenders. Besides, all REs are required to display minimum, maximum, and average interest rates charged by them. These specific measures, supplemented with other measures, *viz.,* no pre-payment penalty (to provide borrowers with the option to switch between lenders), cap on repayment obligations as a percentage of household income (thus nudging the lenders to lower interest rates to keep the instalments within the prescribed cap), keeping a check on the borrowers' over-indebtedness (thus bringing down their credit risk premium, driving lenders to enter into new areas to expand their business thus increasing competition in low-competition areas), reducing the minimum threshold of microfinance loans for NBFC-MFIs from 85 per cent of net assets to 75 per cent of total assets (thus lowering their concentration risk and in turn, cost of funds) and increasing the maximum threshold on microfinance loans for NBFCs other than NBFC-MFIs from 10 per cent to 25 per cent of total assets (thus increasing competition) are expected to increase price competition and lower interest rates in the microfinance sector.

Flexibility to Design Products/Services

Certain product specific requirements for microfinance loans of NBFC-MFIs such as limits on loan amount (overall limit of ₹1,25,000 along with a sub-limit of ₹75,000 in first cycle), tenure of loan (minimum tenure of 24 months for loans above ₹30,000), purpose of loan (minimum 50 per cent of loans for income generation activities) have been withdrawn. This will provide flexibility to NBFC-MFIs to customise their products and services to meet the needs of microfinance borrowers in a comprehensive manner.

Source: RBI.

Fair Valuation of Banks' Investment in Re-capitalisation Bonds

VI.70 At present, the investments classified under HTM portfolio are valued at acquisition cost. It is expected that the acquisition of such instruments shall be at the fair value of the security at the time of its acquisition. Accordingly, it has been clarified, *vide* circular dated March 31, 2022, that banks' investment in special securities received from the GoI towards banks' recapitalisation requirement from 2021-22 onwards shall be recognised at fair value/market value on initial recognition in HTM. Any difference between the acquisition cost and fair value arrived as above shall be immediately recognised in the profit and loss account.

Agenda for 2022-23

VI.71 For the year ahead, the Department will focus on the following key deliverables:

- Convergence with Basel III standards and issuance of final guidelines for computation of capital charge for credit risk, market risk, and operational risk;
- Issue of discussion paper on expected loss approach for provisioning;

- Issuance of guidelines on securitisation of non-performing assets;
- Issue of discussion paper on climate risk and sustainable finance;
- Issuance of guidelines on prudential and conduct issues associated with digital lending;
- Issuance of guidelines on financial statements - presentation and disclosure for rural cooperative banks;
- Issuance of part II of the guidelines on raising capital funds for primary (urban) cooperative banks;
- Guidance note on principles for sound management of operational risk and principles for operational resilience; and
- Review of the following guidelines: (a) prudential framework for resolution of stressed assets; (b) restructuring of projects under implementation by aligning it with prudential framework; (c) investment guidelines and financial statements' formats for UCBs; (d) dividend declaration policy of commercial banks; (e) liquidity management framework for commercial banks and UCBs; (f) capital adequacy framework for SFBs and Payments Banks (PBs); (g) instructions on credit and debit cards; (h) instructions on inoperative accounts, centralised hosting of data on inoperative/unclaimed deposit accounts; and (i) recommendations of the Expert Committee on the primary (urban) cooperative banks and taking steps to issue regulatory instructions based on these recommendations.

FinTech Department

VI.72 The FinTech Division[2], which was operating within the Department of Payment and Settlement Systems (DPSS) since July 2020, is now made a full-fledged Department effective January 4, 2022, with a view to give further focus to the area and facilitate innovation in FinTech sector (Box VI.2). The Department will not only promote innovation in the sector, but also identify the challenges and opportunities associated with it and address them in a timely manner. The Department will also provide a framework for further research on the subject that can aid policy interventions by the Reserve Bank. Accordingly, all matters related to the facilitation of constructive innovations and incubations in the FinTech sector, which may have wider implications for the financial sector/markets and also falling under the purview of the Reserve Bank, will now be examined by the Department. Further, issues related to inter-regulatory coordination and international coordination on FinTech would also fall in its domain.

Major Initiatives

Regulatory Sandbox - Cohorts (Utkarsh)

VI.73 Under the first cohort of the Regulatory Sandbox on "Retail Payments", products and services encompassing technologies like Near Field Communication (NFC), sound waves and Interactive Voice Response (IVR) were tested. All six products were found viable within the boundary conditions defined during testing. Under the second cohort with theme 'Cross-border Payments', eight entities underwent testing. The third cohort with theme 'MSME lending' was opened in October 2021. The theme for fourth cohort - 'Prevention and

[2] FinTech Unit was set up in the Department of Regulation (DoR) in June 2018 for acting as a central point of contact in the Reserve Bank for all activities related to FinTech.

Box VI.2
Facilitating the FinTech Innovation: The Reserve Bank's Approach

The traditional financial landscape has witnessed a fundamental change in its structure and way of functioning, mostly driven by the widespread adoption of technology in the last decade. FinTech has disrupted the Banking, Financial Services, and Insurance (BFSI) segment in its way of product structuring, back-end analytics, delivery of services, *etc*. As expected, such innovation first disrupts the market and once it establishes its constructive role, the regulators and authorities step in to regulate the space to nurture the innovation in a sustainable manner and to also mitigate any associated risks. Even though innovations claim to thrive best when free of regulations, regulations/ legislations are needed for sustainable growth of a sector.

With increasing impact of the FinTech segment on both macro (financial stability and cyber security) and micro levels (consumer protection and financial inclusion), it becomes pertinent to keep facilitating innovation while also bringing regulatory order in the FinTech space. Balancing such innovation with regulation has been the Reserve Bank's nuanced approach that has been dynamically evolving along with market developments.

To deal with the unique developments in the sector, the Reserve Bank has also made conscious efforts to reinvent its primary role as innovation facilitator. Some of the examples of direct FinTech regulation by the Reserve Bank have been in the form of regulations for Non-Banking Financial Company – Peer to Peer (NBFC-P2P) platforms, Account Aggregators, Trade Receivables Discounting System (TReDS) platforms, *etc*. The latest Report of the Working Group on Digital Lending (November 18, 2021) is another exercise to enable the creation of a comprehensive regulatory framework for the digital space.

The Reserve Bank has also assumed non-conventional central banking role through its initiatives such as regulatory sandbox, establishment of the Reserve Bank Innovation Hub, conducting hackathon, *etc.* With a view to give focused attention to its initiatives and to deal with emerging issues in the dynamically changing financial landscape, the Reserve Bank has set up a FinTech Department. Having a single touchpoint for all issues related to facilitation of constructive innovations and incubations in the FinTech sector will certainly bring the required convergence needed to have a unified approach regarding the sector.

In parallel, the central bank, while encouraging innovation, is also factoring in the emerging risks in the FinTech segment. Greater use of technology accentuates the concerns related to cyber security. Further, the involvement of BigTechs in the BFSI segment also brings along the systemic risks. All of the above have implications for financial stability and it is the endeavour of the Reserve Bank to mitigate such risks through careful choice of technology and frameworks, while providing an impetus to the FinTech in a wide array of useful applications in the financial service industry.

To handle the above issues, the Reserve Bank's approach will have to balance innovation with regulation, without compromising on any of the principles of risk management.

Source: RBI.

Mitigation of Financial Frauds' - was announced. 'On Tap' application facility for themes of closed cohort was also enabled.

Central Bank Digital Currency (CBDC)

VI.74 The Reserve Bank has been exploring the pros and cons of introduction of CBDC in India. The design of CBDC needs to be in conformity with the stated objectives of monetary policy, financial stability and efficient operations of currency and payment systems. Accordingly, the appropriate design elements of CBDCs that could be implemented with little, or no disruption are under examination. The introduction of CBDC has been announced in the Union Budget 2022-23 and an appropriate amendment to the RBI Act, 1934 has been included in the Finance Bill, 2022. The Finance Bill, 2022 has been enacted, providing a legal framework for the launch of CBDC.

HARBINGER 2021

VI.75 The Reserve Bank launched its first global hackathon 'HARBINGER 2021 - Innovation for Transformation' in November 2021, with the following four problem statements: (a) innovative, easy-to-use, non-mobile digital payment solutions for converting small-ticket cash transactions to digital mode; (b) context-based retail payments to remove the physical act of payment from payment experience; (c) alternate authentication mechanism for digital payments; and (d) social media analysis monitoring tool for detection of digital payment fraud and disruption. The hackathon has received encouraging response from domestic and international contestants.

Reserve Bank Innovation Hub

VI.76 To foster innovation in a sustainable manner and through an institutional set-up, the Reserve Bank Innovation Hub (RBIH) was set-up as a wholly owned subsidiary of the Reserve Bank. The Hub has an independent Board with eminent members from industry and academia and has its headquarters in Bengaluru.

VI.77 The Hub will collaborate with financial sector institutions, technology, industry and academic institutions and will coordinate efforts for exchange of ideas and development of prototypes related to financial innovations for creating an eco-system that would focus on promoting access to financial services and products and would further financial inclusion. It would also develop the required internal infrastructure to promote FinTech research and facilitate engagement with innovators and start-ups.

Agenda for 2022-23

VI.78 In 2022-23, the Department will focus on the following goals:

- Implementation of the roadmap laid down by 'Vision and Strategy Document on FinTech' *(Utkarsh)*;
- Exploring policy framework for digital banking, FinTech and BigTechs;
- Phased introduction of CBDC *(Utkarsh)*;
- Facilitating setting up of 75 digital banking units in 75 districts of the country; and
- Ensuring execution of key projects of importance through the Reserve Bank Innovation Hub.

4. SUPERVISION OF FINANCIAL INTERMEDIARIES

Department of Supervision (DoS)

VI.79 The Department of Supervision (DoS) is entrusted with the responsibility of supervising all SCBs [excluding regional rural banks (RRBs)], Local Area Banks (LABs), Payments Banks (PBs), SFBs, CICs, AIFIs, UCBs, NBFCs [excluding Housing Finance Companies (HFCs)] and ARCs.

Commercial Banks

VI.80 The Department took a number of measures to further strengthen both on-site and off-site supervision of the SCBs (excluding RRBs), LABs, PBs, SFBs, CICs and AIFIs during the year.

Agenda for 2021-22

VI.81 The Department had set out the following goals for supervision of SCBs during the year:

- Strengthening the on-site assessment of oversight and assurance functions, including risk and compliance culture, as also business strategy/model *(Utkarsh)* [Paragraph VI.82];
- Adoption of innovative and scalable SupTech to enhance the efficiency and efficacy of supervisory processes by modifying its capacity and capability *(Utkarsh)* [Paragraph VI.83];
- Streamlining the process of data collection from all banks and their off-site assessment and on-site supervision of select banks

based on the outcome of risk-based model developed for KYC/anti money laundering (AML) supervision (Paragraph VI.84); and

- Enhancement of Fraud Risk Management System, including improving efficacy of EWS Framework, strengthening fraud governance and response system, augmenting the data analysis for monitoring of transactions, introduction of dedicated Market Intelligence (MI) Unit for frauds and implementation of automated unique system generated number for each fraud (Paragraph VI.85 - VI.86).

Implementation Status

Oversight and Assurance Functions in Banks

VI.82 Assessment of oversight, assurance functions and business model/strategy continue to be the core areas of focus in supervision. Recognising the primacy of good governance and robust internal controls in the functioning of sound financial entities, the Reserve Bank now accords greater weight to the quality of governance and assurance functions in its supervisory assessment. The Reserve Bank's guidelines in the areas of risk management, compliance, internal audit and statutory audit aim to impart greater independence and efficacy to the various wings of assurance function in supervised entities (SEs).

SupTech

VI.83 An integrated supervisory data structure for the entities supervised by the Reserve Bank has been developed by consolidating and optimising the present framework of returns. Data collection from the banks is being further rationalised as part of Centralised Information Management System (CIMS). While technology has been leveraged in strengthening and expanding the scope of off-site analytics, market intelligence and off-site surveillance have been made more structured and are being continuously refined.

Supervising KYC/AML Compliance

VI.84 An analytical model has been developed for risk scoring and profiling of banks based on the KYC/AML data submitted by them. The risk scores arrived at through the model form the basis for off-site and on-site assessment of banks and are provided as an input for risk-based supervision (RBS) of them.

Strengthening Fraud Risk Management

VI.85 During 2021-22, the Reserve Bank carried out a study on the implementation of EWS framework in select SCBs, in collaboration with Reserve Bank Information Technology Private Limited (ReBIT). Further, the effectiveness of EWS was assessed in select banks by using Machine Learning (ML) algorithms.

VI.86 In order to make the analysis of fraud data more effective and result oriented, several improvements like unified fraud reporting system for all SEs, generation of data dashboards and system generated unique identity number for frauds reported by SEs are being implemented under the CIMS project. Further, the revised Central Fraud Registry (CFR) under the CIMS is slated to have enhanced search capabilities and will provide Application Programming Interface (API) capabilities for seamless fraud related data transfers from/to reporting entities.

Other Initiatives

Fraud Analysis

VI.87 An assessment of bank group-wise fraud cases over the last three years indicates that while private sector banks reported maximum number of frauds, public sector banks contributed maximum to the fraud amount (Table VI.1). Frauds have

Table VI.1: Fraud Cases – Bank Group-wise

(Amount in ₹ crore)

Bank Group/Institution	2019-20		2020-21		2021-22	
	Number of Frauds	Amount Involved	Number of Frauds	Amount Involved	Number of Frauds	Amount Involved
1	2	3	4	5	6	7
Public Sector Banks	4,410 *(50.7)*	1,48,224 *(79.9)*	2,901 *(39.4)*	81,901 *(59.2)*	3,078 *(33.8)*	40,282 *(66.7)*
Private Sector Banks	3,065 *(35.2)*	34,211 *(18.5)*	3,710 *(50.4)*	46,335 *(33.5)*	5,334 *(58.6)*	17,588 *(29.1)*
Foreign Banks	1,026 *(11.8)*	972 *(0.5)*	520 *(7.1)*	3,280 *(2.4)*	494 *(5.5)*	1,206 *(2.0)*
Financial Institutions	15 *(0.2)*	2,048 *(1.1)*	24 *(0.3)*	6,663 *(4.9)*	10 *(0.1)*	1,305 *(2.2)*
Small Finance Banks	147 *(1.7)*	11 -	114 *(1.6)*	30 -	155 *(1.7)*	30 -
Payments Banks	38 *(0.4)*	2 -	88 *(1.2)*	2 -	30 *(0.3)*	1 -
Local Area Banks	2 -	- -	2 -	- -	2 -	2 -
Total	**8,703** ***(100.0)***	**1,85,468** ***(100.0)***	**7,359** ***(100.0)***	**1,38,211** ***(100.0)***	**9,103** ***(100.0)***	**60,414** ***(100.0)***

-: Nil/negligible.

Note: 1. Figures in parentheses represent the percentage share of the total.
2. The above data is in respect of frauds of ₹1 lakh and above reported during the period.
3. The figures reported by banks & FIs are subject to change based on revisions filed by them.
4. Frauds reported in a year could have occurred several years prior to the year of reporting.
5. Amounts involved reported do not reflect the amount of loss incurred. Depending on recoveries, the loss incurred gets reduced. Further, the entire amount involved is not necessarily diverted.

Source: RBI Supervisory Returns.

been occurring predominantly in the loan portfolio (advances category), both in terms of number and value (Table VI.2). While the number of frauds reported by private sector banks were mainly on account of small value card/internet frauds, the fraud amount reported by public sector banks was mainly in loan portfolio.

VI.88 An analysis of the vintage of frauds reported during 2020-21 and 2021-22 shows a significant time-lag between the date of occurrence of a fraud and its detection (Table VI.3). 93.73 per cent of the frauds in 2021-22 by value occurred in previous financial years as against 91.71 per cent recorded in 2020-21.

Prompt Recognition of Impaired Assets

VI.89 The Reserve Bank continues to remain engaged with the SCBs in implementing system driven NPA identification, with a view to ensuring prompt and error-free recognition of asset impairment.

Agenda for 2022-23

VI.90 The Department has identified the following goals for supervision of SCBs/AIFIs in 2022-23:

- Generate supervisory dashboards for senior management of the Reserve Bank *(Utkarsh)*;
- Back-testing of Early Warning Indicator (EWI) model to assess its predictive power/creating a new EWI framework for SCBs; and
- Undertaking process audit of SCBs to identify weaknesses and initiate remedial measures.

Table VI.2: Frauds Cases- Area of Operations

(Amount in ₹ crore)

Area of Operation	2019-20		2020-21		2021-22	
	Number of Frauds	Amount Involved	Number of Frauds	Amount Involved	Number of Frauds	Amount Involved
1	2	3	4	5	6	7
Advances	4,608	1,81,942	3,497	1,36,812	3,839	58,328
	(52.9)	*(98.1)*	*(47.5)*	*(99.0)*	*(42.2)*	*(96.5)*
Off-balance Sheet	34	2,445	23	535	21	1077
	(0.4)	*(1.4)*	*(0.3)*	*(0.4)*	*(0.2)*	*(1.8)*
Forex Transactions	8	54	4	129	7	7
	(0.1)	-	*(0.1)*	*(0.1)*	*(0.1)*	-
Card/Internet	2,677	129	2,545	119	3,596	155
	(30.7)	*(0.1)*	*(34.6)*	*(0.1)*	*(39.5)*	*(0.2)*
Deposits	530	616	504	434	471	493
	(6.1)	*(0.3)*	*(6.8)*	*(0.3)*	*(5.2)*	*(0.8)*
Inter-Branch Accounts	2	-	2	-	3	2
	-	-	-	-	-	-
Cash	371	63	329	39	649	93
	(4.3)	-	*(4.5)*	-	*(7.1)*	*(0.2)*
Cheques/DDs, *etc.*	201	39	163	85	201	158
	(2.3)	-	*(2.2)*	*(0.1)*	*(2.2)*	*(0.3)*
Clearing Accounts	22	7	14	4	16	1
	(0.3)	-	*(0.2)*	-	*(0.2)*	-
Others	250	173	278	54	300	100
	(2.9)	*(0.1)*	*(3.8)*	-	*(3.3)*	*(0.2)*
Total	**8,703**	**1,85,468**	**7,359**	**1,38,211**	**9,103**	**60,414**
	(100.0)	***(100.0)***	***(100.0)***	***(100.0)***	***(100.0)***	***(100.0)***

-: Nil/negligible.

Note: 1. Figures in parentheses represent the percentage share of the total.
2. Refer to footnotes 2-5 of Table VI.1.

Source: RBI Supervisory Returns.

Table VI.3: Vintage of Frauds Reported in 2020-21 and 2021-22

(Amount involved >= ₹1 lakh)

2020-21		2021-22	
Occurrence of Fraud	Amount Involved (₹ crore)	Occurrence of Fraud	Amount Involved (₹ crore)
1	2	3	4
Before 2011-12	6,371	Before 2012-13	10,930
2011-12	4,365	2012-13	3,272
2012-13	5,016	2013-14	7,270
2013-14	16,143	2014-15	3,451
2014-15	14,635	2015-16	4,661
2015-16	14,167	2016-17	5,620
2016-17	14,486	2017-18	7,346
2017-18	17,293	2018-19	5,448
2018-19	12,851	2019-20	4,912
2019-20	21,432	2020-21	3,719
2020-21	11,452	2021-22	3,785
Total	**1,38,211**	**Total**	**60,414**

Note: Refer to footnotes 3 and 5 of Table VI.1.

Source: RBI Supervisory Returns.

Urban Cooperative Banks (UCBs)

VI.91 The Department undertook continuous monitoring of the UCBs during the year to ensure the development of a safe and well-managed cooperative banking sector.

Agenda for 2021-22

VI.92 The Department had set out the following goals for supervision of UCBs in 2021-22:

- Conduct information technology (IT)/cyber security examination of select scheduled UCBs *(Utkarsh)* [Paragraph VI.93 - VI.95];
- Developing the risk-based approach for KYC/AML supervision of select UCBs (Paragraph VI.96); and
- Strengthening EWS and stress testing framework for UCBs (Paragraph VI.97).

Implementation Status

Cyber Security and IT Examination of UCBs

VI.93 The technology vision document for cyber security, which was released for UCBs on September 24, 2020, envisages achieving its objective through a five-pillared strategic approach named as **GUARD**, *viz.,* **G**overnance Oversight, **U**tile Technology Investment, **A**ppropriate Regulation and Supervision, **R**obust Collaboration, and **D**eveloping necessary IT and cyber security skills set.

VI.94 During the year, initiatives were taken to enhance the monitoring of cyber security resilience of UCBs, including completion of cyber security examination of select scheduled UCBs. An exercise for ascertaining the implementation of mandatory Society for Worldwide Interbank Financial Telecommunications (SWIFT) system related controls was conducted for applicable UCBs. As an outcome of the exercise, UCBs concerned were advised to plug in the gaps observed on a priority basis.

VI.95 To address risks emanating from IT and cyber-related issues in UCBs, a system for their IT examination has been introduced in collaboration with ReBIT, that complements the regular inspection process. During 2021-22, the Reserve Bank conducted IT examination of all nine UCBs with asset size of ₹5,000 crore and above.

KYC/AML Supervision of UCBs

VI.96 In 2021-22, data templates were designed and shared with select UCBs (having asset size of ₹1,000 crore and above) for data collection. This shall be utilised for generating the risk scores and risk profiling of UCBs.

Early Warning System and Stress Testing Framework

VI.97 As part of the forward-looking assessment of stress, various supervisory tools were designed during the year to identify vulnerabilities. An EWS and a stress testing framework have been developed to capture and analyse the early indicators of stress in the UCB segment.

Agenda for 2022-23

VI.98 The Department has identified the following goals for supervision of UCBs in 2022-23:

- Roll out of Key Risk Indicators (KRIs) for UCBs to assess the cyber security risk profile;
- Extending IT Examination progressively to UCBs with asset size below ₹5,000 crore or mandating external IT reviews; and
- Analysing inter-connectedness of UCBs with companies from directorship perspective.

Non-Banking Financial Companies (NBFCs)

VI.99 The Department continued to effectively monitor the NBFCs (excluding HFCs) and ARCs registered with the Reserve Bank, with the objective to protect the interests of depositors and customers, while ensuring financial stability.

Agenda for 2021-22

VI.100 The Department had identified the following goals for supervision of NBFCs in 2021-22*:*

- Designing supervisory reporting system under Indian Accounting Standards (Ind-AS) *[Utkarsh]* (Paragraph VI.101);
- Implementation of Central Fraud Registry (CFR) for NBFCs (*Utkarsh*) [Paragraph VI.102];
- Strengthening market intelligence (MI) and off-site supervisory assessment of NBFCs (Paragraph VI.103 - VI.104);

- Developing the risk-based approach for KYC/AML supervision of select NBFCs (Paragraph VI.105); and
- Monitoring effectiveness of customer service provided by NBFCs (Paragraph VI.106).

Implementation Status

Rationalisation of Supervisory Reporting System

VI.101 In order to enhance the effectiveness of off-site assessment and the quality of data collection of NBFCs, COSMOS returns of NBFCs have been rationalised and redesigned in the new XBRL system. Also, the NBFC returns have been redesigned to align with Ind-AS accounting norms and the same will be implemented in the CIMS portal. Further, differentiated MIS reports have been designed for off-site surveillance of NBFCs on an ongoing basis in the CIMS portal.

Central Fraud Registry (CFR) for NBFCs

VI.102 An XBRL based platform has been developed during the year for online reporting of frauds by NBFCs. Meanwhile, the development of unified fraud reporting format for all SEs (including NBFCs) under CIMS project has commenced. The unified fraud reporting format hosts an automated system of assigning unique ID for all individual accounts, which have been reported as frauds.

Enhanced Supervisory Assessment

VI.103 The Reserve Bank has set-up a centralised supervisory intelligence cell which prepares a monthly MI report for SEs (including NBFCs) by consolidating information from various external sources (brokers reports, rating downgrades and negative news mapped with internal CRILC data), internal sources (*Sachet* portal and monthly complaint analysis) and inputs received from other sources.

VI.104 Systemically important NBFCs as well as deposit taking NBFCs are closely monitored for any incipient signs of weakness and wherever required, the Reserve Bank undertakes on-site examination/scrutiny to assess their position. Weakness/deficiencies observed are immediately taken up with the management of the NBFCs for time-bound corrective action. The Reserve Bank also maintains oversight on the corrective actions taken by the companies.

KYC/AML Supervision of NBFCs

VI.105 Data templates were designed and shared with select NBFCs for data collection in 2021-22. These data will be utilised for generating the risk scores and risk profiling of NBFCs.

Customer Service by NBFCs

VI.106 The compliance with prescribed guidelines is checked during onsite assessment on sample basis and non-compliances, if any, are brought out in inspection reports of respective NBFCs. Adherence to Fair Practices Code and quality of customer services were also scrutinised for digital lending NBFCs and NBFCs attached to digital lenders having substantial customer interface, on a sample basis.

Agenda for 2022-23

VI.107 The Department has identified the following goals for supervision of NBFCs in 2022-23:

- Review the supervisory framework and the return format for NBFCs under Ind-AS based on the regulatory guidance in the matter *(Utkarsh)*;
- Make changes in sectoral assessment in the context of recently released scale-based regulatory framework for NBFCs;

- Roll out KRIs for NBFCs to assess their cyber security risk profile through off-site design of KRIs; and
- Roll out of IT examination for select NBFCs.

Supervisory Measures for All Supervised Entities (SEs)

VI.108 A unified DoS has been operationalised in which the supervision of banks, UCBs and NBFCs is being undertaken in a holistic manner under one umbrella Department. This will improve handling of issues arising from regulatory/supervisory arbitrage, interconnectedness and information asymmetry.

Agenda for 2021-22

VI.109 The Department had set out the following supervisory goals for all SEs in 2021-22:

- Strengthening cyber security monitoring mechanism for SEs (*Utkarsh*) [Paragraph VI.110 - VI.111];
- Issuing of guidelines on IT governance, risk, controls and assurance practices (Paragraph VI.110 - VI.111);
- Integrate supervisory data structure for the Reserve Bank's REs by reviewing and consolidating the present framework of returns (*Utkarsh*) [Paragraph VI.112];
- Introduce supervisory data analytics with the capability for market surveillance, misconduct analysis, micro/macro prudential analysis (*Utkarsh*) [Paragraph VI.113]; and
- The CoS, under the guidance of Academic Advisory Council (AAC), will plan and develop curricula of all programmes based on identified areas where skill building/up-skilling are required, benchmark the programmes with international standards/best practices, and develop appropriate teaching methods (Paragraph VI.114).

Implementation Status

IT and Cyber Security Related Developments

VI.110 The Reserve Bank has advised all SCBs (excluding foreign banks and RRBs) to identify critical infrastructure as per the National Critical Information Infrastructure Protection Centre (NCIIPC) guidelines issued in 2019. Cyber KRI return has been revised to capture cyber risks faced by banks in a better manner.

VI.111 The Reserve Bank has taken several steps to enhance monitoring of cyber security preparedness of SEs. Master Directions on Digital Payment Security Controls have been issued. Guidelines on usage of new technology, *i.e.,* cloud services and security, and information technology governance, risk, controls and assurance practices are being drafted for placing on the Reserve Bank's website for public comments. Further, the Reserve Bank conducted a phishing simulation exercise for select SEs to assess email security and cyber security preparedness. Based on the exercise, the SEs whose systems needed attention, were advised to implement a definitive action plan with specific timelines.

Supervisory Data Analytics

VI.112 The offsite supervisory data are currently used in a variety of ways to aid policy formulation, identify incipient stress, ascertain status of borrowers across lenders, and check compliance to regulatory stipulations, among others. In addition to CRILC and CFR, the data capabilities of the Reserve Bank are being further upgraded through the revamped data warehouse, *viz.,* CIMS. New integrated return formats have been developed after thorough review and rationalisation of the extant return formats.

VI.113 The Reserve Bank has developed a system for early identification of vulnerabilities to take timely and proactive action. It has been deploying data analytics to the quarterly offsite returns to provide an effective and more comprehensive inputs to onsite supervisory teams. An early warning framework - which tracks macroeconomic variables, and market and banking indicators - complements the analysis. Bank-wise as well as system-wide supervisory stress testing adds a forward-looking dimension for identification of vulnerable areas. During the year, a micro-prudential analytical study as an input to the RBS model along with macro-prudential analysis was conducted for identification of stressed sectors. Market surveillance and misconduct analysis are also being undertaken on an ongoing basis.

College of Supervisors (CoS)

VI.114 In order to enhance the skill set of supervisory and regulatory personnel, the College of Supervisors was set up in May 2020. During the year, a total of 43 training programmes were conducted by CoS (Box VI.3).

Box VI.3
Supervisory Skilling and Empowerment

After the creation of the unified Department of Supervision (DoS) and the unified Department of Regulation (DoR), various initiatives were taken to enable supervisors to undertake ongoing surveillance of the financial system by creating the enabling framework, internal processes, work environment and the right skill sets in sync with the growing complexities in the financial business.

The Reserve Bank has set up a College of Supervisors (CoS) to augment and reinforce supervisory skills among its regulatory and supervisory personnel, both at entry level and on a continuous basis. Initially promulgated in virtual mode in May 2020, the college has been formally operationalised with effect from January 2021. The college is headed by a full-time Director, who is supported by a six-member Academic Advisory Council (AAC), which guides in identifying areas where skill building/up-skilling is required, plans and develops curricula for all programmes, benchmarks the programmes with international standards/ best practices, develops appropriate learning methods, *etc.*

CoS has conducted programmes, workshops and seminars on a wide range of topics relevant for the officers dealing with its regulatory, supervisory, enforcement and financial stability functions at the Reserve Bank and at a few other jurisdictions and to those in the functions of risk, compliance and audit in the Reserve Bank regulated entities. These include programmes on: nuanced techniques of on-site supervision, off-site surveillance of financial entities for smelling “distress” early, digital business models, use of analytics for supervision and regulation, technological foundations and building blocks of FinTech, RegTech & SupTech, leadership, team building & communication skills in supervisory processes, *etc.* During 2021-22, more than 1,700 participants benefitted through 43 training programmes. The focus of CoS is also to upskill the newly recruited personnel by way of foundation courses to develop them suitably and enable them to face newer complex challenges in the future. The programmes were imparted with the help of the best Indian and global faculty using an interactive, case-study based pedagogy. Further, as part of continuous learning programmes, CoS has also organised thematic webinars, topical panel discussions and fire side ‘discussion with the authors’.

Going forward, CoS purports to deploy advanced learning tools and offer e-learning modules and certification courses, besides continuing to impart training in virtual and physical modes. A total of 55 programmes and 12 seminars/webinars have been planned for the year 2022-23, including select collaborative learning programmes with international institutions such as ECB, IMF, BIS, *etc.*

Source: RBI.

Major Developments

Conduct of KYC/AML and Fraud Governance Related Workshops

VI.115 In order to give further impetus to strengthening the KYC/AML and Fraud Governance framework in the banks, UCBs and NBFCs, several workshops were conducted for all the banks and select UCBs/NBFCs through virtual modes in November 2021 and in February 2022. The workshops for banks were also attended by the officials of Indian Banks' Association (IBA). Further, the Reserve Bank conducted several workshops for the senior management of NBFCs and UCBs, for sensitising them on better fraud management, including monitoring and reporting.

Revised Prompt Corrective Action (PCA) Framework for SCBs

VI.116 A revised PCA framework was issued with an objective to enable timely supervisory intervention and to require SEs to initiate and implement remedial measures in a judicious manner, to contain build-up of risks and to put the identified entities on a path of restoration of their financial health. The revised PCA framework is also intended to act as a tool for effective market discipline.

PCA Framework for NBFCs

VI.117 Considering the growing size of NBFCs and their substantial interconnectedness with other segments of the financial system, a PCA framework for NBFCs was introduced to further strengthen the supervisory tools applicable to them.

Rationalisation of Extant Off-site Returns of UCBs

VI.118 A Working Group (WG) has reviewed and re-designed the regulatory and supervisory returns for UCBs. The exercise, *inter alia*, included reduction in the number of returns and addition of new data items, wherever warranted, to capture the key developments related to the UCBs' major business areas. The rationalised set of returns are purported to be rolled out in the CIMS portal.

Strengthening Audit Mechanism for UCBs

VI.119 Beginning with 2021-22, the Reserve Bank has prescribed additional certification/reporting requirements for the statutory auditors of UCBs. Nineteen certification/reporting requirements were prescribed for the year 2021-22. These requirements were conveyed to UCBs for their submission to the Reserve Bank.

Risk Based Internal Audit (RBIA) Guidelines for Select HFCs and NBFCs

VI.120 RBIA guidelines were extended to all deposit-taking HFCs and non-deposit taking HFCs with asset size of ₹5,000 crore and above *vide* circular dated June 11, 2021. The circular intends, *inter alia*, to provide the essential requirements for a robust internal audit function, which includes sufficient authority, stature, independence, resources and professional competence, so as to align these requirements in larger NBFCs/UCBs with those stipulated for SCBs. It is expected that the adoption of RBIA by such entities would help to enhance the quality and effectiveness of their internal audit system.

Harmonised Guidelines on Appointment of Statutory Central Auditors (SCAs)/Statutory Auditors (SAs)

VI.121 The Department issued harmonised guidelines on appointment of SCAs/SAs of commercial banks (excluding RRBs), UCBs and NBFCs (including HFCs) *vide* circular dated April 27, 2021. These guidelines provide necessary instructions regarding the number of auditors, their eligibility criteria, tenure, and rotation, while ensuring the independence of auditors. These guidelines will also ensure that the statutory auditors are appointed in a timely, transparent, and effective manner and strengthen the audit system in REs.

Core Financial Services Solution for NBFCs

VI.122 During the year, the Reserve Bank mandated certain categories of NBFCs to implement 'Core Financial Services Solution (CFSS)', akin to the Core Banking Solution (CBS) adopted by banks, which shall provide for seamless customer interface in digital offerings and transactions relating to products and services with anywhere/anytime facility, enable integration of NBFCs' functions, provide centralised database and accounting records, and be able to generate suitable MIS, both for internal purposes and regulatory reporting.

Various Analytical Studies

VI.123 During the year, the Department conducted various analytical studies on contemporary topics such as assessment of climate change related risks for banks, payment system data, National Automated Clearing House (NACH), Legal Entity Identifier (LEI), corporate insolvency regime, effectiveness of macroprudential policies, prediction of first time NPAs, Ind-AS accounting norms' impact on NBFCs, digitisation in UCBs, *etc*.

Supervisory Colleges for Internationally Active Banks

VI.124 The Reserve Bank monitors the overseas operations of Indian banks through a system of offsite returns and teleconferences with overseas regulators. For banks that are internationally active, there is a system of supervisory colleges, which provides a forum for exchanging supervisory concerns and developments in different jurisdictions. In addition, the Department holds workshop with overseas regulators for sharing of best practices and recent developments in supervision.

Agenda for 2022-23

VI.125 The Department proposes to achieve the following goals for supervision of all SEs in 2022-23:

- Implementation of risk-based approach (RBA) for KYC/AML supervision of select UCBs and NBFCs;
- Issue of guidelines on compliance function and appointment of Chief Compliance Officers (CCOs) in NBFCs and UCBs;
- Unified fraud reporting system for all SEs;
- Undertaking cyber security enhancement measures;
- Further strengthening of audit mechanisms in SEs; and
- Scaling-up of operations of the CoS for capacity development and skill enhancement of supervisory staff.

Enforcement Department (EFD)

VI.126 Enforcement Department was set up in April 2017 with a view to separate enforcement action from supervisory process and to put in place a structured, rule-based approach to identify and process the violations by the REs of the applicable statutes and the rules, regulations, guidelines and orders made, directions issued, and conditions imposed thereunder by the Reserve Bank, and enforce the same consistently across the Reserve Bank. The objective of enforcement is to ensure compliance by the REs with laws, within the overarching principle of ensuring financial stability, public interest and consumer protection.

Agenda for 2021-22

VI.127 The Department had set out the following goals for 2021-22:

- Implementation of the EFD's business process application and database of enforcement actions *(Utkarsh)* [Paragraph VI.128];
- Review of enforcement policy and standard operating procedures (SOPs); and examining undertaking of enforcement action against credit information companies (non-bank and non-NBFC) [Paragraph VI.129];
- Review of existing practices and (business) processes to identify bottlenecks affecting timeliness in enforcement action and improving coordination with DoS and DoR, to shorten the time taken for enforcement action (Paragraph VI.130);
- Increased interaction and trainings aimed at improving consistency in decisions across regional offices (ROs) and putting in place an arrangement for sharing of information across EFD, ROs, as also with the central office (CO) [Paragraph VI.131]; and
- Improving coordination with the National Bank for Agriculture and Rural Development (NABARD) and putting in place a coordination mechanism with the National Housing Bank (NHB) to facilitate effectual undertaking of enforcement action against HFCs (Paragraph VI.132).

Implementation Status

VI.128 The Department is endeavouring to implement business process application by June 2022.

VI.129 Enforcement policy and SOPs are in the process of being reviewed, based on the experience gained by the Department in the previous years, and also to include credit information companies (non-bank and non-NBFC) under the framework.

VI.130 In order to improve coordination between EFD and the regulatory and supervisory departments, the Department has put in place a mechanism for interaction on an ongoing basis and also a coordination structure at the level of Chief General Manager of the departments. Further, the Department has also designed messaging templates for sharing of information, which would obviate the need for collecting additional information from regulated entities and internal departments while processing cases.

VI.131 With a view to ensure consistency in enforcement actions, training sessions were conducted for the ROs of the Department. Additionally, an information sharing mechanism between CO and ROs was put in place for sharing of enforcement actions and best practices.

VI.132 A formal coordination mechanism with NABARD and NHB was put in place to facilitate effective undertaking of enforcement action against the REs, which were supervised by these institutions.

Other Initiative

VI.133 During April 2021-March 2022, the Department undertook enforcement action against 182 REs (189 penalties) and imposed an aggregate penalty of ₹65.32 crore for non-compliance[3] with provisions/contravention of certain directions issued by the Reserve Bank from time to time through various circulars (Table VI.4).

Agenda for 2022-23

VI.134 For the year ahead, the Department proposes to achieve the following goals:

- Towards facilitating improvement in compliance culture by REs, a system of preparing report on enforcement actions at half yearly intervals for dissemination of additional information amongst REs shall be put in place;
- Seminars focused on sensitisation of compliance officers of REs shall also be organised;
- The Department will provide inputs for compliance testing of REs to DOS, NHB and NABARD for frequently observed contraventions identified using the business process application so as to improve the compliance culture in REs; and
- The Department will examine the feasibility of a scale-based approach to enforcement.

Table VI.4: Enforcement Actions (April 2021-March 2022)

Regulated Entity	No. of Penalties	Total Penalty (₹ crore)
1	2	3
Public Sector Banks	13	17.55
Private Sector Banks	16	29.38
Cooperative Banks	145	12.10
Foreign Banks	4	4.25
Payments Banks	-	-
Small Finance Banks	1	1.0
NBFCs	10	1.03
Total	**189**	**65.32**

-: Nil.
Source: RBI.

5. CONSUMER EDUCATION AND PROTECTION

Consumer Education and Protection Department (CEPD)

VI.135 The Consumer Education and Protection Department (CEPD) frames policy guidelines for protection of the interests of customers of the Reserve Bank regulated entities; monitors the functioning of grievance redress mechanism of REs; undertakes oversight on the performance of the ombudsman offices as well as “the Reserve Bank-Integrated Ombudsman Scheme, 2021” (RB-IOS); and creates public awareness on safe banking practices, extant regulations on customer service and protection, as also the avenues for redress of customer complaints.

Agenda for 2021-22

VI.136 The Department had set out the following goals under *Utkarsh* for 2021-22:

- Formulating policy/scheme for handling complaints not covered under the ombudsman schemes (Paragraph VI.137);
- Efforts for inclusion of safe banking practices in educational curriculum (Paragraph VI.138); and

[3] Illustratively, some of them include exposure norms and IRAC norms; Reserve Bank of India [know your customer (KYC)] Directions, 2016; Reserve Bank of India (frauds classification and reporting by commercial banks and select FIs) Directions, 2016; circulars on cyber security framework in banks; membership of credit information companies (CICs); lending to NBFCs; depositor education and awareness fund scheme, 2014; Non-Banking Financial Company Returns (Reserve Bank) Directions, 2016; and master circular on board of directors-UCBs.

- Extension of Internal Ombudsman (IO) scheme to financially sound and well managed UCBs and RRBs (Paragraph VI.139).

Implementation Status

VI.137 The erstwhile ombudsman schemes[4] of the Reserve Bank have been merged into RB-IOS with effect from November 12, 2021. There are two sets of complaints that do not fall under the RB-IOS: (i) complaints against entities not covered under RB-IOS (*i.e.,* non-scheduled UCBs having deposit size of less than ₹50 crore, NBFCs with asset size below ₹100 crore, All India Financial Institutions, Credit Information Companies, *etc.*), which are handled by the Consumer Education and Protection Cells (CEPCs) set up at the ROs of the Reserve Bank across the country; and (ii) complaints appearing in the exclusion list of the RB-IOS (complaints against management, policy matters, *etc.*). Such complaints are forwarded to the regulatory/supervisory departments of the Reserve Bank or to the concerned regulators/ authorities, as the case may be, under advice to the complainant. Detailed guidelines for handling the complaints not covered under the RB-IOS are in place.

VI.138 The Department had formulated a detailed framework for financial education with a focus on customer protection in September 2020. Content for enhancing financial awareness and "safe banking practices", have been taken up for inclusion in the education curriculum of school students in coordination with the National Centre for Financial Education (NCFE) through the Financial Inclusion and Development Department (FIDD) of the Reserve Bank.

VI.139 The proposal to bring in select UCBs and RRBs under the ambit of IO scheme was thoroughly examined. It was decided that the volume and nature of customer complaints received against UCBs and RRBs do not warrant institutionalising an IO mechanism for these entities at present. The volume and nature of customer complaints against REs of the Reserve Bank are monitored on a regular basis and a review on the requirement for IO in UCBs and RRBs would be undertaken again, if required, at a future date.

Major Developments

Launch of the RB-IOS, 2021

VI.140 In terms of the recommendations of an in-house committee to review the functioning of the ombudsman schemes, the three erstwhile ombudsman schemes, namely, (i) Banking Ombudsman Scheme, 2006; (ii) Ombudsman Scheme for Non-Banking Financial Companies, 2018; and (iii) Ombudsman Scheme for Digital Transactions, 2019 were integrated into a single scheme, *viz.,* RB-IOS, 2021, which was launched on November 12, 2021 by the Hon'ble Prime Minister of India (Box VI.4). This scheme has been framed in exercise of the powers conferred upon the Reserve Bank under Section 35A of the Banking Regulation Act, 1949 (10 of 1949), Section 45L of the Reserve Bank of India Act, 1934 (2 of 1934), and Section 18 of the Payment and Settlement Systems (PSS) Act, 2007 (51 of 2007).

[4] Refer to Paragraph VI.140.

Box VI.4
New Initiatives towards Strengthening of Grievance Redress Mechanism for Customers of Regulated Entities

The Reserve Bank has continuously been taking steps to increase the financial ease and convenience for the common man. One important step in this direction is the adoption of 'One Nation – One Ombudsman' system under the "Reserve Bank - Integrated Ombudsman Scheme" (RB-IOS), 2021, launched by the Hon'ble Prime Minister of India on November 12, 2021. The Scheme integrates the three erstwhile ombudsman schemes of the Reserve Bank and intends to cover, in a phased manner, all REs to resolve their customers' grievances in time, without any hassle.

In the words of the Hon'ble Prime Minister, "*the strength of democracy is determined by how strong, sensitive and proactive the grievance redress system is. With the RB-IOS, 2021, the 'depositors-first' commitment has gained strength. Through this scheme, the account holders of 44 crore loan accounts and 220 crore deposit accounts shall get direct relief for their grievances".*

Under the new scheme, the customers of covered REs across the country can lodge, track and monitor their complaints with the Reserve Bank Ombudsman on a single online platform, *viz.,* Complaint Management System (CMS) or through a single physical/email address at the Centralised Receipt and Processing Centre (CRPC) in Chandigarh. Further, all complaints on grounds of "deficiency of service" against these REs are now admissible as against a specific list of grounds under the erstwhile schemes.

A facility for attending conciliation meetings on virtual mode has also been enabled to aid complainants to present themselves from any remote location. The new scheme has delegated powers to the newly introduced position of Deputy Ombudsman for resolution of certain types of complaints in order to improve the turn-around time for redress.

A Contact Centre with a toll-free number (14448) has been operationalised at the CRPC to assist complainants in lodging complaints and providing information pertaining to their complaints/grievance redress mechanism of the Reserve Bank, in nine regional languages, apart from Hindi and English.

Further initiatives, to strengthen the grievance redress mechanism include (i) the formulation of a comprehensive framework for strengthening the internal grievance redress machineries in banks, put in place *vide* circular dated January 27, 2021; and (ii) extension of the IO scheme, in line with that of banks and non-bank system participants, to select NBFCs. Action for usage of advanced technological tools for quicker redress and efficient complaint management is also underway.

Source: RBI.

Extension of the IO Scheme to NBFCs

VI.141 Deposit-taking NBFCs (NBFCs-D) with 10 or more branches and Non-Deposit taking NBFCs (NBFCs-ND) with asset size of ₹5,000 crore and above, having public customer interface were directed in November 2021 to appoint an IO at the apex of their internal grievance redress mechanism within a period of six months from the date of issue of the direction. Select categories of NBFCs not having public customer interface have been exempted. The IO mechanism was mandated earlier for banks in the year 2018 and non-bank payment system participants in 2019. The direction covers, *inter alia*, the appointment/tenure, role and responsibilities, procedural guidelines, and oversight mechanism for the IO. All complaints that are wholly or partially rejected by the internal grievance mechanism of the RE, except on aspects related to frauds, and complaints involving commercial decisions, internal administration, pay and emoluments of staff, sub-judice matters, *etc.*, are required to be reviewed by the IO before a final decision is conveyed to the complainant. The objective of the IO scheme is to enable satisfactory resolution of complaints at the end of the REs themselves so as to minimise the need for the customer to approach other fora for redress.

Returns from Banks on Complaints Received from Customers

VI.142 In terms of the recommendation by the Committee on 'Medium-term Path on Financial Inclusion' (Chairman: Shri Deepak Mohanty), constituted by the Reserve Bank, "*Banks may be required to submit the consolidated status of number of complaints received and disposed off under broad heads to the CEPD, and the Reserve Bank, in turn, can release an annual bank-wise status in the public domain".* The CEPD developed an XBRL returns format for banks to submit, on quarterly basis, consolidated and comprehensive information on complaints received and disposed off by them. Data on complaints received and handled by banks shall thereafter be analysed at CEPD, and also published in an appropriate form.

Efforts towards Customer Awareness (Utkarsh)

VI.143 The Department conducted multi-media campaigns on the ombudsman schemes, basic savings bank deposit accounts, safe digital banking practices, and facilities for senior citizens and differently abled persons, *etc*. The Offices of the Reserve Bank of India Ombudsman (ORBIOs) conducted town hall events wherein ombudsman schemes and important customer service issues were discussed with members of public and REs. Additionally, awareness programmes were also conducted by the ORBIOs with a focus on specific groups such as servicemen, school/college students, customer groups, *etc*. Messages relating to safe banking practices, cyber frauds, ombudsman schemes, and CMS were also hosted on the Reserve Bank's website, '*RBI Kehta Hai*' and CMS webpages. The Reserve Bank published on its website, BE(A)WARE – a booklet on the common *modus operandi* used by fraudsters and precautions to be taken while carrying out various financial transactions. On the World Consumer Rights Day on March 15, 2022, an "Ombudsman Speak" programme was conducted in regional multi-media channels across the country to sensitise consumers/customers in the remotest areas on the RBI grievance redress mechanism as also on safeguards for protection against digital and electronic frauds.

Strengthening the Internal Grievance Redress Mechanism of Banks

VI.144 A framework for strengthening the internal grievance redress mechanism of banks was implemented and the four pillars of the framework, *viz.,* enhanced disclosures; recovery of cost from banks for redressal of complaints by ombudsman under certain conditions; intensive review of banks grievance redress mechanism; and supervisory/regulatory actions continue to be in force during the financial year.

Agenda for 2022-23

VI.145 The Department proposes the following agenda under *Utkarsh* for 2022-23:

- Enhanced nation-wide awareness drive for protecting customers from financial frauds;
- Harnessing advanced technological tools for strengthening customer protection and improving expediency of grievance redressal by the Reserve Bank;
- Broadbase and upgrade the Reserve Bank Contact Centre at Chandigarh to include disaster recovery and business continuity solutions;
- Set up a committee for review of the customer service standards and practices in REs and the Reserve Bank guidelines in the matter;
- Construction and dissemination of a Consumer Protection Index (CoPI); and

- Review of the framework for "Strengthening of Grievance Redress Mechanism in Banks".

Deposit Insurance and Credit Guarantee Corporation (DICGC)

VI.146 Deposit insurance 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. The DICGC is wholly owned by the Reserve Bank of India and is constituted under the DICGC Act, 1961. The deposit insurance extended by the DICGC covers all commercial banks including local area banks (LABs), PBs, SFBs, RRBs and cooperative banks. The number of registered insured banks as on March 31, 2022 stood at 2,043, comprising 141 commercial banks (including 43 RRBs, 2 LABs, 6 PBs and 12 SFBs) and 1,902 cooperative banks (33 StCBs, 352 DCCBs, and 1,517 UCBs).

VI.147 With the current limit of deposit insurance in India at ₹5 lakh, the number of fully protected accounts (256.7 crore) at end-March 2022 constituted 97.9 per cent of the total number of accounts (262.2 crore), as against the international benchmark of 80 per cent. In terms of amount, the total insured deposits of ₹81,10,431 crore as at end-March 2022 constituted 49.0 per cent of assessable deposits of ₹1,65,49,630 crore, as against the international benchmark[5] of 20 to 30 per cent. At the current level, insurance cover would be over 3.3 times per capita income in 2021-22.

VI.148 The 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 and banks under the Reserve Bank's 'All Inclusive Direction' (AID). During the period April 2021 to March 2022, the Corporation has settled five main claims of liquidated banks for an amount aggregating to ₹1,124.1 crore and 12 supplementary claims of liquidated banks aggregating to ₹101.0 crore. The aggregate of main claims and supplementary claims in respect of nine urban co-operative banks amounted to ₹1,225.1 crore under Section 17 (1) of the DICGC Act 1961. In addition to the claims settled as mentioned above, an amount of ₹3,791.6 crore was provided to Unity Small Finance Bank (USFB) for making payment to the depositors of erstwhile Punjab and Maharashtra Co-operative Bank Ltd (PMCBL), pursuant to the merger of PMCBL with USFB with effect from January 25, 2022 under Section 16 (2) of the DICGC Act, 1961. Thus, the total claims settled on account of liquidated banks/merger scheme amounted to ₹5,059.2 crore[6].

VI.149 A major event during 2021-22 was the amendment to the DICGC Act, 1961. The mandate given by the GoI through this amendment (interim payments) is not commonly known in other jurisdictions (Box VI.5). The claims settled under this channel in the case of 22 urban co-operative banks under AID amounted to ₹3,457.4 crore as on March 31, 2022. Overall, the Corporation has settled aggregate claims of ₹8,516.6 crore under

5 IADI (2013), Enhanced Guidance for Effective Deposit Insurance Systems: Deposit Insurance Coverage, Guidance Paper, March, available at www.iadi.org.

6 Inclusive of main claims settled under the expeditious claims settlement policy of the Corporation for an amount of ₹42.6 crore in case of three co-operative banks.

Box VI.5
Salient Features of Amendments to the DICGC Act, 1961

The Deposit Insurance and Credit Guarantee Corporation Act, 1961 was amended as per the notification on August 13, 2021. The amendments came into force from September 1, 2021.

A key amendment to the Act mandates that interim insurance payment to depositors is to be completed within 90 days from the date of imposition of AID by the Reserve Bank. The insured bank has to submit claims after imposition of such restriction within 45 days, and the Corporation has to get the claims verified within 30 days and pay the depositors within the next 15 days. In case the Reserve Bank finds it expedient to bring a scheme of amalgamation/ compromise or arrangement/reconstruction, the liability of the Corporation will get extended by a further period of 90 days. Some of the other amendments are as follows: (i) the DICGC may raise the limit of 15 paise per ₹100 of deposits on insurance premium with the prior approval of the Reserve Bank, considering its financial position and the interests of the banking sector in the country as a whole; and (ii) the DICGC, with the approval of its Board, may defer or vary the repayment period for the insured bank to discharge its liability to the DICGC and charge a penal interest of 2 per cent over the repo rate in case of delay. Consequent to these amendments, regulations 21A and 22A have been incorporated in the DICGC's general regulations with effect from September 22, 2021 on the procedure relating to claims settlement and the specifying of the time period to insured banks for recovery of claims paid.

These amendments are expected to have a favourable impact on the confidence of the public in the banking system, particularly in UCBs, and will be helpful in maintaining financial stability.

Source: The Gazette of India (CG-DL-E-13082021-228988 and CG-MH-E-01102021-230102) and DICGC.

different channels as mentioned above during the year 2021-22. The size of the DIF stood at ₹1,46,842 crore as on March 31, 2022 yielding a reserve ratio of 1.81 per cent.

6. CONCLUSION

VI.150 In 2021-22, the Reserve Bank kept a close watch on the potential disruptions to the financial system emanating from the resurgence of the pandemic while suitably adjusting its regulatory response. The steps taken for increasing credit flow to corporates as well as small businesses appear to have been efficacious. Simultaneously, the year also witnessed consumer education and protection ascending the hierarchy of priorities in the Reserve Bank's regulatory and supervisory action plans; several initiatives were taken spanning various dimensions such as the creation of a unified consumer grievance redressal mechanism, a comprehensive regulatory framework for microfinance loans, time bound interim payments in the case of deposit insurance, and the promotion of financial awareness and safe banking practices. Measures to harness technology and big data analytics for effective supervision and efficient customer services were also put in place. Efforts in the direction of minimising policy arbitrage and ensuring adequate risk management continue to evolve, enabling the Reserve Bank to intervene timely and take proactive action when necessary. In sum, these will strengthen the regulatory and supervisory framework of SCBs, cooperative banks and NBFCs in line with the global best practices and will also enhance public's confidence in the banking system, especially in the cooperative segment, with crucial implications for financial stability. Importantly, the Reserve Bank is also preparing to adopt a forward-looking, comprehensive, and strategic approach to climate-related financial risks.

VII PUBLIC DEBT MANAGEMENT

As the debt manager of the central and state governments, the mandate of the Reserve Bank is to manage the government market borrowing programme in a non-disruptive manner while keeping in mind the objective of cost optimisation, risk mitigation and market development. The Reserve Bank employed a combination of measures to maintain the evolution of the orderly market conditions. While the G-sec yields hardened during the year, the weighted average coupon on the entire outstanding debt stock decreased. The weighted average maturity of primary issuances increased to 16.99 years from 14.49 years in the previous year. During the year, a noteworthy milestone achieved was the launch of the Retail Direct Scheme - a significant step in the development of the G-sec market by offering retail investors direct access to the G-sec market.

VII.1 The Internal Debt Management Department (IDMD) of the Reserve Bank is entrusted with the responsibility of managing the domestic debt of the central government by statute *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 said Act. Further, short-term credit is provided up to three months to both central and state governments in the form of Ways and Means Advances (WMA) to bridge temporary mismatch in their cash flows, as laid down in terms of Section 17(5) of the RBI Act, 1934.

VII.2 During the past two years, financing needs of governments have been rising as countries strive to bring COVID-19 under control leading to governments' debt reaching record high levels, globally. Larger recourse to market borrowing was the common trend across countries. While the cost of borrowings declined in general, reflecting the impact of quantitative easing stance of the central banks and the low policy interest rates, significant increase in risk aversion and resultant preference for government securities (G-sec) led to a larger demand for these securities since 2020-21. In line with the global trend, Government of India (GoI) also responded to the pandemic challenges and increased government expenditure on health and social sector. At the same time, revenue receipts declined due to cliff effects of the pandemic on economic activity. Consequently, fiscal deficit widened necessitating an increase in the size of the borrowing programme significantly during 2020-21 and 2021-22 in order to render counter-cyclical fiscal policy support and provide targeted support to segments deeply hit by the pandemic. Although government borrowings contracted during 2021-22 as compared to the previous year, they remained high as compared to the pre-COVID year, *i.e.*, 2019-20. Unwinding of accommodative monetary policy by major central banks, rise in crude oil prices and inflationary expectations led to some pressure on medium to long-term yield during 2021-22. The Reserve Bank had to continuously review and adapt its debt management strategy, in view of the pressure on yield from elevated inflation and expectations of gradual withdrawal of excess liquidity, while striving to ensure that the higher market borrowing by government is conducted in a non-disruptive manner.

VII.3 Notwithstanding the global and domestic headwinds impacting the Indian G-sec market, the Reserve Bank as debt manager for the central and state governments ensured market borrowing in a non-disruptive manner with objectives of cost optimisation, risk mitigation and market development while ensuring a stable debt structure. During the year 2021-22, a noteworthy milestone achieved was the launch of the 'Retail Direct Scheme'. The Scheme is a significant step in the development of the G-sec market while offering retail investors direct access to the G-sec market.

VII.4 The remainder of the chapter is arranged in three sections. Section 2 presents the implementation status in respect of the agenda for 2021-22. Section 3 covers major initiatives to be undertaken in 2022-23, followed by a summary in the last section.

2. Agenda for 2021-22

VII.5 The Department had set out the following goals for 2021-22:

- Consolidation of debt through calendar-driven, auction-based switches and buyback operations along with re-issuances of securities to augment liquidity in GoI securities market and facilitate fresh issuance (Paragraph VII.6 - VII.9);
- Permit retail investors to open gilt securities account directly with the Reserve Bank under the 'Retail Direct Scheme' in order to encourage greater retail participation through the improvement in ease of access to the G-sec market (Paragraph VII.10);
- Improve overall liquidity in the G-sec market by enhancing the role of Primary Dealers (PDs) in market making (*Utkarsh*) [Paragraph VII.10];
- Developing a module in *e-Kuber* for capturing gilt level data to improve the existing market infrastructure for the government securities market besides enabling primary and secondary market settlement directly at the gilt account level for facilitating effective monitoring and surveillance of the market (*Utkarsh*) [Paragraph VII.11];
- Review of Subsidiary General Ledger (SGL) Account and Constituents' Subsidiary General Ledger (CSGL) guidelines for gilt module development and gilt account settlement (Paragraph VII.12);
- Review of value free transfer (VFT) guidelines (Paragraph VII.13);
- Review of operational guidelines on GoI savings bond in order to account for online subscriptions as well as incorporating better system for risk management (Paragraph VII.14);
- Continuing efforts to enhance quality of data and consolidating data on public debt (Paragraph VII.15);
- Automating monitoring of GoI's consent to states for open market borrowings (OMBs) – developing a centralised system in *e-Kuber* to record these consents for better control, monitoring and management information system (MIS) purposes (Paragraph VII.16);
- Implementation of Separate Trading of Registered Interest and Principal Securities (STRIPS)/reconstitution facility for State Development Loans (SDLs) *[Utkarsh]* (Paragraph VII.17);
- Hiving-off of servicing of compensation bonds issued in physical forms to state treasuries (*Utkarsh*) [Paragraph VII.18];

- Operationalistion of Society for Worldwide Interbank Financial Telecommunication (SWIFT) module for transactions with foreign central banks (FCBs) to smoothen the investment and disinvestment instructions from FCBs in a secured manner (*Utkarsh*) [Paragraph VII.19]; and
- Conduct capacity building programmes for sensitising the state governments about prudent practices in cash and debt management (*Utkarsh*) [Paragraph VII.20].

Implementation Status

VII.6 The Reserve Bank's role as debt manager for central and state governments is focused on ensuring completion of the market borrowing programme in a non-disruptive manner with objectives of cost optimisation, risk mitigation and developing domestic debt market while ensuring a stable debt structure. During 2021-22, the market borrowing programme was conducted following the above-mentioned principles of debt management strategy. Notwithstanding the uncertainties emanating from the COVID-19 pandemic and its effects on domestic and global economic and financial markets, the Reserve Bank successfully managed the combined gross market borrowings of the central and the state governments to the tune of ₹18,29,008 crore during the year, that was lower by 15.7 per cent as compared to the previous year.

VII.7 The Reserve Bank continued its policy of passive consolidation by way of re-issuances and active consolidation through buyback/switches that also helped in altering the maturity structure of the government debt to reduce bunching of redemptions. During 2021-22, 142 out of 154 issuances of G-sec were re-issuances (92.2 per cent) as compared with 162 re-issuances out of 178 issuances (91.0 per cent) in the previous year.

VII.8 The active form of consolidation through switching of short-term G-sec with long-term securities is generally conducted once in every month. Accordingly, 109.6 per cent of the switches budgeted for the fiscal 2021-22, amounting to ₹197,185 crore, were completed during 2021-22 as compared with ₹1,53,418 crore in the previous year.

VII.9 During 2021-22, new securities ranging from 2 to 40 years tenor (original maturity) were issued with the objective of catering to the demands of various institutional investors in different maturity buckets. Floating Rate Bonds (FRBs) of 7 year and 13 year tenor (original maturity) were also issued during the year. The share of FRBs in total issuances during 2021-22 was 7.8[1] per cent as compared with 6.5 per cent a year ago.

VII.10 A significant milestone achieved in the development of the G-sec market was the launch of the Reserve Bank of India-Retail Direct (RBI-RD) Scheme which brings G-secs within easy reach of the common man by simplifying the process of investment. The scheme provides a one-stop solution to facilitate investment in government securities by retail investors (Box VII.1). Subsequent to the launch of the scheme, a market making scheme for the PDs to support the Retail Direct Scheme was announced.

VII.11 The work related to mirroring of gilt accounts and settlement at gilt account level in *e-Kuber*, has been taken up for implementation in phases.

[1] Excludes issuance of FRBs of ₹58,057.48 crore made through switch auctions.

Box VII.1
RBI Retail Direct Scheme

The Reserve Bank, as the debt manager of the Government of India, has been proactively engaged in the development of the government securities (G-sec) market including broadening investor participation. As part of continuing efforts to increase retail participation in G-sec, 'RBI Retail Direct' facility was announced in the Statement of Developmental and Regulatory Policies on February 5, 2021 for improving the ease of access by retail investors through online access to the government securities market - both primary and secondary - along with the facility to open their gilt securities account ('Retail Direct') with the Reserve Bank.

In pursuance of this announcement, the 'RBI Retail Direct' scheme, which is a one-stop solution to facilitate investment in government securities by individual investors was issued on July 12, 2021. The RBI Retail Direct portal (https://rbiretaildirect.org.in) was launched by the Hon'ble Prime Minister in virtual mode on November 12, 2021 for operationalising the scheme. With the launch of this scheme, India could achieve a significant milestone in the development of the G-sec market and became one of the select few countries offering such a facility to the retail investors.

Under the Scheme, retail individual investors are permitted to open a Retail Direct Gilt (RDG) Account with the Reserve Bank, using an online portal (https://rbiretaildirect.org.in). Investments can be made using the following routes:

(i) *Primary Issuance of Government Securities* : Investors can place their bids as per the non-competitive scheme for participation in primary auction of central government securities (including Treasury Bills) and state government securities. Investors can also subscribe to Sovereign Gold Bonds; and

(ii) *Secondary Market* : Investors can buy and sell government securities on NDS-OM[2] ('Odd Lot' and 'Request for Quote' segments).

Payments for transactions (both primary and secondary market transactions) can be done conveniently using savings bank account through internet-banking or Unified Payments Interface (UPI). Investor support facility is available through telephone, email as well as online portal. Investor services include provisions for transaction and balance statements, nomination facility, pledge or *lien* of securities and gift transactions. No fees are charged for facilities provided under the Scheme. The Scheme aims to provide a safe, simple, direct and secured platform for retail investors.

Source: RBI.

VII.12 SGL account and CSGL account guidelines were revised on September 22, 2021 to bring uniformity in definition of VFT across guidelines and to streamline the operational procedures including reporting requirements.

VII.13 VFT guidelines were revised to bring clarity in definition of VFT transactions and for streamlining the reporting requirements. The revised guidelines were issued on October 5, 2021.

VII.14 The review of the operational guidelines on savings bonds to account for online subscriptions as well as incorporating better system of risk management is currently under examination.

VII.15 Steps have been initiated to effectively consolidate the public debt data from different sources and bring the same under one single point access.

VII.16 Development of the module for automating monitoring of GoI's consent to states for OMBs is in progress and is expected to be operationalised by Q1:2022-23.

VII.17 Financial Benchmarks of India Limited (FBIL) is developing the Zero Coupon Yield Curve (ZCYC) essential for implementation of STRIPS.

[2] Negotiated Dealing System - Order Matching.

VII.18 A proposal regarding handing over the future servicing of compensation bonds[3] through their treasuries was put forth to the state governments issuing these bonds. Two state governments, *viz*., Uttar Pradesh and Karnataka have provided their concurrence for taking over the servicing of compensation bonds.

VII.19 Operationalisation of SWIFT module for transactions with FCBs to smoothen the investment and disinvestment instructions from FCBs in a secured manner is under development.

VII.20 Capacity building programmes for sensitising state governments about the prudent measures of cash and debt management were conducted for seven states during the year, *viz*., Kerala, Maharashtra, West Bengal, Tamil Nadu, Madhya Pradesh, Meghalaya and Bihar. The Department also handled training sessions for the middle level State Finance Officers from the Government of Chhattisgarh during a programme organised by the Chhattisgarh Academy of Administration.

Major Developments

Debt Management of the Central Government

VII.21 During 2021-22, the gross market borrowings of GoI through dated G-secs was lower by 17.7 per cent as compared with the previous year. Net market borrowings through dated G-secs decreased by 24.5 per cent as compared with that of previous year. Net market borrowings through dated G-secs financed 54.2 per cent of the central government's revised gross fiscal deficit (GFD) as against 62.9 per cent in the previous year. The net market borrowings through dated securities and Treasury Bills (T-Bills) taken together decreased by 32.4 per cent as compared with that of the previous year (Table VII.1).

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

(₹ crore)

Item	2018-19	2019-20	2020-21	2021-22
1	2	3	4	5
Net Market Borrowings (i to iv)	4,58,337	5,11,500	13,75,654	9,29,351
i) Dated Securities@	4,22,737	4,73,972	11,43,114	8,63,103
ii) 91-day T-Bills	-46,542	-9,600	10,713	45,439
iii) 182-day T-Bills	32,931	38,354	-18,743	71,252
iv) 364-day T-Bills	49,211	8,774	2,40,570	-50,444

@: Without adjusting for buyback/switches. After adjusting for buyback/switches, net market borrowings during 2021-22 stood at ₹9,29,060 crore, ₹11,46,739 crore in 2020-21, ₹4,73,990 crore in 2019-20 and ₹4,23,269 crore in 2018-19.

Source: RBI.

Debt Management Operations

VII.22 The weighted average yield (WAY) of G-sec issuances during the year increased by 49 basis points (bps) as compared to the WAY of the previous year. The weighted average coupon on the entire outstanding debt stock, however, decreased by 16 bps. The weighted average maturity (WAM) of primary issuances (excludes issuances under switch auction) increased to 16.99 years from 14.49 years in the previous year. The WAM of the outstanding debt increased from 11.31 years to 11.71 years (Table VII.2).

VII.23 Partial devolvement on PDs took place on seventeen instances amounting to ₹97,938 crore during 2021-22 as compared with fifteen instances for ₹1,30,562 crore in 2020-21. No bid was accepted on nine instances for a total notified amount of ₹99,000 crore due to the market

[3] The compensation bonds are issued by various state governments for *Zamindari* abolition and land reforms schemes.

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

(Yield in Per cent/Maturity in Years)

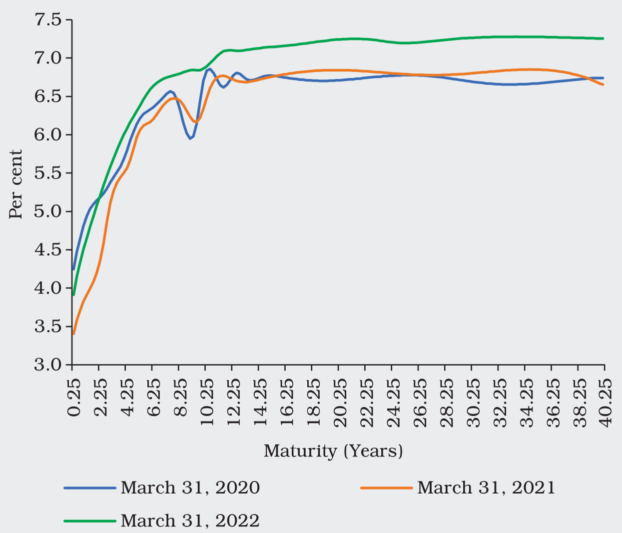
Years	Range of Cut Off Yield in Primary Issues^			Issued during the Year^			Outstanding Stock#	
	Under 5 years	5-10 years	Over 10 years	Weighted Average Yield	Range of Maturities @	Weighted Average Maturity	Weighted Average Maturity	Weighted Average Coupon
1	2	3	4	5	6	7	8	9
2015-16	-	7.54-8.10	7.59-8.27	7.88	6-40	16.03	10.50	8.08
2016-17	6.85-7.46	6.13-7.61	6.46-7.87	7.15	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	7.77	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	3.79-5.87	5.15-6.53	4.46-7.19	5.79	1-40	14.49	11.31	7.27
2021-22	4.07-5.10	4.04-6.78	4.44-7.44	6.28	1-40	16.99	11.71	7.11

-: Not applicable. @: Residual maturity of issuances and figures are rounded off.
*: Excluding special securities. ^: Excluding switch auction. #: Including switch auction.
Source: RBI.

conditions prevailing then as compared with four instances for a total notified amount of ₹39,000 crore in the previous year.

VII.24 The G-sec yields hardened during the year largely due to expectations of monetary policy normalisation measures by major central banks, rise in crude oil prices and changes in the Reserve Bank's liquidity measures aiming at rebalancing systemic liquidity. The 10-year bond yield hardened by 66 bps from 6.18 per cent as at end-March 2021 to 6.84 per cent as at end-March 2022. In the first two months of Q1:2021-22, yields declined due to the G-sec acquisition programme (G-SAP) and open market operations (OMOs) conducted by the Reserve Bank. However, the decline in yields was partly offset in June 2021 tracking the release of higher than expected CPI inflation figures for May and increase in crude oil prices. The 10-year yield softened by 13 bps in Q1. In Q2:2021-22, the G-sec yields initially softened due to lower than expected CPI inflation for June and July. However, the yields gained after the announcement of variable rate reverse repo (VRRR) auctions for liquidity rebalancing. The 10-year yield rose by 17 bps in Q2. Further hardening of the yields was witnessed in Q3:2021-22 with the 10-year yield increasing by 23 bps, mainly driven by rise in crude oil prices, higher cut-offs at VRRR auctions and rise in government bond yields in major economies. In Q4:2021-22, announcement of higher than expected market borrowing by the central government in the Union Budget for 2022-23, the geopolitical uncertainties arising out of Russia-Ukraine conflict leading to a sharp rise in crude oil and other commodity prices and rise in yields in major economies in the wake of policy normalisation measures by major central banks led to further firming up of the 10-year yield by 39 bps (Chart VII.1).

VII.25 During 2021-22, about 58.2 per cent of the market borrowings was raised through issuance of dated securities with a residual maturity of 10 years and above as compared with 49.0 per cent in the previous year. Further, the 30-year and 40-year tenor securities were



Source: FBIL.

issued/re-issued during the year with the objective of catering to the demand from long-term investors such as insurance companies and pension funds (Table VII.3).

Treasury Bills

VII.26 Short-term cash requirements of the central government are met through issuance of T-Bills. The net short-term market borrowings of the government through T-Bills (91, 182 and 364 days) decreased to ₹66,248 crore during 2021- 22 from ₹2,32,540 crore in the previous year.

Ownership of Securities

VII.27 Commercial banks remained the largest holders of government securities (including T-Bills and SDLs) accounting for 37.4 per cent share as at end-March 2022, followed by insurance companies (25.6 per cent), the Reserve Bank (10.6 per cent) and provident funds (9.6 per cent). The share of the foreign portfolio investors (FPIs) was 1.0 per cent. The other holders of government securities (including T-Bills and SDLs) include mutual funds, state governments, financial institutions (FIs) and corporates.

Primary Dealers (PDs)

VII.28 The number of PDs stood at 21 [14 Bank-PDs and 7 Standalone PDs (SPDs)] at end-March 2022. The PDs have the mandate to underwrite primary auctions of dated G-sec while they have a target of achieving bidding commitment and success ratio in respect of primary auctions of T-Bills/cash management bills (CMBs). The PDs individually achieved the stipulated

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

(Amount in ₹ crore)

Residual Maturity	2019-20		2020-21		2021-22	
	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	1,46,000	20.6	3,91,990	28.6	2,29,255	20.3
5 - 9.99 Years	1,79,000	25.2	3,07,405	22.4	2,41,865	21.5
10 -14.99 Years	1,37,000	19.3	3,76,766	27.5	3,20,639	28.4
15 -19.99 Years	15,000	2.1	-	-	-	-
20 Years & Above	2,33,000	32.8	2,94,162	21.5	3,35,621	29.8
Total	**7,10,000**	**100.0**	**13,70,324**	**100.0**	**11,27,382**	**100.0**

-: Nil.
Note: Figures in the columns might not add up to the total due to rounding off of numbers.
Source: RBI.

minimum success ratio of 40 per cent in primary auctions of T-Bills with an average success ratio of 62.5 per cent in H1:2021-22 and 62.3 per cent in H2:2021-22. The share of PDs in auctions of T-Bills/CMBs was 71.4 per cent during 2021-22 as compared with 68.9 per cent in the previous year. The commission paid to PDs, excluding GST, for underwriting primary auctions of dated G-sec during 2021-22 was ₹412.67 crore as compared with ₹454.64 crore in the previous year.

Sovereign Gold Bond (SGB) Scheme

VII.29 The Reserve Bank, in consultation with the GoI, issued ten tranches of SGBs during 2021-22 for an aggregate amount of ₹12,991 crore (27 tonnes). A total of ₹38,693 crore (90 tonnes) has been raised through the scheme since its inception in November 2015.

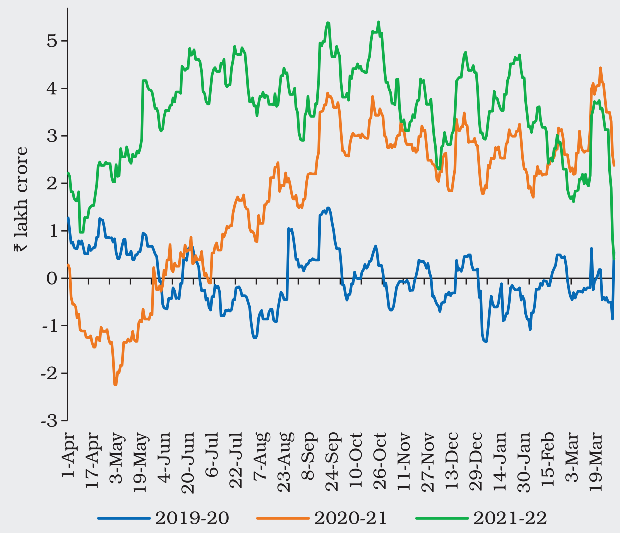
Cash Management of the Central Government

VII.30 The central government started the year 2021-22 with a cash balance of ₹2,37,572 crore. The Ways and Means Advances (WMA) limit of the centre was fixed at ₹1,20,000 crore for the first half and ₹50,000 crore for the second half of 2021-22. The central government did not resort to WMA/Overdraft (OD) during 2021-22 *vis-à-vis* 63 days WMA and 9 days OD in the previous year. Notwithstanding the ongoing uncertainties relating to COVID-19 pandemic, the cash balance of the central government has remained comfortable throughout the year (Chart VII.2).

Investments under Foreign Central Bank Scheme

VII.31 Under the Foreign Central Bank (FCB) scheme, the Reserve Bank invests in Indian G-secs on behalf of select FCBs and multilateral development institutions in the secondary G-sec market. Total volumes transacted on behalf of these institutions stood at ₹3,285 crore (face value) during 2021-22 as compared to ₹3,120 crore in the previous year.

Chart VII.2: GoI Cash Balance Position



Source: RBI.

Debt Management of State Governments

VII.32 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 borrowings in financing GFD of states consequently rose to 85.1 per cent in 2021-22 (BE) from 77.8 per cent in 2020-21 (RE).

VII.33 Notwithstanding the impact of the second wave of the COVID-19 pandemic on the state government finances, the gross and net market borrowings of states were lower than the previous year. The gross market borrowings of states in 2021-22 stood at 78 per cent of the amount indicated in the quarterly indicative calendar for market borrowings by the state governments.

Table VII.4: Market Borrowings of States through SDLs

(Amount in ₹ crore)

Item	2018-19	2019-20	2020-21	2021-22
1	2	3	4	5
Maturities during the Year	1,29,680	1,47,067	1,47,039	2,09,143
Gross Sanctions under Article 293(3)	5,50,071	7,12,744	9,69,525	8,95,166
Gross Amount Raised during the Year	4,78,323	6,34,521	7,98,816	7,01,626
Net Amount Raised during the Year	3,48,643	4,87,454	6,51,777	4,92,483
Amount Raised during the Year to Total Sanctions (per cent)	87.0	89.0	82.4	78.4
Outstanding Liabilities (at the end of period) #	27,78,536	32,65,989	39,25,555	44,29,957

#: Including *Ujwal* DISCOM Assurance *Yojana* (UDAY) and other special securities.
Source: RBI.

There were 608 issuances in 2021-22, of which 60 were re-issuances (742 issuances in 2020-21, of which 56 were re-issuances) [Table VII.4].

VII.34 The weighted average cut-off yield (WAY) of SDL issuances during 2021-22 was higher at 6.98 per cent than 6.55 per cent in the previous year. The weighted average spread (WAS) of SDL issuances over comparable central government securities was lower at 40.95 bps in 2021-22 as compared with 52.72 bps in the previous year. In 2021-22, twenty one states and two union territories issued dated securities of tenors other than 10 year, ranging from 2 to 35 year. Seven states and one UT rejected all bids in one or more of the auctions. The average inter-state spread on securities of 10-year tenor (fresh issuances) was 4 bps in 2021-22 as compared with 10 bps in 2020-21.

Cash Management of State Governments

VII.35 In order to provide greater comfort to state governments in undertaking COVID-19 containment and mitigation measures, and also to enable states to plan their market borrowings, as an interim measure, the Reserve Bank had announced an increase in WMA limit of the states/UTs by 60 per cent over and above the level as on March 31, 2020, which remained valid till March 31, 2021. Based on the recommendations of the Advisory Committee on WMA to state governments (Chairman: Shri Sudhir Shrivastava), the Reserve Bank decided to retain the interim limit of WMA (at ₹51,560 crore for all States/UTs) till September 30, 2021 and later extended it till March 31, 2022. Relaxations in the overdraft (OD) scheme were also given by the Reserve Bank to state governments/UTs to tide over mismatches in cash flows by increasing the number of days, for which a state/UT can be in OD continuously to 21 working days from 14 working days, and in a quarter to 50 working days from 36 working days, which are valid till March 31, 2022. Seventeen states/UTs availed the special drawing facility (SDF)[4], fourteen states/UTs resorted to WMA and nine states/UTs availed OD in 2021-22.

VII.36 Over the years, states have been accumulating a sizeable cash surplus in the form of intermediate treasury bills (ITBs). The outstanding investments of states in ITBs and auction treasury

4 Please see paragraph VII.37 for explanation on SDF.

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

(₹ crore)

Item	Outstanding as on March 31				
	2017-18	2018-19	2019-20	2020-21	2021-22
1	2	3	4	5	6
14-Day (ITBs)	1,50,871	1,22,084	1,54,757	2,05,230	2,16,272
ATBs	62,108	73,927	33,504	41,293	87,400
Total	**2,12,979**	**1,96,011**	**1,88,261**	**2,46,523**	**3,03,672**

Source: RBI.

bills (ATBs) increased during the year 2021-22 (Table VII.5).

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

VII.37 The Reserve Bank manages two reserve fund schemes on behalf of state governments - the consolidated sinking fund (CSF) and the guarantee redemption fund (GRF). So far, 24 states and one union territory, *i.e.*, Puducherry have set up CSF. Currently, 18 states are members of the GRF. States can also avail of a 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 as at end-March 2022 was ₹1,54,255 crore and ₹9,399 crore, respectively, as against ₹1,27,208 crore and ₹8,405 crore at end-March 2021.

3. Agenda for 2022-23

VII.38 In the Union Budget 2022-23, the gross market borrowings through dated securities for 2022-23 are budgeted at ₹14,95,000 crore as compared with ₹10,46,500 crore in 2021-22(RE). Taking into account the switch operations conducted just before the Union Budget 2022-23 in which securities worth ₹63,648 crore maturing in the year 2022-23 were switched, the gross market borrowings through dated securities for the year stand revised at ₹14,31,352 crore. Net market borrowings (including short-term debt and repayment of Post Office Life Insurance Fund) are budgeted at ₹11,58,719 crore, financing 69.75 per cent of GFD in 2022-23.

VII.39 During the year 2022-23, the focus will remain on smooth conduct of the market borrowing programme. The following strategic milestones are targeted to be achieved in support of efficient conduct of debt management:

- Consolidation of debt through calendar driven, auction-based switches and buyback operations along with re-issuance of securities to augment liquidity in G-sec market and facilitate fresh issuances;
- The consolidated operational guidelines for PDs issued in 2005 are updated from time to time. The guidelines relating to basic eligibility criteria, *viz.*, net owned funds (NOF) requirement and targets, however, remain largely unchanged. It is proposed to undertake a comprehensive review of the extant operational guidelines for PDs;
- Taking appropriate measures for further popularisation of the 'RBI Retail Direct Scheme' for improving its overall reach for suitable retail investors across the country (*Utkarsh*);
- The Hon'ble Finance Minister in her budget speech on February 1, 2022 announced that the government will issue Sovereign Green Bonds in the domestic market as a part of its overall market borrowing programme for the next financial year and the proceeds will be deployed in public-sector green projects. Accordingly, the

Reserve Bank, as the debt manager for GoI, is providing necessary support to the GoI for formulation of the framework for issuance of Sovereign Green Bonds in line with the international standards. The issuance of Sovereign Green Bonds will be taken up during the year after the preparatory work is completed;

- Review of Medium-Term Debt Management Strategy (MTDS) for management of public debt of GoI with an objective to mobilise market borrowings at low cost over medium to long-term, with prudent levels of risk and a stable debt structure, while also developing a liquid and well-functioning domestic debt market;
- Around one-third of general government debt pertains to sub-national governments. However, a document outlining the strategy of debt management for efficient and effective management at sub-national government is lacking. Therefore, a pilot MTDS for a few states is proposed to be drafted reflecting the state governments' plan for financing their activities, while taking due account of constraints and potential risks (*Utkarsh*); and
- Conduct capacity building programmes for sensitising the state governments about prudent practices in cash and debt management.

4. Conclusion

VII.40 During 2021-22, the combined gross market borrowings of centre and states were conducted successfully. The Reserve Bank also announced a number of measures to manage the stress on the finances of both central and state governments in the wake of uncertainties relating to COVID-19 pandemic. Going forward, the key areas of focus of the Reserve Bank for the year 2022-23 will be smooth completion of the government borrowing programme in line with the guiding principles of debt management, while ensuring a stable debt structure and proactively taking appropriate policy actions, if necessary.

VIII CURRENCY MANAGEMENT

The focus of currency management during the year continued on making available adequate quantity of clean notes in circulation, especially in the backdrop of the second wave of the COVID-19 pandemic. The Reserve Bank made an attempt to gauge trends and preferences in public usage of banknotes with a view to optimise the currency management operations.

VIII.1 In the wake of the second wave of COVID-19 pandemic, which induced renewed restrictions on movement in various parts of the country, the efforts of the Reserve Bank remained focused on ensuring adequate supply of clean banknotes in the economy while accelerating the pace of disposal of soiled notes, a process that was severely disrupted in the previous year. Simultaneously, the Reserve Bank also attempted to gather meaningful insights about the pattern of usage of cash by the public given the rise in digital payments in the recent past.

VIII.2 Against this backdrop, the rest of the chapter is organised into five sections. The next section presents the important developments in currency in circulation during the year. Section 3 covers the implementation status of the agenda for 2021-22 and section 4 presents the developments with regard to Bharatiya Reserve Bank Note Mudran Private Ltd. (BRBNMPL), a wholly-owned subsidiary of the Reserve Bank. Section 5 sets out the agenda for 2022-23, while concluding observations are set out in the last section.

2. Developments in Currency in Circulation

VIII.3 Currency in circulation (CiC) includes banknotes and coins. Presently, the Reserve Bank issues banknotes in denominations of ₹2, ₹5, ₹10, ₹20, ₹50, ₹100, ₹200, ₹500 and ₹2000. Coins in circulation comprise 50 paise and ₹1, ₹2, ₹5, ₹10 and ₹20 denominations.

Banknotes

VIII.4 The value and volume of banknotes in circulation increased by 9.9 per cent and 5.0 per cent, respectively, during 2021-22 as compared with 16.8 per cent and 7.2 per cent, respectively, during 2020-21 (Table VIII.1). In value terms, the share of ₹500 and ₹2000 banknotes together accounted for 87.1 per cent of the total value of banknotes in circulation as on March 31, 2022, as against 85.7 per cent as on March 31, 2021. In volume terms, ₹500 denomination constituted the highest share at 34.9 per cent, followed by ₹10 denomination banknotes, which constituted 21.3 per cent of the total banknotes in circulation as on March 31, 2022.

Coins

VIII.5 The total value of coins in circulation increased by 4.1 per cent in 2021-22, while the total volume increased by 1.3 per cent during the same period (Table VIII.2). As on March 31, 2022, coins of ₹1, ₹2 and ₹5 together constituted 83.5 per cent of the total volume of coins in circulation, while in value terms, these denominations accounted for 75.8 per cent.

Table VIII.1: Banknotes in Circulation (end-March)

Denomination (₹)	Volume (pieces in lakh)			Value (₹ crore)		
	2020	2021	2022	2020	2021	2022
1	2	3	4	5	6	7
2 and 5	1,12,203 (9.7)	1,11,728 (9.0)	1,11,261 (8.5)	4,331 (0.2)	4,307 (0.2)	4,284 (0.1)
10	3,04,022 (26.2)	2,93,681 (23.6)	2,78,046 (21.3)	30,402 (1.3)	29,368 (1.0)	27,805 (0.9)
20	82,994 (7.2)	90,579 (7.3)	1,10,129 (8.4)	16,599 (0.7)	18,116 (0.6)	22,026 (0.7)
50	86,009 (7.4)	87,524 (7.0)	87,141 (6.7)	43,004 (1.8)	43,762 (1.5)	43,571 (1.4)
100	1,99,021 (17.2)	1,90,555 (15.3)	1,81,420 (13.9)	1,99,021 (8.2)	1,90,555 (6.7)	1,81,421 (5.8)
200	53,646 (4.6)	58,304 (4.7)	60,441 (4.6)	1,07,293 (4.4)	1,16,608 (4.1)	1,20,881 (3.9)
500	2,94,475 (25.4)	3,86,790 (31.1)	4,55,468 (34.9)	14,72,373 (60.8)	19,33,951 (68.4)	22,77,340 (73.3)
2000	27,398 (2.4)	24,510 (2.0)	21,420 (1.6)	5,47,952 (22.6)	4,90,195 (17.3)	4,28,394 (13.8)
Total	**11,59,768**	**12,43,671**	**13,05,326**	**24,20,975**	**28,26,863**	**31,05,721**

Note: 1. Figures in parentheses represent the percentage share in total volume/value.
2. Figures may not add up due to the rounding-off of numbers.
Source: RBI.

Currency Management Infrastructure

VIII.6 The functions relating to the 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.

Table VIII.2: Coins in Circulation (end-March)

Denomination (₹)	Volume (pieces in lakh)			Value (₹ crore)		
	2020	2021	2022	2020	2021	2022
1	2	3	4	5	6	7
Small coins	1,47,880 (12.1)	1,47,880 (12.0)	1,47,880 (11.9)	700 (2.7)	700 (2.6)	700 (2.5)
1	5,08,878 (41.8)	5,12,597 (41.7)	5,15,879 (41.4)	5,089 (19.3)	5,126 (19.1)	5,159 (18.4)
2	3,35,158 (27.5)	3,37,863 (27.5)	3,40,792 (27.3)	6,703 (25.5)	6,757 (25.1)	6,816 (24.4)
5	1,75,992 (14.4)	1,79,360 (14.6)	1,84,331 (14.8)	8,800 (33.5)	8,968 (33.4)	9,217 (33.0)
10	50,130 (4.1)	51,391 (4.2)	54,044 (4.3)	5,013 (19.1)	5,139 (19.1)	5,404 (19.3)
20	- -	896 (0.1)	3,372 (0.3)	- -	179 (0.7)	674 (2.4)
Total	**12,18,038**	**12,29,988**	**12,46,298**	**26,305**	**26,870**	**27,970**

-: Not applicable.
Note: 1. Figures in parentheses represent the percentage share in total volume/value.
2. Figures may not add up due to the rounding-off of numbers.
Source: RBI.

Table VIII.3: Currency Chests and Small Coin Depots

Category	Number of Currency Chests	Number of Small Coin Depots
1	2	3
State Bank of India	1,544	1,291
Nationalised Banks	1,067	832
Private Sector Banks	253	160
Cooperative Banks	5	4
Foreign Banks	4	3
Regional Rural Banks	4	5
Reserve Bank of India	1	1
Total	**2,878**	**2,296**

Source: RBI.

As on March 31, 2022, the State Bank of India accounted for the highest share (53.6 per cent) of currency chests (Table VIII.3).

Indent and Supply of Currency

VIII.7 The indent of banknotes for 2021-22 was marginally lower by 1.8 per cent than that of a year ago (Table VIII.4). The supply of banknotes was also marginally lower by 0.4 per cent during 2021-22 than the previous year.

VIII.8 During 2021-22, the indent and supply for coins was lower by around 73.3 per cent and 73.0 per cent, respectively, as compared with last year due to accumulated stock and lower demand in last few years (Table VIII.5).

Disposal of Soiled Banknotes

VIII.9 The disposal of soiled banknotes increased by 88.4 per cent to 1,878.01 crore pieces during 2021-22 from 997.02 crore pieces in the previous year (Table VIII.6).

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

(Pieces in lakh)

Denomination (₹)	2019-20		2020-21		2021-22	
	Indent	Supply	Indent	Supply	Indent	Supply
1	2	3	4	5	6	7
5	-	60	-	-	-	-
10	14,700	14,702	2,840	2,846	7,500	7,510
20	12,500	13,390	48,750	38,520	20,000	20,000
50	24,000	23,431	14,000	13,887	15,000	15,000
100	33,000	32,708	40,000	37,270	40,000	40,002
200	20,500	19,588	15,000	15,106	12,000	11,991
500	1,46,300	1,19,996	1,06,000	1,15,672	1,28,000	1,28,003
2000	-	-	-	-	-	-
Total	**2,51,000**	**2,23,875**	**2,26,590**	**2,23,301**	**2,22,500**	**2,22,505**

-: Not Applicable.

BRBNMPL: Bharatiya Reserve Bank Note Mudran Private Limited. SPMCIL: Security Printing and Minting Corporation of India Limited.

Note: Figures in the columns may not add up to the total due to the rounding-off of the numbers.

Source: RBI.

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

(Pieces in lakh)

Denomination (₹)	2019-20		2020-21		2021-22	
	Indent	Supply	Indent	Supply	Indent	Supply
1	2	3	4	5	6	7
1	1,000	1,093	1,000	1,000	-	-
2	8,000	7,993	9,500	6,718	2,000	2,000
5	10,000	9,984	11,000	10,995	2,000	2,000
10	12,000	11,565	5,500	5,852	2,000	2,000
20	3,000	458	3,000	5,061	2,000	2,000
Total	**34,000**	**31,093**	**30,000**	**29,626**	**8,000**	**8,000**

-: Not Applicable.
Source: RBI.

Counterfeit Notes

VIII.10 During 2021-22, out of the total Fake Indian Currency Notes (FICNs) detected in the banking sector, 6.9 per cent were detected at the Reserve Bank and 93.1 per cent at other banks (Table VIII.7).

VIII.11 Compared to the previous year, there was an increase of 16.4 per cent, 16.5 per cent, 11.7 per cent, 101.9 per cent and 54.6 per cent in the counterfeit notes detected in the denominations of ₹10, ₹20, ₹200, ₹500 (new design) and ₹2000, respectively. The counterfeit notes detected in the denominations of ₹50 and ₹100 declined by 28.7 per cent and 16.7 per cent, respectively (Table VIII.8).

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

(Pieces in lakh)

Denomination (₹)	2019-20	2020-21	2021-22
1	2	3	4
2000	1,768	4,548	3,847
1000	-	-	-
500	1,645	5,909	22,082
200	318	1,186	6,167
100	44,793	42,433	59,203
50	19,070	12,738	27,696
20	21,948	10,325	20,771
10	55,744	21,999	46,778
Up to 5	1,244	564	1,257
Total	**1,46,530**	**99,702**	**1,87,801**

-: Not Applicable.
Note: Figures in the columns may not add up to the total due to the rounding-off of the numbers.
Source: RBI.

Expenditure on Security Printing

VIII.12 The total expenditure incurred on security printing during April 1, 2021 to March 31, 2022 was ₹4,984.8 crore as against ₹4,012.1 crore in the previous year (July 1, 2020 to March 31, 2021).

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

(Number of pieces)

Year	Detection at Reserve Bank	Detection at Other Banks	Total
1	2	3	4
2019-20	13,530	2,83,165	2,96,695
	(4.6)	(95.4)	(100.0)
2020-21	8,107	2,00,518	2,08,625
	(3.9)	(96.1)	(100.0)
2021-22	15,878	2,15,093	2,30,971
	(6.9)	(93.1)	(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.

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

(Number of pieces)

Denomination (₹)	2019-20	2020-21	2021-22
1	2	3	4
2 and 5	22	9	1
10	844	304	354
20	510	267	311
50	47,454	24,802	17,696
100	1,68,739	1,10,736	92,237
200	31,969	24,245	27,074
500 (Specified Banknotes)	11	9	14
500	30,054	39,453	79,669
1000 (Specified Banknotes)	72	2	11
2000	17,020	8,798	13,604
Total	**2,96,695**	**2,08,625**	**2,30,971**

Source: RBI.

3. Agenda for 2021-22

VIII.13 Last year, the Department had set out the following goals:

- Augmentation of disposal of soiled notes (Paragraph VIII.14);
- Procurement of new Shredding and Briquetting Systems (SBS) (*Utkarsh*) [Paragraph VIII.15]; and
- Establishment of a state-of-the-art facility for conducting cutting edge research to test the robustness of security features of banknotes and introduction of new security features (*Utkarsh*) [Paragraph VIII.15].

Implementation Status

Augmentation of Disposal of Soiled Banknotes

VIII.14 The disposal of soiled banknotes was severely affected during the second and third waves of COVID-19 pandemic. However, as a result of concerted efforts, the disposal of soiled banknotes improved significantly as alluded to earlier under paragraph VIII.9.

Other Goals

VIII.15 The remaining goals set for 2021-22 are under various stages of implementation and have thus been carried forward to the agenda for 2022-23.

Major Activities

Microsite for Banknotes

VIII.16 A new microsite for banknotes is being launched by the Reserve Bank, hosting information on security features and exchange facility for banknotes. The hallmark of the microsite is that the information will be disseminated not only through multiple modes such as 360-degree views of the design and security features of banknotes, explanatory videos and animations, but also through interactive games.

Awareness Campaign on Exchange of Banknotes

VIII.17 With a view to enhance customer service, the Reserve Bank embarked on an awareness campaign exclusively on exchange facilities for banknotes. The media mix of the campaign included TV commercials and print advertisements in newspapers. The campaign which was conducted from March 16 to 31, 2022 is expected to provide further impetus to the exchange facility for banknotes.

Banknote Survey of Consumers

VIII.18 The Department launched a banknote survey of consumers with the objective of (i) assessing demand for cash as well as denomination preferences at the consumer level; (ii) measuring awareness of consumers about various security features of the banknotes; and (iii) gauging the level of satisfaction with banknotes and coins among the

Box VIII.1
Banknote Survey of Consumers: Major Findings

A diverse sample of 11,000 respondents from rural, semi-urban, urban and metropolitan areas, spanning 28 states and three union territories participated in the survey. The survey also included 351 visually impaired respondents (VIR). The survey covered respondents from the age of 18 to 79 years with a gender representation of 60:40 for males and females.

The survey findings revealed that, among banknotes, ₹100 was the most preferred while ₹2000 was the least preferred denomination. Among coins, denomination of ₹5 was the most preferred whereas ₹1 was the least preferred. Watermark of Mahatma Gandhi's image followed by windowed security thread were the most recognised security feature. Around three per cent of the respondents were not aware of any banknote security feature. Overall, approximately 7 out of 10 respondents were found to be satisfied with the new series of banknotes. Among the VIR, majority were found to be aware of the quality of paper and size of the banknotes.

Source: RBI.

general public as well as visually impaired persons (Box VIII.1).

Procurement of New Security Features for Indian Banknotes

VIII.19 The Reserve Bank is actively involved in taking the process of introduction of new security features for banknotes forward.

Strengthening Currency Management Operations

VIII.20 The Reserve Bank continued to focus on the enhancement of its production and processing capabilities towards strengthening the currency management operations in the economy.

Scheme of Penalty for Non-replenishment of ATMs

VIII.21 A scheme of penalty for non-replenishment of ATMs was introduced for banks/White Label ATM Operators (WLAOs) to ensure that sufficient cash is made available to the public through ATMs.

Increasing Incentives for Distribution of Coins

VIII.22 Currency Distribution and Exchange Scheme (CDES) for banks was reviewed wherein the incentive for distribution of coins was increased from ₹25 to ₹65 per bag. An additional incentive of ₹10 per bag will be payable for coin distribution in rural and semi-urban areas. While the need of engaging business correspondents (BCs) and cash in transit (CIT) companies by banks for distribution of coins was re-emphasised, banks were also advised to provide coins to bulk customers which was not permitted earlier.

4. Bharatiya Reserve Bank Note Mudran Private Ltd. (BRBNMPL)

VIII.23 BRBNMPL is a wholly-owned subsidiary of the Reserve Bank, which is playing a crucial role in designing, printing and supply of banknotes. In the COVID-19 pandemic-induced environment, BRBNMPL achieved production of 13,350 million pieces of banknotes in 2021-22. The two-fold increase in direct remittances by BRBNMPL to currency chests aided the unfettered availability of banknotes during the pandemic. Colour Shift Intaglio Ink (CSII), a security feature used in the Indian banknotes that was imported earlier, is now being indigenously manufactured at Varnika, the Ink Manufacturing Unit at BRBNMPL, Mysuru, meeting the entire requirement of both BRBNMPL and SPMCIL. This has resulted in significant reduction in import dependency for banknote production as also saving of foreign exchange. During the year, the Governor, Reserve Bank dedicated the Ink Manufacturing Unit (Varnika) of BRBNMPL, Mysuru to the nation.

5. Agenda for 2022-23

VIII.24 During the year, the Department will focus on the following:

- Procurement of new Shredding and Briquetting Systems (SBS) [*Utkarsh*];
- Establishment of a state-of-the-art facility for conducting cutting edge research to test the robustness of security features of banknotes and introduction of new security features (*Utkarsh*);
- Study on automation and logistics in currency management;
- Mobile Aided Note Identifier (MANI) App for the visually impaired persons - introduction of 11 regional languages in the App in addition to Hindi and English already available; and
- Survey on the usage of cash, coins and digital mode for payments.

6. Conclusion

VIII.25 In sum, during 2021-22, the Reserve Bank focused on augmenting disposal of soiled notes, enhancing public awareness, understanding public demand and expectations from banknotes, making available adequate quantity of clean notes and maintaining sufficient buffer stock to meet any contingency requirements on account of COVID-19 pandemic. Going ahead, the Reserve Bank's endeavour would be to further modernise the processing of banknotes, rationalise currency management processes, promote analytical research for strengthening the integrity of banknotes, frame a strategy for complete indigenisation of raw materials for banknote production, increase public awareness through technological aids and study the public usage of cash, coins and digital mode through a pan-India survey.

IX PAYMENT AND SETTLEMENT SYSTEMS AND INFORMATION TECHNOLOGY

During the year, the Reserve Bank continued its endeavour to increase efficiency, improve customer convenience, expand outreach and ensure safety and security of payment systems, in line with the Payment Systems Vision 2021. Though the focus remained on cyber resilience in a COVID-19 induced pandemic environment and for ensuring round the clock availability of the Information and Communication Technology (ICT) infrastructure in the Reserve Bank, the efforts also continued towards upgrading IT infrastructure and stabilising newly introduced applications.

IX.1 During the year, the Department of Payment and Settlement Systems (DPSS) continued its efforts towards the planned development of the payment systems as guided by the Reserve Bank's Payment and Settlement Systems Vision 2021 document, *viz.,* enhance experience of consumers, empower payment system operators and service providers, enable the ecosystem and infrastructure and put in place forward looking regulation supported by risk focused supervision. Keeping in view the global focus on enhancing cross-border payment arrangements, the Reserve Bank also explored the possibility of linking India's fast payment system - Unified Payments Interface (UPI) with similar systems in other jurisdictions, and actively participated in the discussions of the Committee on Payments & Market Infrastructures (CPMI) and Financial Stability Board (FSB) on implementation of the G20 endorsed cross-border payments roadmap. The focus of the Department of Information Technology (DIT) remained on ensuring an uninterrupted functioning of the ICT infrastructure in the Reserve Bank in the COVID-19 induced pandemic environment. Further, the major milestones achieved during the year included enhancing resilience of Real Time Gross Settlement (RTGS) and Structured Financial Messaging System (SFMS), upgradation of non-IT physical infrastructure at data centres and stabilisation of *Sarthi* application (*i.e.,* electronic document management system for internal use in the Reserve Bank).

IX.2 Against this backdrop, the following section covers developments in the sphere of payment and settlement systems during the year and also takes stock of the implementation status of the agenda for 2021-22. Section 3 provides various measures undertaken by the DIT during the year *vis-à-vis* the agenda set for 2021-22. These departments have also set out an agenda for 2022-23. The chapter has been summarised at the end.

2. DEPARTMENT OF PAYMENT AND SETTLEMENT SYSTEMS (DPSS)

IX.3 The Reserve Bank continued its endeavour to enhance competition, ensure optimal cost for consumers, improve customer convenience and increase confidence in payment systems, in line with the outcomes identified in the Payment Systems Vision 2021. The Reserve Bank expanded access to centralised payment systems to include non-bank payment system providers. Leveraging on the 24x7x365 availability of RTGS, additional settlements were introduced in UPI, Immediate Payment Service (IMPS), *Aadhaar* enabled Payment System (AePS), National Electronic Toll Collection (NeTC), and National Financial Switch (NFS), and National Automated Clearing House (NACH) was operationalised on all days of the week. In order to enhance

Box IX.1
India and Singapore to Link their Fast Payment Systems - UPI and PayNow

The Reserve Bank of India and the Monetary Authority of Singapore (MAS) have announced a project to link their fast payment systems, UPI and PayNow. The linkage will enable users of the two systems to make instant fund transfers (remittances) without the need to get onboarded onto the other system. In other words, a user of UPI does not require to be a part of PayNow system to be able to transfer funds to a PayNow user in Singapore and *vice versa*. The linkage builds upon the earlier efforts of NPCI International Payments Limited (NIPL, a subsidiary of NPCI) and Network for Electronic Transfers (NETS of Singapore) to facilitate QR code-based payments through UPI in Singapore. The initiative is in line with the Reserve Bank's vision of reviewing inbound remittance corridors between India and other countries.

The UPI-PayNow linkage can foster cross-border interoperability of payments and further anchor trade, travel and remittance flows between the two countries. Singapore has a large number of Indian workers and students, resulting in substantial (more than USD 1 billion) in-bound and out-bound remittances every year. The UPI-PayNow linkage is expected to be a significant milestone in the development of infrastructure for cross-border payments between India and Singapore, and aligns with the G20's financial inclusion priority of enabling faster, cheaper and more transparent cross-border payments. It can also contribute towards fulfilling United Nation's (UN) Sustainable Development Goals (SDG 10.c)[1] by reducing cost of remittances.

The linkage is expected to be operationalised in the second half of 2022.

Source: RBI.

cross-border payment arrangements, the Reserve Bank explored the possibility of linking India's fast (retail) payment system, UPI, with similar system in other jurisdictions. The India (UPI) Singapore (PayNow) interlinking is underway (Box IX.1).

Payment Systems

IX.4 The payment systems[2] recorded a robust growth of 63.6 per cent in terms of volume during 2021-22 on top of the expansion of 26.7 per cent in the previous year. In value terms, the growth was 23.1 per cent as against a decline of 13.4 per cent in the previous year, mainly due to robust growth observed in the large value payment system, *viz.,* RTGS. The share of digital transactions in the total volume of non-cash retail payments increased to 99.3 per cent during 2021-22, up from 98.8 per cent in the previous year (Table IX.1).

Digital Payments

IX.5 Among the digital modes of payments, the number of transactions using RTGS increased by 30.5 per cent during 2021-22 (Table IX.1). In terms of value, RTGS transactions registered an increase of 21.8 per cent; transactions through the National Electronic Funds Transfer (NEFT) system also witnessed an increase of 30.6 per cent and 14.3 per cent in volume and value, respectively, reflective of the increase in large value corporate transactions, in line with rising economic activity. As at end March 2022, RTGS services were available through 1,56,740 IFSCs[3] of 239 members, while NEFT services were available through 1,60,428 IFSCs of 227 member banks.

IX.6 During 2021-22, payment transactions carried out through credit cards increased by 27.0

[1] By 2030, reduce the transaction costs of migrant remittances to less than 3 per cent and eliminate remittance corridors with costs higher than 5 per cent.

[2] Data for total payments include digital payments and paper-based instruments.

[3] Indian Financial System Code.

Table IX.1: Payment System Indicators - Annual Turnover (April-March)

Item	Volume (lakh)			Value (₹ lakh crore)		
	2019-20	2020-21	2021-22	2019-20	2020-21	2021-22
1	2	3	4	5	6	7
A. Settlement Systems						
CCIL Operated Systems	36	28	33	1,341.50	1,619.43	2,068.73
B. Payment Systems						
1. Large Value Credit Transfers – RTGS Retail Segment	**1,507**	**1,592**	**2,078**	**1,311.56**	**1,056.00**	**1,286.58**
2. Credit Transfers	**2,06,297**	**3,17,868**	**5,77,632**	**285.57**	**335.04**	**427.23**
2.1 AePS (Fund Transfers)	10	11	10	0.005	0.01	0.01
2.2 APBS	16,747	14,373	12,298	0.99	1.11	1.33
2.3 ECS Cr	18	0	0	0.05	0	0
2.4 IMPS	25,792	32,783	46,625	23.38	29.41	41.71
2.5 NACH Cr	11,100	16,465	18,730	10.37	12.17	12.77
2.6 NEFT	27,445	30,928	40,407	229.46	251.31	287.25
2.7 UPI	1,25,186	2,23,307	4,59,561	21.32	41.04	84.16
3. Debit Transfers and Direct Debits	**6,027**	**10,457**	**12,222**	**6.06**	**8.66**	**10.38**
3.1 *BHIM Aadhaar* Pay	91	161	228	0.01	0.03	0.06
3.2 ECS Dr	1	0	0	0	0	0
3.3 NACH Dr	5,842	9,646	10,788	6.04	8.62	10.31
3.4 NETC (Linked to Bank Account)	93	650	1,207	0.002	0.01	0.02
4. Card Payments	**72,384**	**57,787**	**61,786**	**14.35**	**12.92**	**17.02**
4.1 Credit Cards	21,773	17,641	22,399	7.31	6.30	9.72
4.2 Debit Cards	50,611	40,146	39,387	7.04	6.61	7.30
5. Prepaid Payment Instruments	**53,811**	**49,743**	**65,812**	**2.16**	**1.98**	**2.94**
6. Paper-based Instruments	**10,414**	**6,704**	**6,999**	**78.25**	**56.27**	**66.50**
Total - Retail Payments (2+3+4+5+6)	3,48,933	4,42,557	7,24,451	386.38	414.86	524.07
Total Payments (1+2+3+4+5+6)	3,50,440	4,44,149	7,26,530	1,697.94	1,470.86	1,810.65
Total Digital Payments (1+2+3+4+5)	**3,40,026**	**4,37,445**	**7,19,531**	**1,619.69**	**1,414.59**	**1,744.14**

APBS: Aadhaar Payment Bridge System. ECS: Electronic Clearing Service.

Note: 1. RTGS system includes customer and inter-bank transactions only.
2. Settlements of 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.
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.

per cent and 54.3 per cent in terms of volume and value, respectively (Table IX.1). Transactions through debit cards decreased by 1.9 per cent in terms of volume, though in terms of value, it increased by 10.4 per cent. Prepaid Payment Instruments (PPIs) recorded an increase in volume and value terms by 32.3 per cent and 48.5 per cent, respectively. The growth in digital payments can be attributed to increased availability of acceptance infrastructure, which witnessed substantial growth during the year benefitting from the operationalisation of the Payments Infrastructure Development Fund (PIDF). The number of Points of Sale (PoS) terminals increased by 28.6 per cent to 60.7 lakh during the year, while the number of *Bharat* Quick Response (BQR) codes deployed increased by 39.3 per cent to 49.7 lakh during the same period. Further, the number of Automated Teller Machines (ATMs) also increased to 2.48 lakh in 2021-22 from 2.39 lakh in the previous year.

IX.7 There is global evidence of a pandemic-induced shift in digital payment habits owing to social distancing norms (Alber and Dabour, 2020; Jonker *et al.,* 2020) and relief measures by governments (Toh and Tran, 2020) to mitigate the negative impacts of the pandemic on household consumption spending (Liu *et al.* 2020). In the Indian context also, the COVID-19 induced lockdown was an inflection point for digital onboarding of new users (Box IX.2).

Box IX.2
Household Choice of Digital Payments amidst COVID-19 Pandemic

An empirical analysis of primary survey data from the National Payments Corporation of India (NPCI, 2020) brings to the fore useful perspectives about households' choice of digital payments during the pandemic (Table 1). Around one-third of surveyed households transacted digitally for the first time during the lockdown. Households that had prior experience with digital payments but had abandoned them for reasons such as difficulty in use, lack of internet access, fraud, overspending, *etc.*, were most likely to re-adopt them during the pandemic. General awareness about payment modes as well as the level of formal educational attainment contributed to first-time adoption, notably even at low levels. The former has a stronger effect than the latter, indicating that familiarity and occasional use are sufficient to encourage the switch. Long-term beneficiaries of welfare support were more likely to go digital to access their entitlements in a timely manner. Debit card and smartphone ownership were key enablers, while access to bank *mitras* and mobile banking apps played a relatively smaller role.

Actual use of smartphones for digital payments may be effectively boosted by enhancing digital literacy and awareness (Chart 1). Most new users were from the middle-aged and the old age segment, indicating that the pandemic may have "force-bridged" the generation gap in digital payments. While respondents over the age of 60 preferred cards, UPI and mobile wallets were highly popular amongst the younger and middle-aged population. Heads of households who didn't personally own a smartphone were also likely to switch if they had a family member with a smartphone. There is evidence of such digitally empowered household members substituting for bank *mitras* in enabling digital payment adoption.

The pandemic induced 'switch to digital' is likely to be permanent if there are significant changes in the

Table 1: Summarised Logistic Regression Results (Dependent Variable: "Did you use digital methods for the first time after the lockdown?")

Variables	Logit Coefficients	Marginal Effect at Means
Used Digital Payments earlier but discontinued later	2.826*** (0.192)	0.458*** (0.0484)
Level of Awareness= 1 (Low)	2.357*** (0.615)	0.0334*** (0.00544)
Level of Awareness= 2 (Medium)	4.676*** (0.619)	0.277*** (0.0293)
Level of Awareness = 3 (High)	4.608*** (0.615)	0.264*** (0.0228)
Level of Education	0.169** (0.0695)	0.0121** (0.00519)
Received DBT based government aid both before and after lockdown	2.601*** (0.324)	
Access to Smartphone	1.436*** (0.193)	0.0860*** (0.0122)
Access to Debit Card	2.171*** (0.285)	0.106*** (0.0128)
Access to Bank *Mitra*	0.474*** (0.113)	0.0327*** (0.00852)
Access to Mobile Banking App	0.407*** (0.115)	0.0314*** (0.0101)
Constant	-9.609*** (0.794)	
McFadden's Adjusted R^2	0.481	
Observations	4,061	4,061

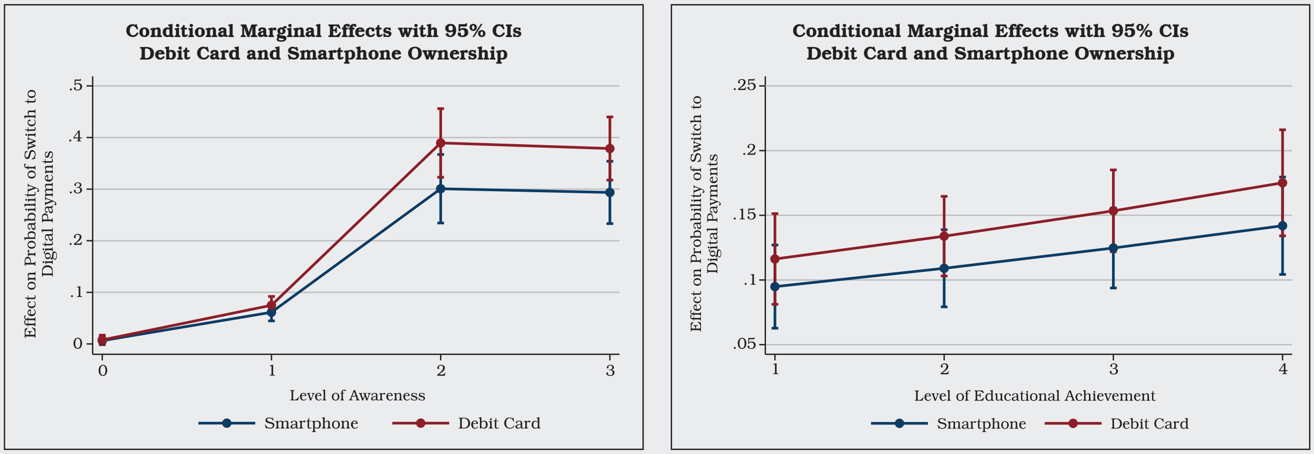
***: Significant at 1 per cent level. **: Significant at 5 per cent level.

Note: 1. Values in the parentheses indicate standard errors.
2. Levels of Awareness are: 0 (Not Aware - base case), 1 (Low), 2 (Medium) and 3 (High).
3. Levels of Education are on the scale: 1 (Illiterate), 2 (Primary School), 3 (High School), and 4 (Graduates and above).
4. The Marginal Effect at Means (MEM) is the marginal effect of a particular regressor with other regressors held at their mean values.
5. To ascertain the predictive accuracy of the baseline model, the data was split into training and testing set (80:20). The classification accuracy of the model stands at 87 per cent, sensitivity at 89 per cent and specificity at 82 per cent. Based on Cook's distance, there is no evidence of influential outliers.

Source: Saroy *et al.,* (2022).

(Contd...)

Chart 1: Effect of Digital Literacy on First-time Digital Payment Adoption Post-lockdown



CIs : Confidence Intervals
Source: Saroy *et al.* (2022).

underlying enablers such as enhancement in the payment infrastructure, more merchant on-boarding, reduction in frauds, greater customer trust in digital payments and enhanced ease of use of such payment modes. This would ensure that the recent shift in preferences towards digital is not just a temporary spike but a permanent behavioural shift.

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Authorisation of Payment Systems

IX.8 Payment System Operators (PSOs) comprise PPI issuers, cross-border Money Transfer Service Schemes (MTSS), White Label ATM (WLA) operators, Trade Receivables Discounting Systems (TReDS), 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 2021-22

IX.9 Last year, the Department had set out the following goals:

Encouraging Healthy Competition

- The Reserve Bank shall initiate discussion to develop a framework for settlement risk management with increased participation of non-banks in centralised payment systems including, review of membership (Paragraph IX.11);

Table IX.2: Authorisation of Payment System Operators (as at end-March)

(Number)

Entities	2021	2022
1	2	3
A. Non-Banks – Authorised		
PPI Issuers	36	37
WLA Operators	4	4
Instant Money Transfer Service Providers	1	1
BBPOUs	8	9
TReDS Platform Operators	3	3
MTSS Operators	9	9
Card Networks	5	5
ATM Networks	2	2
B. Banks – Approved		
PPI Issuers	56	57
BBPOUs	42	43
Mobile Banking Providers	566	648
ATM Networks	3	3

Source: RBI.

Improving Consumer Convenience

- The Reserve Bank had announced that pilot schemes for offline payment solutions would be conducted till March 31, 2021. Based on the experience gained through these pilot schemes, the Reserve Bank shall decide on implementing offline payment solutions in the country (Paragraph IX.12); and
- The Reserve Bank shall explore the possibility of facilitating settlement of card transactions processed by various card payment networks through the accounts of card payment networks maintained with the Reserve Bank. Settlement of card transactions in Reserve Bank books shall increase confidence in card transactions (Paragraph IX.13).

Ensuring Affordable Cost

- The Reserve Bank will examine the role that the payment services providers (PSPs) can play to ensure friction free remittances at lower cost, including review of corridors and charges for inbound cross-border remittances (Paragraph IX.14);

Increasing Customer Confidence

- The Reserve Bank has established a framework to capture the location and business details of commercial bank branches, ATMs and business correspondents (BCs). It is envisaged to extend a similar framework to capture and maintain information about PoS terminals and other payment system touch points as well (Paragraph IX.15); and
- The Reserve Bank shall examine the need for a separate regulatory framework for outsourcing arrangements by non-bank payment service providers, given the current trend of outsourcing arrangements and the need for security control and clarity of roles and responsibilities of the regulated entities (Paragraph IX.16).

Implementation Status

IX.10 In the 'Payment and Settlement Systems in India: Vision 2019-2021', DPSS had identified four goal-posts, *viz.,* competition, cost, convenience, and confidence, for achieving its vision.

Encouraging Healthy Competition

Review of Membership to Centralised Payment Systems (CPS)

IX.11 The Reserve Bank expanded access to CPS (RTGS and NEFT) and permitted authorised non-bank PSOs, *viz.,* PPI issuers, card networks and WLA operators, to participate in CPS as direct members. The non-bank PSOs were also allowed to open current accounts with the central bank. Guidelines were issued in July 2021 stipulating eligibility criteria, membership type and nature of transactions, along with frequently asked questions (FAQs) for operational and user convenience. Direct access is expected to minimise the overall risk in the payments ecosystem and also benefit non-banks by lowering cost and time for effecting/receiving payments, reducing dependence on banks and eliminating uncertainty in finality of payments as settlement will be carried out in central bank money.

Improving Customer Convenience

Offline Payment Solutions

IX.12 To encourage technological innovations that enable offline digital transactions, authorised PSOs were permitted in August 2020 to conduct pilots for proximity payments using cards, wallets or mobile devices. Based on the experience gained, the framework for facilitating small value digital payments in offline mode was issued on January 3, 2022. Accordingly, the authorised PSOs and Payment System Participants (both acquirer and issuers – banks and non-banks) were permitted to enable small value digital payments in offline mode using any channel or instrument like cards, wallets, mobile devices, *etc.*, subject to specified conditions. The initiative is expected to give a push to digital transactions in areas with poor or weak internet or telecom connectivity, particularly in semi-urban and rural areas.

National Settlement Services for Card Schemes

IX.13 A circular on 'Access for Non-Banks to CPS' was issued on July 28, 2021, amending Master Directions on Access Criteria for Payment Systems dated January 17, 2017 and permitting direct access to non-bank PSPs including card networks. This will facilitate settlement of card transactions in the Reserve Bank.

Ensuring Affordable Costs

Review of Corridors and Charges for Inbound Cross-border Remittances

IX.14 The Reserve Bank is working on use of UPI for cross-border remittances across jurisdictions. While the efforts with various countries are at various stages, the interlinking of UPI with PayNow has been formally announced and is expected to be operationalised in the second half of 2022. The interlinking will further anchor trade, travel and remittance flows between the two countries and lower the cost of cross-border remittances. It would also serve as an example of interlinking of respective fast payment systems to achieve instant remittances in a cost-effective manner.

Increasing Confidence

Geo-tagging of Payment System Touch Points

IX.15 As announced in the Statement on Developmental and Regulatory Policies of October 8, 2021, the Reserve Bank prescribed a framework for geo-tagging of payment acceptance infrastructure deployed by banks and non-bank PSOs. Geo-tagging is expected to provide insights on regional penetration of digital payments by monitoring infrastructure density across different locations. This will help initiate policy interventions to deploy additional payment touch points and facilitate undertaking focused digital literacy programmes.

Third Party Risk Management and System-wide Security

IX.16 The Reserve Bank issued a circular dated August 3, 2021 on "Framework for Outsourcing of Payment and Settlement-related Activities by Payment System Operators". The framework provides minimum standards to manage risks in outsourcing of payment and/or settlement-related activities (including other incidental activities like on-boarding customers, IT based services, *etc.*).

Major Developments

Improving Customer Convenience

Enhancements in PPIs

IX.17 Mandating interoperability, permitting cash withdrawal from full-KYC[4] PPIs and increasing maximum balance in full-KYC PPIs to ₹2 lakh were enhancements permitted to PPIs in May 2021.

Bharat Bill Payment System (BBPS) - Addition of Biller Category

IX.18 In July 2021, mobile prepaid recharges were permitted as a biller category in BBPS. As part of BBPS, the mobile prepaid customers will benefit from standardised bill payment experience, centralised customer grievance redressal mechanism, transparent customer convenience fee and availability of a bouquet of anytime, anywhere digital payment options.

Enhancements to Indo-Nepal Remittance Facility Scheme

IX.19 Enhancements were made to the Indo Nepal Remittance Facility Scheme in October 2021 by way of increasing the ceiling per transaction to ₹2 lakh and removing the annual cap of 12 remittances. These enhancements are expected to boost trade payments between the two countries and also ease pension payments to the ex-servicemen settled/relocated in Nepal.

Availability of NACH on All Days

IX.20 Leveraging on the availability of RTGS 24x7x365, NACH system was made operational on all days of the week, including weekends, effective August 1, 2021. NACH has emerged as a popular and prominent digital mode of direct benefit transfer (DBT) to large number of beneficiaries and has helped transfer of government subsidies during the COVID-19 pandemic in a timely and transparent manner.

24x7 Helpline for Digital Payments – DigiSaathi

IX.21 Under the guidance of the Reserve Bank, NPCI in association with the payments industry set-up a centralised industry-wide 24x7 helpline for digital payments christened – *DigiSaathi*. The 24x7 helpline provides a channel to obtain help on the entire gamut of digital payments. Automated responses on information related to digital payment products and services are available in Hindi and English through multiple options like – (a) toll-free number (1800-891-3333), (b) a short code (14431), (c) website – www.digisaathi.info, and *chatbots*. *DigiSaathi* will assist users with their queries on digital payments *via* website and *chatbot* facility and through toll-free calls where user can dial or call out the options/products for which the information is required.

UPI for Feature Phones – UPI123Pay

IX.22 UPI123Pay was launched by the Reserve Bank to empower 40+ crore feature phone subscribers to get onboarded to the domain of digital payments by enabling them to transact digitally and avail UPI features. UPI123Pay provides four distinct options to feature phone users to effect digital payments, *viz.,* (a) Interactive Voice Response (IVR), (b) missed call, (c) app based functionality, and (d) proximity sound-based payments.

Enhancing Transaction Limit for IMPS

IX.23 IMPS is an important payment system providing 24x7 instant domestic funds transfer facility and is accessible through various channels

4 Know your customer.

like internet banking, mobile banking apps, bank branches, ATMs, SMS and Interactive Voice Response System (IVRS). Keeping in view the importance of IMPS in processing of domestic payment transactions, the per-transaction limit was enhanced from ₹2 lakh to ₹5 lakh for all channels other than SMS and IVRS (₹5 thousand). This will lead to further increase in digital payments and will provide an additional facility to customers for making digital payments beyond ₹2 lakh.

Increase in UPI Transaction Limit for Specified Categories

IX.24 To facilitate greater participation of retail customers in financial markets, *e.g.*, investment in the G-secs segment through the Retail Direct Scheme, and for payment towards subscription of Initial Public Offerings (IPOs); the transaction limit in UPI system was enhanced from ₹2 lakh to ₹5 lakh for these categories.

Ensuring Affordable Costs

Usage of Automated Teller Machines/Cash Recycler Machines - Review of Interchange Fee and Customer Charges

IX.25 The interchange fee and customer charges for transactions at ATMs and cash recycler machines were reviewed in June 2021 after examining the recommendations of the committee set-up by the Reserve Bank under the Chairmanship of the Chief Executive, Indian Banks' Association (IBA). Accordingly, a marginal increase in interchange fees per transaction from ₹15 to ₹17 for financial transactions and from ₹5 to ₹6 for non-financial transactions in all centres was effected from August 1, 2021. Consequently, the ceiling on customer charge per transaction, beyond the free transactions, was also increased slightly from ₹20 to ₹21, effective January 1, 2022.

Discussion Paper on Charges in Payment Systems

IX.26 To take a comprehensive view of the charges payable by merchants and consumers for receiving/making digital payments, it was announced in the Statement on Developmental and Regulatory Policies of December 8, 2021 that a discussion paper covering all aspects related to charges (including convenience fee and surcharging) involved in various channels of digital payments will be issued shortly.

Increasing Confidence

Investment in Entities from FATF Non-compliant Jurisdictions

IX.27 Guidelines were issued in June 2021 on investment in PSOs from Financial Action Task Force (FATF) non-compliant jurisdictions to ensure consistency with similar instructions for investment in non-banking financial companies (NBFCs) from such jurisdictions.

Tokenisation - Card Transactions

IX.28 The framework on device-based card tokenisation was extended in August 2021 to include laptops, desktops, wearables (wrist watches and bands) and Internet of Things (IoT) devices. Further, in September 2021, card networks and card issuers were permitted to offer Card-on-File Tokenisation (CoFT) services. It was also advised that from July 1, 2022 no entity in the card transaction/payment chain, other than the card issuers and/or card networks, shall store the actual card data, and any such data stored previously shall be purged.

Other Initiatives

CPFIR - Payment Fraud Reporting (Utkarsh)

IX.29 The reporting of payment frauds to the Central Payments Fraud Information Registry (CPFIR) maintained by the Reserve Bank was further streamlined with inclusion of more scheduled commercial banks and non-bank PPI issuers as reporting entities.

Payments Infrastructure Development Fund (PIDF) [Utkarsh]

IX.30 The PIDF scheme was operationalised fully during the year, and as at end-March 2022, the contribution to the scheme was ₹798.94 crore. Also, as at end-March 2022, 94.77 lakh payment acceptance devices were deployed under the PIDF. The Advisory Council chaired by the Reserve Bank's Deputy Governor (Shri T. Rabi Sankar) provided overall guidance and also approved inclusion of eligible street vendors of the Prime Minister Street Vendor's *AatmaNirbhar Nidhi* (PM *SVANidhi*) Scheme in Tier-1 and 2 centres as beneficiaries of the PIDF Scheme.

Inspection of NPCI

IX.31 Inspection of NPCI was conducted in November 2021. The scope of the inspection, driven by the Principles for Financial Market Infrastructures (PFMIs), was confined to functional assessment of various retail payment systems operated by NPCI, risk assessment and management framework, governance and oversight, business impact analysis, compliance audit, information and cyber security audit, compliance status of previous Inspection Report and compliance of the terms and conditions of the Certificate of Authorisation.

Inspection of CCIL

IX.32 The Reserve Bank conducted the onsite inspection of CCIL under Section 16 of the Payment and Settlement Systems (PSS) Act, 2007. CCIL was assessed against the 24 PFMIs formulated by the Committee on Payments and Market Infrastructures-International Organisation of Securities Commissions (CPMI-IOSCO). As Central Counterparty (CCP), CCIL was rated 'Observed' for 17 principles and 'Broadly Observed' for three, while four were 'Not Applicable' to it. As Trade Repository (TR), CCIL was rated 'Observed' for 11 principles, while 13 were 'Not Applicable'.

Developments in CCIL

IX.33 During the year, CCIL was able to manage its operations smoothly notwithstanding the challenges from the COVID-19 pandemic. CCIL enhanced its risk management process by increasing margin period of risk (MPOR) to 5 days in various segments, calibrating the floor for 1-day value at risk (VaR) for securities in a tenor bucket to 95th percentile and improving the methodology for intra-month revision of default fund.

IX.34 Leveraging on RTGS 24x7, CCIL extended the cut-off time for clearing and settlement in forex segments. CCIL settlement data was included in daily data on payment systems published on the Reserve Bank's website from May 3, 2021. Submission of returns/statements by CCIL was further rationalised. CCIL also assumed responsibility as the aggregator and receiving office for the RBI Retail Direct Scheme, which facilitates investment in government securities by individual investors. The issuances of Legal Entity Identifier (LEI) by CCIL's subsidiary Legal Entity Identifier India Ltd. (LEIL) crossed 45,000 in March 2022.

e-BAAT Programmes

IX.35 The Reserve Bank has been conducting electronic Banking Awareness and Training (e-BAAT) programmes regularly for the benefit of customers/bankers/students/public. The aim is to create awareness and clear doubts on use of various payment systems and products. During the year, 367 e-BAAT programmes were conducted by the regional offices of Reserve Bank.

Inspection of PSOs

IX.36 Under Section 16 of the PSS Act, inspection of 46 retail entities, *viz.,* 30 PPI issuers, 4 WLA operators, 8 BBPOUs, 3 TReDS platform operators and one ATM Network was carried out by the Reserve Bank during the year.

Agenda for 2022-23

IX.37 In 2022-23, the Department will focus on the following goals:

- *Formulation and Release of Payment System Vision 2025 Document:* With the achievement of the intended outcomes and completion of identified actions in Vision 2021, the Reserve Bank shall come out with its Vision for the payments ecosystem in the coming years to ensure continuous development of the payments landscape;
- *Publication of Payments Dashboard:* To enhance consumer experience and provide greater insights into payment trends, the Reserve Bank shall publish a payments dashboard with pictorial representation of trends in payment systems; and
- *Implementation of Framework of Geo-tagging of Payment Acceptance Infrastructure:* As announced in the Statement on Developmental and Regulatory Policies of October 8, 2021, the Reserve Bank has prescribed a framework for geo-tagging payment touch points and will initiate the process to implement the framework.

3. DEPARTMENT OF INFORMATION TECHNOLOGY (DIT)

IX.38 The focus of the Department of Information Technology during the year remained on ensuring an uninterrupted functioning of the ICT infrastructure in the Reserve Bank in the COVID-19 induced pandemic environment. The Bio-bubble created by the Department, right at the beginning of the COVID-19 pandemic, was sustained through the successive waves of the pandemic ensuring smooth functioning of the country's payment systems, financial market operations, internal ICT facilities in the Reserve Bank, among others.

IX.39 During the year, though the focus remained on cyber resilience in a COVID-19 induced pandemic environment for ensuring round the clock availability of the ICT infrastructure in the Reserve Bank, the Department also continued its efforts towards upgrading infrastructure and also stabilising newly introduced applications. The major milestones achieved during the year included enhancing resilience of RTGS and SFMS, upgradation of non-IT physical infrastructure at data centres and stabilisation of *Sarthi* application.

Major Initiatives

Improving Resilience of RTGS

IX.40 As an incremental strategy to continuously improve India's payment systems, upgrades have been carried out in underlying infrastructure hosting RTGS, which smoothens the message flow, its reconciliation and replication across sites. This coupled with ongoing improvements in RTGS system would help in reducing the system Recovery Time Objective (RTO) and further improving the resilience.

New Advanced Firewall and Network Data Flow Monitoring

IX.41 The new advanced firewall solution, which is being implemented across the Reserve Bank, provides advanced features equipped to cater to the security requirements of the growing needs of Reserve Bank's IT infrastructure. The content disarm and reconstruction feature provides dedicated file scanning for the network traffic.

IX.42 The network data flow monitoring solution provides protection against both internal and external threats with higher visibility and security, through analytics on encrypted traffic for malware. The security analytics of the solution helps to identify security compliance gaps, aids in forensic investigation, threat alarms and incident response.

Upgradation of Non-IT Physical Infrastructure at Data Centres

IX.43 The Reserve Bank rejuvenated non-IT infrastructure of its existing data centres during the COVID-19 induced lockdown. All non-IT infrastructure was replaced/upgraded in live running environment of 24x365 critical operations. The work has been completed at two data centres and is in advanced stage of completion at third data centre. The major driving factor for the project was optimal capacity planning and energy efficiency which includes upgrading of non-IT infrastructure at data centres. This measure is expected to increase the operational efficiency of data centres.

Enhancing Resilience/Efficiency of SFMS

IX.44 SFMS, the messaging system used for both NEFT and RTGS, is being upgraded in phased manner in the Reserve Bank and 200+ member banks to enhance its capability to support functions in automated manner. Features such as reconciliation, enhanced reconciliation and dual certificate support are already implemented. The upgraded SFMS will take care of the futuristic requirements, *viz.,* high availability, scalability, enhanced security, performance, and resilience.

Reserve Bank as Aggregator for Tax Information Network (TIN 2.0)

IX.45 The initiative is to integrate Reserve Bank's *e-Kuber* system with Tax Information Network (TIN 2.0) of Central Board of Direct Taxes (CBDT) and the Public Financial Management System (PFMS) of Controller General of Accounts (CGA) for implementation of *Pratyaksh Kar Lekhankan Pranali* (PRAKALP). The development in *e-Kuber* has been completed and is ready for implementation.

Stabilisation of Sarthi Application

IX.46 *Sarthi*, the less-paper solution for the Reserve Bank's internal processes was launched on January 1, 2021, and continuous efforts were made during the year to customise new workflow processes and enhance the features and functionalities of the application as well as ensuring better user experience. Further, extensive users' training programmes were conducted covering all central office departments (CODs), regional offices (ROs) and training establishments (TEs) for better adoption of the application. Additionally, application utilisation is being continuously monitored and application security measures are being regularly reviewed to ensure robustness of the application.

Hybrid Payment System

IX.47 An efficient payment system is the lifeline of the economy. The Reserve Bank has been focusing on developing the payment systems in the country for the past four decades. Today, India can boast of having a vibrant, efficient and secured payment ecosystem. Availability of NEFT and RTGS around the clock has further strengthened the payment ecosystem in the country. Currently, the payment systems are either based on gross settlement or net settlement, so, the possibility of having an integrated system capable of both gross and net settlements may be explored.

Agenda for 2021-22

IX.48 Last year, the Department had set out the following goals under *Utkarsh*:

- *Next Generation Data Centre*: Examination of the feasibility of next generation data centre and preparation of detailed prototype plan to cater to the Reserve Bank's ICT roadmap for coming years (Paragraph IX.49 - IX.50);
- *Upgradation of Non-IT Physical Infrastructure at Data Centres:* The rejuvenating of non-IT infrastructure at its existing data centres is underway. Optimal capacity planning and energy efficiency is a major driving factor for the project, which includes invigorating non-IT infrastructure at data centres (Paragraph IX.51); and
- *Implementation of Next-Generation e-Kuber: e-Kuber* is performing key financial services and operations of the Reserve Bank with/for various stakeholders such as government, banks and other market participants. The system is being revived to improve the functionalities by leveraging on technological developments and will facilitate enhanced automation of processes, flexibility of integration with external and internal systems, ease of change management, enhanced modularity, reporting with comprehensive real time dashboards, front end improvements for enhancing productivity and robust controls (Paragraph IX.52).

Implementation Status

Next Generation Data Centre

IX.49 The Reserve Bank will be constructing a new state-of-the-art greenfield data centre to address capacity expansion constraints to meet the ever-increasing IT landscape need, avoid region specific risk and house critical data centre manpower. The new data centre will also host 'Enterprise Computing and Cybersecurity Training Centre' to cater to the advanced training needs of the Reserve Bank's staff and also the banking sector.

IX.50 Land acquisition for the new data centre has been completed. The Reserve Bank is in the process of identifying the project implementation agencies.

Upgradation of Non-IT Physical Infrastructure at Data Centres

IX.51 The work has been completed at two data centres, and is in advanced stage of completion at the remaining data centre.

Implementation of Next-Generation e-Kuber

IX.52 The process of upgradation of *e-Kuber* system which facilitates key financial services and operations of the Reserve Bank with/for various stakeholders, is in progress.

Agenda for 2022-23

IX.53 The Department's goals for 2022-23 are set out below:

- *Robotic Process Automation (RPA) Solution for Automation of Routine and Repetitive Tasks:* RPA is envisioned for automation of repetitive and manual tasks such as software installation, report generation, reconciliation issues and fault remediation activities by bots without the support of IT engineers thereby resulting in better utilisation of their services in other critical functions. This shall help in reducing human errors and bring in more efficiency and productivity in day-to-day operations across the Reserve Bank;

- *Better Interface for Internal Applications to Enhance User Experience and Adoption:* The Department will be enhancing the user interface of the internal applications by adopting the latest best practices and global standards to improve the user experience and adoption of the applications. Special focus will be on user-centric design and continuous accessibility in safe and secure manner;
- *Next Generation e-Kuber:* The *e-Kuber* will be upgraded to the next generation based on newer technologies with wider flexibility and stability. The upgraded system will have functionalities like reporting with comprehensive real time dashboards, enhanced user experience, scalability, resilient, easier process orchestration, ease of integration with external and internal systems, front end improvements for enhancing productivity, robust controls, and integrated security architecture platform;
- *Making NEFT Compliant to Global Messaging Standards:* Payment industry has evolved over a period and various business drivers like richness of data, standardisation across payment nodes, compliance, deeper reporting, and related requirements have been constantly driving the need for change. ISO 20022 is a global and open standard for payment messaging. The RTGS system is already based on ISO 20022. The Reserve Bank will strive to make its NEFT system also compliant to this global messaging standard. Adoption of ISO 20022 will provide structured and granular data, improved analytics, end-to-end automation, and better global harmonisation. It will also pave way for interoperability between RTGS and NEFT *(Utkarsh);*
- *Continuous Upgrading of IT and Cyber Security:* The Reserve Bank strives to continuously assess and upgrade its IT security infrastructure to enhance its efficiency and effectiveness of tackling the emergent threats and protect its IT infrastructure that caters to critical payment infrastructure. In this endeavour, the Reserve Bank will upgrade Security Operation Centre (SOC) technologies with innovative capabilities and additional advancements like security orchestration, automation and response, user entity behaviour analytics, extended detection and response; and
- *Enterprise Data Centre and Enterprise Computing and Cybersecurity Training Centre:* The Reserve Bank plans to commence work on a new state-of-the-art greenfield data centre during 2022-23 for which necessary land has been obtained. The data centre will cater largely to internal needs of the Reserve Bank, and will also host an enterprise computing and cybersecurity training centre which will cater to the needs of the banking and financial sector of the country.

4. CONCLUSION

IX.54 The Reserve Bank continued its efforts to develop state-of-the-art payment and settlement systems in the country for building less cash society, along with a focus on increasing efficiency, improving customer convenience, expanding outreach and ensuring safety and security of payment systems as envisaged in the Reserve Bank's Payment and Settlement

Systems Vision 2021 document. Keeping in view the global focus on enhancing cross-border payment arrangements, the Reserve Bank also explored the possibility of linking India's fast payment system UPI with PayNow of Singapore. Further, the major milestones achieved during the year included enhancing resilience of RTGS and SFMS, upgradation of non-IT physical infrastructure at data centres and stabilisation of *Sarthi* application. Going ahead, release of Payment System Vision Document 2025; implementation of framework of geo-tagging of payment acceptance infrastructure; making NEFT compliant to global messaging standards; strengthening IT and cyber security; setting up enterprise data centre and enterprise computing and cybersecurity training centre will be the major focus areas of the Reserve Bank.

X COMMUNICATION, INTERNATIONAL RELATIONS, RESEARCH AND STATISTICS

During the year, the Reserve Bank unveiled its Communication Policy 2.0, continuing with its endeavour to reach out to a wide spectrum of audience through multiple channels including social media and public awareness campaigns, while adhering to the principles of relevance, transparency, clarity, comprehensiveness, and timeliness in its communication. Economic and statistical policy analysis and research were sharpened, and information management systems were strengthened. International relations were deepened under the BRICS Chair of India in 2021 with achievement of several milestones. The Reserve Bank also joined the Network for Greening of the Financial System (NGFS) with its commitment to support greening India's financial system. Efforts were also made for effective cash management on behalf of the government and sound management of foreign exchange reserves. Legislative initiatives/amendments were also pursued during the year to ensure a robust legal framework necessary for a sound and efficient financial system in the economy.

X.1 The Reserve Bank released its Communication Policy 2.0 on July 16, 2021. Transparent communication, unambiguous interpretation and precise articulation of the multifarious objectives of the Reserve Bank are the goals of its communication policy. The economic and financial relations with international organisations and multilateral bodies were further strengthened during the year. In pandemic-induced environment, concerted efforts were made to provide effective cash management services to the government by integrating its system with that of *e-Kuber*. In the uncertain global macroeconomic scenario, safety, liquidity and return in that order continued to be the guiding principles for managing foreign exchange reserves (FER). During the year, several research studies were undertaken on a wide range of contemporary issues, besides providing research inputs for policy formulation and timely release of the flagship publications. Information management system was further strengthened through development of the next generation data warehouse [*viz.,* centralised information management system (CIMS)] and several other initiatives such as use of non-traditional data sources and advanced statistical and artificial intelligence (AI)/machine learning (ML) techniques. The year also witnessed a number of amendments/introduction of legislations pertaining to the financial sector.

X.2 Against this backdrop, the rest of the chapter is structured into eight sections. The next section 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 interactions 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. 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 (DSIM), whereas Section 8 presents the activities of the Legal Department. Concluding observations are given in the last section.

2. COMMUNICATION PROCESSES

X.3 In recent years, central bank communication has become a key guiding factor in making the central bank policies effective and transparent. Communication of central banks is now targeted to cover a wide spectrum of the audience while ensuring clarity and accuracy. Central banks are now judged not only on what information they communicate, but how it is communicated to a diverse audience.

X.4 The Communication Policy 2.0 of the Reserve Bank[1] was released on July 16, 2021. The Reserve Bank's communication policy follows the guiding principles of relevance, transparency, clarity, comprehensiveness and timeliness; it strives to continuously improve public understanding of developments in the multiple domains under its ambit. The Reserve Bank's approach is to communicate its policy stance and its assessment of the evolving situation by providing rationale as well as supporting information and analyses to all stakeholders. Transparent communication, unambiguous interpretation and precise articulation of the multifarious objectives of the Reserve Bank are the goals[2] of its communication policy. The composite mandate necessitates open, clear and structured communication for its effective functioning as well as for supporting the expanding boundaries of its policy instruments.

X.5 The Communication Policy 2.0, which distinctly sets out the purpose and principles of communication, is aligned with medium-term strategy (*Utkarsh*) of the Reserve Bank and recognises social media as another channel of communication with emphasis on monetary policy communication [particularly, post Monetary Policy Committee (MPC) deliberations], financial stability communication and communication during crisis time, alongside communication by the central board members. Further, the Communication Policy 2.0 embraces technological advancements, changes in modes of communication and other developments in the aspects of central bank communication over the years.

X.6 The Reserve Bank disseminates customised communication depending on the target audience[3] through public awareness initiatives and microsite on its website in 11 major regional languages apart from Hindi and English. The Reserve Bank reaches out to academicians, researchers, financial market participants, bankers, financial journalists and other financially informed communities and also maintains deeper engagement with the general public through traditional and non-traditional channels (Box X.I).

[1] The first communication policy was formulated in 2008 by aligning various channels of communication such as circulars/ notifications/directives, policy statements, press releases, statutory publications, and speeches with policy rationale and intent, and expected outcomes.

[2] The communication policy of the Reserve Bank has the following principal goals: (i) clarity on its role and responsibilities; (ii) building confidence in its policy measures; (iii) improving transparency and accountability; (iv) anchoring expectations of all economic agents to enhance the efficacy of monetary policy and to minimise undue speculation; (v) increasing awareness about financial stability; (vi) dissemination of information with minimum time lag; (vii) ensuring timeliness and credibility through effective communication; and (viii) deepening engagement with the multi-lingual and multi-cultural society.

[3] Such as regulated entities, researchers, analysts, academics, rating agencies, media, other central banks, multilateral institutions, market participants, government agencies, and members of public including women, senior citizens, defence personnel and school children in urban and rural areas.

Box X.1
Central Bank Outreach and Public Awareness

In line with one of the broad goals of the Reserve Bank's Communication Policy 2.0 to disseminate customised communication depending on the target audience, the Reserve Bank reaches out to such audience through multiple channels such as the Reserve Bank's website, media interface, informal workshops, and social media, besides public awareness campaigns to reach out to the general public. Further, target-specific communication of public interest has also been released through social media and placed under the '*RBI Kehta Hai*' page of the Reserve Bank's website and YouTube channel - a multi-media and multi-lingual flagship public awareness initiative launched to educate the public about banking regulations and practices. Virtual modes of awareness campaigns also became crucial for spreading financial literacy among masses, particularly during the COVID-19 pandemic.

New Initiatives

In 2021, the Reserve Bank launched a few key initiatives to reach out to the general public by:

- Spreading awareness through a rap song which encourages people to transact digitally, while protecting themselves against cybercrimes like identity theft.
- Associating with Olympic gold medallist Neeraj Chopra, bronze medallist Bajrang Punia and Bhavani Devi through a sports broadcasting channel for warning people against digital banking frauds. The timing of the broadcast was synchronised with the Olympics sports events to maximise the impact.
- The Financial Literacy Week 2021 saw a creative change when the Reserve Bank animated its mascot for financial literacy named 'Money Kumar'.
- Spreading awareness on the need to be cautious while transacting digitally through an animated dance video and song with its mascot 'Money Kumar', which was broadcast on TV channels and its social media handles.
- Associating with a popular kids' dance show to spread the message "how to stay cyber secure".
- Use of popular television programmes like *Kaun Banega Crorepati* in multiple languages, to convey financial awareness messages.

Apart from these public awareness campaigns, the Reserve Bank constantly monitors its social media presence and envisages structured two-way communication and engagement over social media.

Source: RBI.

Agenda for 2021-22

X.7 Last year, the Department had set out the following goals under *Utkarsh*:

- To open for public a new section of 'The RBI Museum', which will be dedicated to the functions and working of the Reserve Bank (Paragraph X.8);
- To revamp the Reserve Bank's website with improved information architecture (Paragraph X.9);
- To continue to conduct virtual/physical workshops/sessions for the regional media on important regulatory and banking related issues (Paragraph X.10); and
- To use public awareness programmes, social media presence and other channels of communication to further deepen engagement with the society (Paragraph X.11-X.13).

Implementation Status

Second Phase of 'The RBI Museum'

X.8 Preparation of the visualisation and exhibits for the second phase of 'The RBI Museum' located at Kolkata (West Bengal) is currently underway. It will display exhibits pertaining to major functions of the Reserve Bank, such as currency management, banker to banks, banker to the government, financial markets, monetary policy, regulation and supervision, foreign exchange and the Reserve Bank's role in the Indian financial system.

Revamping of Reserve Bank's Website

X.9 The work of revamping and redesigning the Reserve Bank's website was awarded after following an open and competitive selection process. The revamped and redesigned website of the Reserve Bank is expected to be rolled out in 2022-23.

Workshops for Regional Media Persons

X.10 The Reserve Bank conducts regular workshops and interactions with the regional media to familiarise the media persons with major functional areas of the Reserve Bank. This promotes a clear understanding of the Reserve Bank's role and functions and in turn fosters better informed reporting on its regulations, policy actions and decisions. A workshop for the regional media was conducted at Hyderabad in September 2021.

Social Media Command Centre

X.11 Department has set up a social media command centre for monitoring the Reserve Bank related communication on social and digital media on a near real time basis. Specific reports on media monitoring are generated, analysed and suitable measures are taken, if required. The Reserve Bank constantly monitors its social media presence and going forward envisages structured two-way communication and engagement with social media (Table X.1).

Public Awareness Campaigns

X.12 The Reserve Bank continued to conduct 360-degree mass media public awareness campaigns through media channels, *viz.,* print, television, radio, digital, hoardings and SMS. Campaigns through cinema halls were kept on hold, following the COVID-19 protocols. The Reserve Bank also participated in high-impact unique programmes on television, *viz.,* Indian Premier League (IPL), *Kaun Banega Crorepati* (KBC), Euro Cup, Olympics, *Kon Honar Crorepati* (Marathi version of KBC), *Evaru Meelo Koteeswaralu* (Telegu version of KBC), and year-long campaign on *Doordarshan* and All India Radio. In 2021, the Reserve Bank also launched some new initiatives to reach out to the wider public as alluded to earlier in Box X.1.

Table X.1: Social Media Following (as on March 31, 2022)

Platform	Name of Social Media Handle/Page	Launched in	Number of Followers/ Subscribers
1	2	3	4
Twitter	i. @RBI	January 2012	15.70 lakh
	ii. @RBIsays	August 2019	1.13 lakh
YouTube	Reserve Bank of India	August 2013	1.11 lakh
Facebook	i. @RBIsays	August 2019	5,526
	ii. @therbimuseum	February 2020	1,127
Instagram	@reservebankofindia	January 2022	9,381

Source: RBI.

X.13 The Reserve Bank also spreads public awareness through social media such as Facebook, Instagram, Twitter, and YouTube.

Other Initiatives

Communication Seminars

X.14 During the year, three communication seminars were conducted for senior and top management of the Reserve Bank. The objectives of the communication seminars were: (i) to engage with senior management on nuances of external communication; (ii) to aid

Regional Directors, Banking Ombudsmen and Officers-in-Charge in communicating with the stakeholders, including media on various issues pertaining to their functional or geographical jurisdiction; and (iii) to equip senior management with strategies and techniques in communication during times of crisis.

X.15 A communication seminar for Executive Directors was organised on August 7, 2021 at Kashid, Maharashtra, and two communication seminars for Regional Directors/ Chief General Managers/ Officers-in-Charge and Ombudsmen were organised on July 30 and December 20, 2021 at Bengaluru and Amritsar, respectively.

Informal Media Interactions

X.16 Apart from the structured post monetary policy press conferences on the days that monetary policy announcement is scheduled at bi-monthly intervals, the Reserve Bank conducts semi-structured media interactions in an informal set-up a few days after every monetary policy announcement, or as and when such an engagement is felt necessary. 16 such interactions were held during 2021-22 to explain the rationale behind major policy decisions, seek feedback from media persons and clarify their doubts and concerns on the domain.

RBI Website

X.17 During the year, a new FinTech microsite was made live in co-ordination with FinTech Department and Reserve Bank Information Technology Pvt. Ltd. (ReBIT).

X.18 During 2021-22, the Department released 1,953 press releases, 200 notifications/circulars, 16 master directions and uploaded 37 interviews/ speeches of the top management, six RBI reports, 10 working papers, 1,026 tenders and 97 recruitment related advertisements.

Agenda for 2022-23

X.19 During 2022-23, the Reserve Bank's communication channels would be further strengthened, and efforts will be made to:

- Revamp the Reserve Bank's website with improved information architecture *(Utkarsh)*;
- Greater engagement with general public through additional social media platforms, such as Instagram and enhance two-way communication efforts through active social media listening *(Utkarsh)*;
- Layering of public awareness messages for last-mile connectivity by adding illustrations, animations and infographics for interactive campaigns;
- Targeted media monitoring at the level of regional offices of the Reserve Bank;
- Revisiting the style and usage in written communication as a step towards simplifying the Reserve Bank's internal and external communication content; and
- Conducting impact assessment of the Reserve Bank's public awareness campaigns to gauge the effectiveness.

3. INTERNATIONAL RELATIONS

X.20 During 2021-22, the Reserve Bank further strengthened economic and financial relations with international organisations and multilateral bodies through its International Department.

Agenda for 2021-22

X.21 The Department had set out the following goals:

- Follow up on the issues relating to the International Financial Architecture

Working Group (IFA WG) of the G20 *(Utkarsh)* [Paragraph X.22-X.23];

- Successful completion of the IMF Article IV surveillance by the IMF Mission to India *(Utkarsh)* [Paragraph X.24];
- Continue to deliver under various initiatives including the BRICS *(Utkarsh)* [Paragraph X.25-X.28];
- Continue to support the South Asian Association for Regional Cooperation (SAARC) countries *(Utkarsh)* [Paragraph X.29-X.30]; and
- Strengthen engagement with the G20 in the run-up to taking over the Presidency in 2023 (Paragraph X.31).

Implementation Status

IMF and IFA Related Issues

X.22 The Department participated in the meetings of the G20 IFA WG and provided inputs on issues relating to volatility in capital flows, adequacy of global financial safety net (GFSN), and the new general allocation of the Special Drawing Rights (SDRs) by the IMF.

X.23 The Department provided inputs for participation in the biannual meetings of the International Monetary and Financial Committee (IMFC) held virtually in April and October 2021. A new Note Purchase Agreement (NPA) 2020 was signed between the Reserve Bank of India (RBI) and the IMF. The NPA 2020 amounting to USD 3.9 billion is effective from September 24, 2021.

X.24 In view of the pandemic, the Article IV engagement with the IMF was held in a virtual format in July 2021. The Department regularly participated in various surveys of the IMF such as Annual Report on Exchange Arrangements and Exchange Restrictions (AREAER), the Macroprudential Policy Survey, and surveys on climate risks and cyber risks. The Department also participated in the IMF's Independent Evaluation Office (IEO) Survey for assessment of the IMF's capacity development.

X.25 The Department firmed up the Reserve Bank's stance and provided inputs to the Ministry of Finance (MoF), Government of India (GoI) on various international policy issues. The Department also worked closely with the Ministry of Commerce and Industry and provided inputs for various bilateral, plurilateral and multilateral trade negotiations relating to the World Trade Organisation (WTO).

X.26 The Department provided inputs for the World Bank's India Development Update 2021, participated in the Organisation for Economic Co-operation and Development's (OECD) Advisory Task Force on the Codes (ATFC) meetings and coordinated the completion of the Asian Development Bank's Asia Small and Medium-Sized Enterprise Monitor (ASM) 2021.

BRICS, SAARC and Bilateral Cooperation

X.27 As the BRICS Chair in 2021, the Reserve Bank led the BRICS central bank workstream in 2021 (Box X.2), which led up to the BRICS Leaders' New Delhi Declaration in the XIII BRICS Summit held on September 9, 2021.

X.28 The Reserve Bank conducted the maiden Contingent Reserve Arrangement (CRA) test run of the IMF-linked portion in 2021 and initiated discussions to establish a framework for coordination between the CRA and the IMF.

X.29 The Reserve Bank extended currency swap support aggregating USD 1.05 billion to three SAARC central banks. Under the SAARCFINANCE Scholarship Scheme for

Box X.2
BRICS Chair 2021 – RBI Achievements

In 2021, the Reserve Bank achieved the following milestones under BRICS Chair of India:

- Several BRICS high-level meetings of Finance Ministers and Central Bank Governors (FMCBG), Finance and Central Bank Deputies (FCBD), CRA Governing Council (GC), CRA Standing Committee (SC) and CRA technical and research groups were conducted during the year.
- The BRICS Economic Bulletin 2021 with the theme "*Navigating the Ongoing Pandemic: The BRICS Experience of Resilience and Recovery*" was published under the aegis of the CRA Research Group.
- BRICS deepened its cooperation in 2021 by exchange of information on cyber threats and sharing of experience in countering cyber-attacks in the financial sphere.
- BRICS e-Booklet on "*Information Security Regulations in Finance", "Compendium of BRICS Best Practices on Information Security Risks: Supervision and Control"*, and *"BRICS Digital Financial Inclusion Report"* were the important publications during 2021.
- BRICS Seminar on "*Information Security and Consumer Protection*" was organised on December 15, 2021.
- The Reserve Bank has undertaken several initiatives, including the BRICS Collaborative Study on "COVID-19: *Headwinds and Tailwinds for BoP of the BRICS*" and a dialogue with the IMF under the CRA.
- The BRICS Payments Task Force (BPTF) has taken various measures in 2021 to strengthen cooperation amongst BRICS countries on payments systems. The BPTF Annual Report 2021 and the CRA Evaluation Report were produced during the year.

Source: RBI.

the academic year 2022-23, the Reserve Bank selected four candidates, two from the Bangladesh Bank and one each from the Royal Monetary Authority of Bhutan and the Nepal Rastra Bank (NRB) for pursuing higher studies in recognised Indian Universities/ institutions.

X.30 The fourth Joint Technical Coordination Committee (JTCC) meeting, hosted by the NRB, was held virtually on September 6, 2021. The meeting covered discussions on issues raised by the NRB relating to currency management, non-competitive bidding in T-bills, and other issues relating to foreign trade, balance of payments and foreign direct investment.

G20 and its Working Groups

X.31 The Department provided research briefs/ inputs for the agenda issues under the Italian and Indonesian Presidencies. India has entered the G20 Troika from December 2021, ahead of the Indian Presidency in 2023.

Other Initiatives

Engagement with BIS

X.32 The Department provided analytical support that shaped RBI's stance on issues discussed in various meetings of the Bank for International Settlements (BIS), including the Committee on the Global Financial System (CGFS).

X.33 The Department contributed to various BIS surveys including on mandate of the central bank beyond price stability, post-pandemic modes of working and opinion surveys to gauge public awareness and perception of central banks. It also coordinated the Reserve Bank's participation in the CGFS workshop on non-bank financial institutions (NBFIs) and the functioning of government bond markets. In addition, the Department also provided support and inputs for activities related to the BIS Board and its Administrative Committee.

FSB Initiatives on Global Financial Regulation

X.34 The Department prepared inputs for presenting India's stance in various Committees and Working Groups of the Financial Stability Board (FSB).

X.35 With India as the co-chair of FSB's Regional Consultative Group, Asia (RCG-Asia), the Department organised two meetings of the RCGA in virtual mode. Contributions were made to the FSB's annual monitoring exercise to assess global trends and risks from the NBFIs. The Department also provided inputs for various surveys[4] conducted by the FSB.

X.36 The Reserve Bank joined the Network for Greening of the Financial System[5] (NGFS) on April 23, 2021 and the Department spearheaded the effort for this outcome. The Reserve Bank, as a member central bank, has been contributing to the work of NGFS (Box X.3).

X.37 The Department is the nodal point for bilateral dialogues/ meetings with other countries and for various other bilateral issues.

Other Activities

X.38 The Reserve Bank continued its active engagement with the South Asia Regional Training and Technical Assistance Centre (SARTTAC) and the South East Asian Central Banks (SEACEN) Centre. A mid-term evaluation of IMF's SARTTAC operations by external agencies was facilitated by the Department.

X.39 The third Senior Level Dialogue (SLD) between the Reserve Bank and Bank of Japan (BoJ) was organised and hosted on November 29, 2021 in a virtual format. The SLD is organised every year to deepen relations, strengthen the exchange of information and reinforce cooperation in the field of central banking between the two central banks.

Box X.3
NGFS' Glasgow Declaration and Reserve Bank's Commitment

As part of contribution to the COP26, the NGFS released the "*NGFS Glasgow Declaration: Committed to Action"*, in which it set forth future plans to improve the resilience of the financial system to climate-related and environmental risks, and for supporting the transition towards a sustainable economy.

Alongside, the Reserve Bank also published its *Commitment to Support Greening India's Financial System* on November 3, 2021. The Reserve Bank broadly supports the NGFS declaration. Specifically, keeping in view the national commitments, priorities and complexity of India's financial system, a commitment has been made to explore how climate scenario exercises can be used to identify vulnerabilities in the Reserve Bank supervised entities' balance sheets and business models. Also, the Reserve Bank shall work to integrate climate-related risks into financial stability monitoring and shall also build awareness about climate-related risks among regulated financial institutions.

References:

1. NGFS Glasgow Declaration: Committed to Action, Glasgow, November 3, 2021.
2. RBI, Statement of Commitment to Support Greening India's Financial System - NGFS, November 3, 2021.

[4] Survey on regulatory and supervisory approaches to addressing climate risks at financial institutions, survey on leveraged loan definitions, survey on implementation of reforms in OTC derivatives, thematic peer review of the corporate debt workouts and survey on cyber incident reporting.

[5] The NGFS is a group of central banks and supervisors willing to share best practices and contribute to the development of environment and climate risk management in the financial sector.

Agenda for 2022-23

X.40 In the year 2022-23, the Department will focus on attaining the following milestones:

- Deepening engagement with multilateral institutions including on issues under IFA WG of the G20;
- Participation in Advisory Group for G20 Finance Track Agenda set up by the MoF, GoI to ideate on priorities, suggest outcomes/ deliverables and provide expert guidance on the finance track agenda under the 2023 Indian Presidency of the G20;
- India will take over the G20 Presidency on December 1, 2022 and several high-level and working group meetings will be organised in collaboration with the Government of India;
- Increasing exposure visits and capacity building support for SAARC and other countries through formal MoUs or otherwise; and
- Strengthening BRICS central banks' cooperation through various channels of engagement.

4. GOVERNMENT AND BANK ACCOUNTS

X.41 The Department of Government and Bank Accounts (DGBA) oversees the functions of the Reserve Bank as banker to banks and banker to governments, besides maintenance of internal accounts and formulation of accounting policies of the Reserve Bank.

Agenda for 2021-22

X.42 Last year, the Department had set out the following goals under *Utkarsh:*

- Pursuing the on-going agenda of integration of central and state government systems with *e-Kuber* for e-payments and e-receipts (Paragraph X.43); and
- Providing dashboard facility to governments for self-monitoring of e-receipts and e-payments transactions (Paragraph X.44).

Implementation Status

Pursuing the on-going Agenda of Integration of Central and State Government Systems with e-Kuber for e-Payments and e-Receipts

X.43 During the year, the Treasury Single Account (TSA) system for central government autonomous bodies has been extended for universal application in coordination with Office of Controller General of Accounts, Ministry of Finance. One Union Territory (UT) has been on-boarded for e-payments and two state governments have completed testing and are expected to be on-boarded soon. Two other state governments are in the process of carrying out changes to their internal systems for integration with *e-Kuber*.

Providing Dashboard Facility to Governments for Self-monitoring of e-Receipts and e-Payments Transactions

X.44 The facility is in advanced stages of design/development and fine-tuning to meet the requirements of governments.

Major Initiatives

Induction of Scheduled Private Sector Banks as Agency Bank

X.45 After the lifting of embargo placed on private sector banks to undertake fresh or additional government business by Department of Financial Services, Ministry of Finance, Government of

India, revised guidelines have been issued by the Reserve Bank for authorising scheduled private sector banks as its agency banks for conduct of government business. As on March 31, 2022, there are 31 agency banks comprising all 12 public-sector banks (post amalgamation) and 19 scheduled private sector banks which are undertaking government business on behalf of the Reserve Bank.

Extension of online Memorandum of Error (MoE) Process in GST Framework to All State Governments

X.46 During the year, the online MoE process was extended to seven more state governments and one UT for reconciliation of GST transactions. As on March 31, 2022, 14 state governments and two UTs have been successfully onboarded on the online MoE platform. Moreover, one state government has completed the testing and is expected to go live shortly, nine more state governments are in various stages of testing.

Integration of Express Cargo Clearing System (ECCS) with E-Payment Gateway of ICEGATE

X.47 *E-Kuber* of the Reserve Bank is integrated with Indian Customs Electronic Gateway (ICEGATE) system of the Central Board of Indirect Taxes and Customs (CBIC) since July 1, 2019 for payment of central excise, service tax and special economic zone (SEZ) custom duty. During the year, ECCS was also integrated with *e-Kuber* through ICEGATE payment gateway from August 2021 thus enabling payment of requisite duties by taxpayers directly into the accounts of CBIC maintained at the Reserve Bank using NEFT/RTGS payment option.

Universalisation of Treasury Single Account (TSA)

X.48 As announced in the Union Budget speech in February 2021, and as per the office memorandum dated February 22, 2021 issued by the Department of Economic Affairs, Ministry of Finance, the TSA system is being extended for universal application in coordination with Office of Controller General of Accounts, Ministry of Finance.

Other Developments

X.49 The facility of account validation through National Payments Corporation of India (NPCI) was rolled out during the year and three state governments have been on-boarded.

X.50 Facility of direct benefit transfer (DBT) payment using *Aadhaar* Payment Bridge System (APBS) for governments through *e-Kuber* has been enabled and one state government has been on-boarded during the year.

X.51 Facility for dissemination of changes in Indian Financial System Code (IFSC) through XML based notification to government systems integrated with *e-Kuber* for e-payments is under testing.

X.52 Facility for providing Application Programming Interface (API) web-based reconciliation system is being implemented in consultation with Office of Controller General of Accounts, Ministry of Finance, GoI.

X.53 Office of Controller General of Defence Accounts (CGDA) is in the process of enabling defence pension payments to Nepal-domiciled pensioners under the Indo-Nepal Remittance Facility through *e-Kuber* integration with CGDA's SPARSH [System for Pension Administration (Raksha)].

Agenda for 2022-23

X.54 For 2022-23, the Department proposes the following agenda in line with *Utkarsh*:

- Enhancing the payments (non-pension) by Central Civil Ministries through integration between *e-Kuber* and Public Fund Management System, including Inter-Government Adjustment Advice;

- Enhancing the e-payment transactions (non-pension) of state governments who are already integrated with *e-Kuber*;
- Integration of state governments with *e-Kuber* for e-receipts for direct NEFT/ RTGS based receipts and agency bank reporting;
- Integrating remaining state governments in North-East region with *e-Kuber*; and
- Onboarding of agency banks for collection of customs duty receipts through ICEGATE portal of the Central Board of Indirect Taxes and Customs (CBIC).

5. MANAGING FOREIGN EXCHANGE RESERVES

X.55 The Russia-Ukraine conflict has roiled financial markets and injected a fresh dose of uncertainty in the global economy, which was already struggling to recover from the pandemic-driven shock. The initial indications suggest that the conflict could impact the global macroeconomy primarily through the inflation channel, though growth is also likely to take a hit as the conflict prolongs. In this *milieu* of dynamic global macroeconomic environment and increasing geo-political uncertainties, safety, liquidity and return in that order continued to guide the Department of External Investments and Operations (DEIO) as investment objectives for managing foreign exchange reserves (FER). On a year-on-year basis, FER increased by 5.3 per cent during 2021-22 as compared with 20.8 per cent in the previous year.

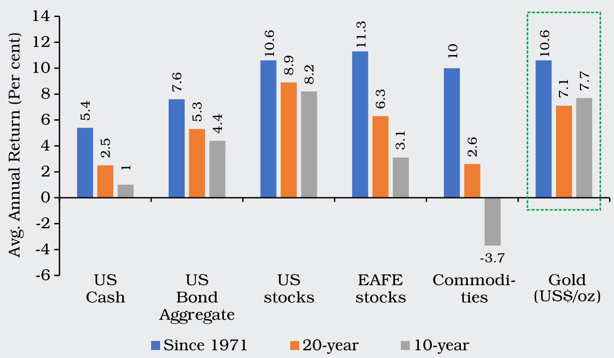
X.56 Gold has traditionally offered reserve managers many benefits, such as the absence of default risk, diversification of portfolio, low correlation with other asset classes and safe haven investment during different phases of financial cycles (Box X.4).

Box X.4
Gold as a Financial Asset in Different Phases of Financial Cycles

Gold is a unique asset with attributes of financial assets. Gold acts as a diversifier and is a vehicle to mitigate losses in times of market stress. Gold has delivered positive returns over the long run, often outperforming other major asset classes (Chart 1). In the context of a negative relationship between the US dollar and the price of gold, as observed by many analysts and researchers, Pukthuanthong and Roll (2011) showed that price of gold in terms of US dollar increases while the US dollar depreciates against other currencies. They further showed that the fall in price of gold in USD terms can be associated with currency depreciation in every country.

The financial cycle may be constructed based on economic fluctuations that originate in the financial system. It typically manifests itself as a co-movement between credit aggregates and asset prices. The Global Financial Crisis (GFC) reinvigorated the interest in studying financial cycles. Stremmel (2015) identified the key ingredients for European financial cycles by constructing techniques and contrasting different financial indicators such as credit aggregates, asset prices and banking sector variables. More recently, Potjagailo and Wolters (2020) have used a time-varying

Chart 1: Long-term Performance of Gold *versus* Other Financial Assets



Source: World Gold Council.

(Contd.)

dynamic factor model to analyse co-movement in credit, house prices, equity prices, and interest rates across 17 advanced economies over 130 years. They observe global co-movement across financial variables as well as variable-specific global cycles of different lengths and amplitudes. Global cycles have gained relevance over time. For equity prices, they now constitute the main driver of fluctuations in most countries. Global cycles in credit and housing have become much more pronounced and protracted since the 1980s, but their relevance increased for a sub-group of financially open and developed economies only.

The performance of gold as a financial asset during different phases of financial cycles has been examined using a combination of Baxter-King filter and the Harding and Pagan's cycle dating algorithm. This is used to determine the financial cycles from the credit-to-GDP and GDP weighted equity indices. To determine the property cycle, the periods with negative and positive year-on-year GDP weighted percentage changes in prices were segregated. The objective behind using above methodologies is to construct meaningful cycles for the study. This helps to understand the relation between gold returns and explanatory variables in the different phases of financial cycles.

As per earlier studies and empirical findings, gold's price is driven by the performance of USD. The filtered credit, equity and property cycles have unique characteristics in terms of amplitude and duration which is well expected from the financial markets. In a sample of 21 years, both cycles peaked before the two international financial events (2001 market crash and 2008 global financial crisis). However, it was observed that the equity cycle reaches peak before the credit cycle. This can be explained due to the nature of credit and equity markets as credit build-up and wind down takes a longer time than changes in the equity indices. Both the cycles witness highest peaks before the global financial crisis. This observation is supported by Claessens, Kose and Terrones (2011) that recoveries coinciding with booms in credit and housing markets are stronger. The observations across the various phases of the different financial cycles imply that in addition to providing a greater risk hedge to USD, gold's performance as a safe asset among other asset classes has also improved in the recent phases of financial cycles.

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2. Pukthuanthong, K. and Roll, R. (2011), 'Gold and the Dollar (and the Euro, Pound and Yen)', *Journal of Banking and Finance*, 35(8), 2070-2083.
3. Potjagailo and Wolters (2020), 'Global Financial Cycles since 1880', *Staff Working Paper*, No. 867, Bank of England.
4. Ranjan, Aniket and Naveen Kumar (2022), 'Performance of Gold as a Financial Asset During Different Phases of Financial Cycles', Social Science Research Network (SSRN), March.
5. Stremmel, H. (2015), 'Capturing the Financial Cycle in Europe', *Working Paper Series*, European Central Bank.

X.57 The 49th Board of Directors' Meeting of the Asian Clearing Union (ACU) held virtually on May 24, 2021 (Chair: Reserve Bank of India) deliberated on various issues such as resuming the use of Euro in the ACU mechanism, ways in which the ACU platform can be expanded and strengthened, issues faced by the exporters and importers in using the ACU mechanism, among others.

X.58 As part of diversification strategy, the Reserve Bank continued to purchase gold during the year. The Department also continued in its endeavour to ensure effective diversification of reserves by exploring new asset classes/jurisdictions for deployment of foreign currency assets (FCA), while adhering to the primary objectives of safety and liquidity. The process of scaling up of newly introduced products such as forex swaps and repos also continued during the year.

Agenda for 2021-22

X.59 Last year, the Department had set out the following goals:

- Continue to explore new asset classes, new jurisdictions/ markets for deployment of FCA for portfolio diversification and in the process tap advice from external experts, if required (Paragraph X.60);

- Leverage IT in the form of contemporary treasury management solution for FER management *(Utkarsh)* [Paragraph X.61]; and
- Roll-out system based daily computation of weighted average cost for assets (Paragraph X.62).

Implementation Status

X.60 The Department continued in its endeavour to ensure effective diversification of reserves by exploring new asset classes/ jurisdictions for deployment of FCA, while adhering to the primary objectives of safety and liquidity. The process of scaling up of newly introduced products continued during the year.

X.61 The Department has initiated the process of implementing a new treasury application which is targeted to go live during 2022-23.

X.62 During the year, the system-based daily computation of weighted average cost for foreign currency assets was developed and implemented effective April 1, 2022.

Agenda for 2022-23

X.63 For 2022-23, the Department will focus on the following goal:

- In order to ensure effective deployment of forex reserves, the Department will continue to explore new products/ opportunities, while ensuring the safety and liquidity of FCA.

6. ECONOMIC AND POLICY RESEARCH

X.64 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) provides research-based inputs and management information system (MIS) services for policy formulation by the Reserve Bank. The Department generates primary national level data on various economic heads, prepares the statutory reports of the Reserve Bank, brings out several research publications, provides technical support to various operational departments and to technical groups/ committees constituted by the Reserve Bank from time to time, and promotes collaborative policy-oriented research with external experts. The Department is also the key repository and disseminator of secondary data on various heads relating to the Indian economy.

X.65 While fully adhering to COVID-19 protocols and safety measures, 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 also 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 both on the online and offline platforms.

Agenda for 2021-22

X.66 Last year, the Department had set out the following goals:

- Increase in the number of research studies for publication in the Reserve Bank of India Occasional Papers and Working Papers *(Utkarsh)* [Paragraph X.67];
- Forward-looking agricultural commodity price sentiment analysis, based on newspaper coverage, through big data applications *(Utkarsh)* [Paragraph X.68];

- Development of an in-house expertise for data compilation under the KLEMS [capital (K), labour (L), energy (E), material (M) and services (S)] project (Paragraph X.69); and
- Conduct of an Itinerant Archives Exhibition on the first floor of the Reserve Bank Museum at Kolkata (Paragraph X.70).

Implementation Status

X.67 During 2021-22, the Department published 67 research papers/articles, of which 20 were published in external international and domestic journals. In addition, 10 RBI Working Papers and eight papers in the RBI Occasional Papers were published during the year. The published papers covered a wide range of issues, such as leverage and investment dynamics of Indian corporate sector; macroeconomic implications of bank capital regulations; education loan NPAs; forecasting core inflation; long-run saving-investment relationship; measuring demand supply mismatch index to forecast inflation; the non-deliverable forwards (NDF) market; climate change; determinants of India's external commercial borrowings; policy responses for banks facing loan defaults; performance of inflation forecasting models; and monetary policy transmission through the lens of Monetary Conditions Index.

X.68 Based on the news coverage on agricultural commodities in nine leading English dailies, commodity-wise price sentiment indices were constructed using text mining techniques for three vegetables, namely tomatoes, onions and potatoes (TOP), as the volatility in the prices of these three vegetables has substantial bearing on the headline inflation. The results confirmed the usefulness of news-based sentiment in providing forward-looking information on price movements of TOP in the Consumer Price Index (CPI).

X.69 The Department created a new KLEMS Division for an in-house compilation of the KLEMS estimates. KLEMS database provides time-series estimates on total factor productivity and factor inputs [Capital (K), Labour (L), Energy (E), Material (M), and Services (S)] for the Indian economy and 27 subsectors. The knowledge transition from the external experts at the Delhi School of Economics to the KLEMS Division was completed during the year. The Division successfully completed a parallel estimate of KLEMS for 2018-19, following which the KLEMS data were posted on the Reserve Bank's website.

X.70 The RBI Archives identified the relevant archival documents and prepared a story line for the Itinerant RBI Archives Exhibition.

Other Initiatives

X.71 The Department employed a new approach to forecast GDP growth, involving the use of innovative machine learning algorithms. GDP nowcasting using a dynamic factor model was augmented with most relevant sets of indicators and the model is now being used to nowcast GDP of recent quarters.

X.72 In view of the pandemic, the Department also undertook research on certain pandemic-related issues, including the impact of the global supply chain disruptions on real GDP growth. Furthermore, research on various topical issues, including the role of systemic liquidity and gross NPA (GNPA) on bank credit offtake during a downcycle and the efficacy of the quality and quantum of government spending on growth was undertaken.

X.73 Apart from regular compilation of the annual estimates of household financial savings, the data on quarterly household financial savings and household debt to GDP ratio were also compiled and were released up to the third quarter of 2020-21.

X.74 During India's BRICS Presidency 2021, the Department along with the Department of Statistics and Information Management hosted two workshops on Services Trade Statistics as part of the BRICS Contact Group on Economic and Trade Issues.

X.75 The Department initiated its survey on India's inward remittances in 2021-22 to capture various aspects relating to remittances in 2020-21, including the source, destination, purpose of inward remittances, size, prevalent mode of transmission, and receivers'/ senders' cost of remittances.

X.76 Apart from completing the various goals set for 2021-22, the Department also released all its flagship publications, *viz.,* the Annual Report, Report on Trend and Progress of Banking in India, and State Finances: A Study of Budgets of 2021-22 in a timely manner. The Report on Currency and Finance 2021-22, with the theme 'Revive and Reconstruct', was released in the public domain on April 29, 2022. The History of the Reserve Bank, Volume-5 for the period spanning 1997 to 2008 is expected to be released in 2022.

X.77 Furthermore, the 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.

X.78 The DEPR Study Circle, an in-house discussion forum, organised 26 online seminars/ presentations during the year on diverse research themes. The Department also organised a DEPR Colloquium on Productivity, Competitiveness and Inflation on June 28, 2021 and an expert talk on "Tapering Then and Now" delivered by Dr. Poonam Gupta, Director General, National Council for Applied Economic Research on November 16, 2021.

X.79 The Reserve Bank Information Technology Pvt. Ltd. (ReBIT) has been assigned the work of developing the document management software (DMS). The functional module of the DMS software has been completed and overall security aspects of the application are in progress. The testing of the DMS was taken up in April 2022. By August 2022, the user acceptance test is expected to be completed after which the DMS can be operationalised. The RBI Archives (RBIA) had also conducted about 16 online customised programmes on record management for central office departments, regional offices and training establishments during 2021-22. The tender for digitisation of 5 lakh pages of archival records (kept in RBIA) per year has been awarded based on the e-tendering process. It is proposed to complete the digitisation of 15 lakh pages up to March 31, 2024. The scientific preservation of paper records has also been outsourced by the RBIA.

Agenda for 2022-23

X.80 The Department's agenda for 2022-23 will focus on the following goals:

- Publishing a minimum of 100 research papers every year and to improve quality of analysis and research with broader coverage of emerging issues *(Utkarsh)*;
- Making Municipal Finance Report timely and improving the coverage of the report *(Utkarsh)*;

- Annual compilation of the KLEMS dataset and manual by the Department *(Utkarsh)*;
- Application of new machine learning techniques for assessing macro-economic outlook; and
- Embedding climate risk in the traditional macro-modelling framework and analysing its impact on macroeconomic aggregates.

7. STATISTICS AND INFORMATION MANAGEMENT

X.81 In keeping with its core mandate, the Department of Statistics and Information Management (DSIM) engaged in compilation, analysis and dissemination of macro-financial statistics and also provided statistical support and analytical inputs through data management, applied statistical research, and forward-looking surveys across various functions of the Reserve Bank. In this endeavour, it maintains centralised information system of the Reserve Bank, manages electronic submission of returns by regulated entities, and compiles statistical indicators in the area of banking, corporate and external sectors. To further enhance the efficiency and effectiveness of these functions, the next generation data warehouse [*viz.,* centralised information management system (CIMS)] is at an advanced stage of development. Initiatives have been taken to use non-traditional data sources and advanced statistical and artificial intelligence (AI)/machine learning (ML) techniques.

Agenda for 2021-22

X.82 Last year, the Department had set out the following goals:

- Work towards making CIMS fully operational and migrate all databases to the new centralised system (*Utkarsh*) [Paragraph X.83];
- Follow Statistical Data and Metadata eXchange (SDMX) standards for metadata-driven maintenance and dissemination system (*Utkarsh*) [Paragraph X.84];
- Implement a scalable end-to-end system for public credit registry (PCR) in a phased manner, starting with scheduled commercial banks (SCBs) *(Utkarsh)* [Paragraph X.85];
- Revise the reporting system for international banking statistics (IBS) as per the revised guidelines of the Bank for International Settlements (BIS) [Paragraph X.86];
- Expand the scope of data collection mechanism and analytical work in the domain of Big data for providing supplementary information relevant to the Reserve Bank (Paragraph X.87); and
- Put in place a system to collect monthly data on economic classification of international credit/debit card transactions (Paragraph X.88).

Implementation Status

X.83 All infrastructure installations (*i.e.*, hardware and standard softwares) for CIMS were completed, despite delays caused by containment measures in the wake of successive waves of the pandemic. The new software application is under user acceptance test (UAT). All existing data are migrated and are under third party audit. All SCBs (excluding regional rural banks) and 14 major cooperative banks are in the process of onboarding. A majority of the returns have been deployed under the Reserve Bank's test environment, with an aim to complete all returns by September 2022.

X.84 Data elements / dimensions / measures / attributes have been finalised in 245 returns for SDMX standards for metadata-driven maintenance and dissemination systems.

X.85 Hardware and software set-up installations have been completed at the data centre and disaster recovery (DR) sites of the Indian Financial Technologies and Allied Services (IFTAS). The system requirement study (SRS) has been done, and system design and development of a comprehensive credit information repository is in progress.

X.86 The reporting system for IBS is undergoing modifications to implement the revised guidelines within the deadline given by the BIS.

X.87 The analytical activities in the domain of Big data covered under *Utkarsh* 2022 were completed and the compilation of price indices (food and housing) is being carried out on a regular basis to complement existing statistical efforts. Remote sensing based climatic factors and crop vegetation indicators have been used for modelling *mandi* arrivals and food price projections (Box X.5).

Box X.5

Satellite Images and Remote Sensing Data for Assessment of Agricultural Commodities

The constellation of artificial satellites whirling around the earth collects massive amount of data, which provide useful information for understanding natural resources, monitoring of weather, crop coverage, estimation of biomass density and crop yields, and efficient use of groundwater and fertilisers in agriculture.

Accordingly, a better understanding of the Indian agro-economy can be obtained by juxtaposing satellite-based information on (a) wholesale prices of diverse set of agricultural commodities collected from *mandis* across the nation, (b) modal prices, price ranges, *mandi* profile and daily arrivals available on the agricultural marketing portal (www.agmarknet.gov.in) of the Ministry of Agriculture & Farmers Welfare, Government of India, and (c) spatial and temporal rainfall. In this box, price dynamics of the two widely used price sensitive agro-commodities in the Indian consumer basket, *viz.*, *tur* (or *arhar*) dal and onion are presented.

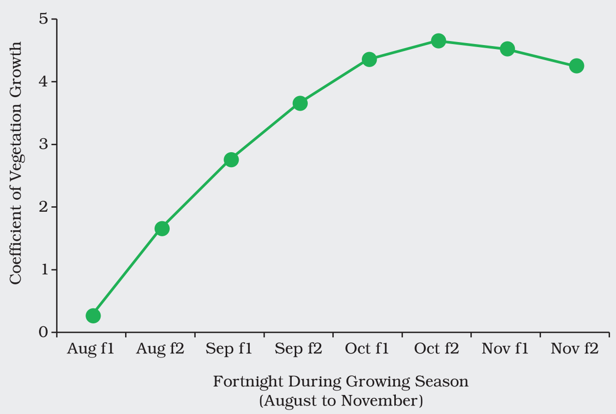
Tur Dal

Daily arrival data from *mandis* are juxtaposed with the normalised difference vegetation index (NDVI) at *taluk/tehsil* level for three major production states (*viz.*, Karnataka, Maharashtra and Madhya Pradesh), with an average share of 63 per cent in total production during the five-year period from 2015-16 to 2019-20. Due consideration is given to temporal signatures, since crop-specific phenology changes (*i.e.,* development of crop during its life cycle from sowing to harvesting) as the crop season progresses. Vegetation growth is derived by suitable seasonal filtering and temporal aggregation of NDVI. Arrival growth has been modelled as a function of vegetation growth over fortnights during the growing season. The impact of vegetation growth on *mandi* arrivals is estimated dynamically and the coefficients are presented in Chart 1.

Onion

Mandi prices from Lasalgaon, Nashik district, Maharashtra, which is considered to be the biggest onion market in Asia, has been used along with weather parameters as an initial use case to determine the association between high price (rise of 25 per cent and above) events and dew temperature at two meters above the earth's surface (Chart 2). The bin height in the chart corresponds to the proportion of high price events in the respective dew temperature bucket.

Chart 1: Impact of Vegetation Growth on Arrival Growth



(Contd.)

Chart 2: Onion Price Growth with Dew Temperature (2 Meters above the Earth's Surface)

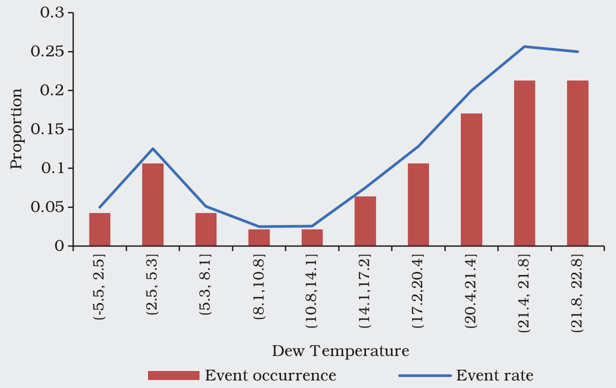
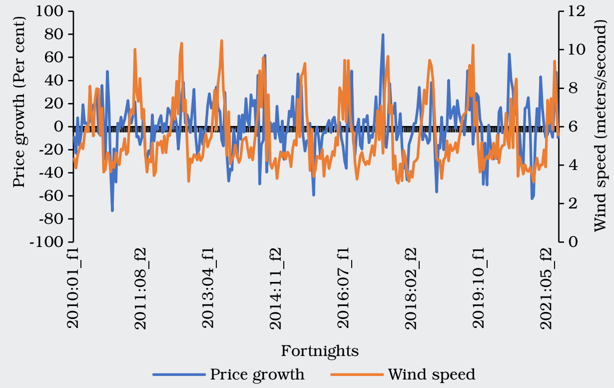


Chart 3: Price Growth *v/s* Wind Speed (50 Meters above the Earth's Surface)



1. For Chart 2, event occurrence is the share of high price events in the interval. Event rate is the number of events divided by the number of events and non-events in that class interval.
2. For Charts 1 and 3, f1 and f2 indicate first and second fortnight of a month, respectively. In Chart 3, 01 stands for January, 02 for February, and so on.
3. In Chart 2, dew temperature is divided into ten intervals. The interval (a, b] means greater than a and less than or equal to b. For example, (2.5, 5.3] consists of values greater than 2.5 and less than or equal to 5.3.

Higher event rates are found to be associated with higher dew temperature and fortnightly onion price growth shows close co-movements with wind speed at 50 meters above the earth's surface (Chart 3).

Given the complex non-linear interactions between weather parameters and price dynamics, the analysis revealed that machine learning techniques (*e.g.*, random forests) may have more predictive capabilities than traditional statistical methods.

References:

1. Navalgund, R.R., and Ray, S.S. (2019), 'Application of Space Technology in Agriculture: An Overview', *Smart Agripost*, 6(6), 6-11.
2. Ray, S.S. (2016), 'Crop Assessment using Space, Agro-Meteorology & Land Based Observations: Indian Experience', *International Seminar on Approaches & Methodologies for Crop Monitoring & Production Forecasting* (pp. 25-26).

X.88 A new system called "Foreign Exchange Transactions Electronic Reporting System – Cards (FETERS-Cards)" under the Balance of Payments (BoP) portal was implemented for collecting economic activity wise monthly data on international credit / debit cards and unified payment instrument (UPI) transactions. All Authorised Dealer (AD) banks have been reporting such transactions since April 2021.

Other Initiatives

X.89 Despite the operational challenges posed by the outbreak of the pandemic, the Department adhered to the timelines on forward looking bimonthly/quarterly surveys of enterprises, households and professional forecasters. Several *ad hoc* surveys were also conducted at short notice by the central and regional offices. In addition, methodological improvements were also carried out for improving the robustness of estimates, coverage and for aligning codes in the regular monetary policy surveys under the guidance of the Reserve Bank's Technical Advisory Committee on Surveys (TACS) [*e.g.*, product/industry codes in the industrial outlook survey (IOS), and nature of business/activity codes in the services and infrastructure outlook survey (SIOS) to industry standard classifications, estimation under the order books, inventories and capacity utilisation survey (OBICUS)].

X.90 The Department also reduced the time lag in releasing the results of external sector census/ surveys [*viz.*, annual census on foreign liabilities and assets (FLA) of Indian direct investment entities, FLA survey of mutual fund companies, survey on exports of computer software and information technology-enabled services (ITES), and biennial survey on foreign collaboration in Indian industry].

X.91 All regular data publications were released, and updated time series data were made available through the Database on Indian Economy (DBIE) portal of the Reserve Bank in a timely manner despite COVID-19-induced operational challenges. The Department regularly submitted around 175 data series of various periodicities (*viz.,* daily, weekly, monthly, quarterly and annual) to BIS databank as per the schedule.

X.92 Electronic data submission portal (EDSP) has been extended to the (i) payments frauds register; (ii) natural calamity return; (iii) unit-level data for inflation expectations survey of households (IESH); and (iv) residential asset price monitoring survey (RAPMS). Offsite monitoring returns relating to NBFCs have been automated and the return submission process has been strengthened. Data management and extraction facility has been enhanced by providing additional monitoring facility for user departments during the COVID-19 pandemic.

Agenda for 2022-23

X.93 Going ahead, the Department will focus on the following goals:

- Completion of all integration in the advanced analytics environment and automate publication workflow of all regular data publications in the next generation data warehouse (*Utkarsh*);
- Populating of the comprehensive credit information repository in a phased manner starting with SCBs (*Utkarsh*);
- Implementation of the new data governance framework through flexible element-based repository (EBR) with the facility to convert from return-based repository (RBR) by carrying out forward and reverse engineering to ensure completeness;
- Maintaining of a 'Regulatory Reporting' link on the Reserve Bank's website giving all resources and validation rules to aid banks and other reporting entities for further improving the quality of data reporting to the Reserve Bank;
- Further refinement of the estimation procedures for monetary policy surveys under the guidance of the TACS; and
- Exploring alternate sources of data including satellite data in the areas relevant to the Reserve Bank and use of advanced statistical tools, including Big data and ML techniques.

8. LEGAL ISSUES

X.94 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 also functions as the secretariat to the First Appellate Authority under the Right to Information Act, 2005 and represents the Reserve 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), the Centre for Advanced Financial Research and Learning (CAFRAL), and other RBI-owned institutions on legal issues, litigation and court matters.

Agenda for 2021-22

X.95 Last year, the Department had set out the following goals:

- Proactively perform its functions in close coordination with the operational departments of the Reserve Bank (Paragraph X.96); and
- Take efforts to automate its workflow process and function, keeping in view the importance of use of technology in legal operations, particularly, in a situation like COVID-19 pandemic (Paragraph X.97).

Implementation Status

X.96 Several important legislations/regulations concerning the financial sector were brought in/ amended during the year as set out below:

- The National Bank for Financing Infrastructure and Development Act, 2021 received the assent of the President on March 28, 2021. As stated in the Preamble to the Act, it establishes the National Bank for Financing Infrastructure and Development as the principal development financial institution to support infrastructure financing in India.
- The Factoring Regulation (Amendment) Act, 2021, which received the assent of the President on August 7, 2021 and came into force with effect from August 23, 2021, amends the Factoring Regulation Act, 2011. The Amendment Act simplifies the definition of 'receivables' and adds the definition of "Trade Receivables Discounting System" as a payment system authorised by the Reserve Bank under section 7 of the Payment and Settlement Systems Act, 2007 for the purpose of facilitating financing of trade receivables.
- The Insolvency and Bankruptcy Code (Amendment) Act, 2021 received the assent of the President on August 11, 2021 and came into force with effect from April 4, 2021. It amends the Insolvency and Bankruptcy Code, 2016 and makes provision for an alternative process of insolvency resolution for micro, small, and medium enterprises (MSMEs), called the pre-packaged insolvency resolution process (PIRP).
- The Deposit Insurance and Credit Guarantee Corporation (Amendment) Act, 2021 received the assent of the President on August 13, 2021. The Act was notified in the Gazette of India on August 27, 2021 and came into force with effect from September 1, 2021 for banks insured under the DICGC Act, 1961. The said Act amends certain provisions of the Deposit Insurance and Credit Guarantee Corporation Act, 1961 and inserts a new Section 18A in the Act.

X.97 The work relating to the development of a software package for automating the activities of the Department has been entrusted to the Reserve Bank Information Technology Private Ltd. (ReBIT). Development of the software in this regard is in the advanced stages and the software shall soon be integrated with the activities of the Department.

Agenda for 2022-23

X.98 In 2022-23, the Department will continue to focus on the following goals:

- Completion of the implementation of the workflow automation process application *(Utkarsh)*;
- Merging the existing opinion database management system and the litigation management system *(Utkarsh)*; and
- Digitisation of available/existing legal records and providing their access to the users.

9. CONCLUSION

X.99 The Reserve Bank continued with its endeavour to reach out to a wide spectrum of audience through multiple channels, including social media and public awareness campaigns during the year. The international economic and financial relations with the international organisations and multilateral bodies were deepened and strengthened. The Reserve Bank joined the NGFS with its commitment to support greening India's financial system. Going ahead, the major focus of the Reserve Bank in the functional areas covered in the chapter would be aimed at ensuring: greater engagement with general public through additional social media platform such as Instagram; further strengthening economic and financial international relations; integration of state governments with *e-Kuber* for e-receipts for direct NEFT/RTGS based receipts and agency bank reporting; continuing to explore portfolio diversification through new asset classes/markets for forex reserve management; sharpening economic and statistical policy analysis and research; exploring alternate sources of data including satellite data in the areas relevant to the Reserve Bank and use of advanced statistical tools, including AI, Big data and ML techniques, in analytical studies.

XI GOVERNANCE, HUMAN RESOURCES AND ORGANISATIONAL MANAGEMENT

The Reserve Bank stepped forward on meeting its human resources and organisational and management challenges and continued to focus on recruitments, and in-house and external training programmes, relying primarily on online and e-Learning modes. It also responded swiftly and comprehensively for securing critical business processes and ensured business continuity in the financial system along with safety and health of its human resources. It conducted vaccination drives to have 98 per cent of its staff fully vaccinated by end-March 2022 and calibrated on-site and off-site working to the intensity of infections. Several measures were initiated during the year for strengthening the risk monitoring and internal audit mechanism in the Reserve Bank. The governance structure of the Reserve Bank oversaw the Reserve Bank's functioning maintaining governance standards and provided necessary guidance in multi-dimensional areas.

XI.1 This chapter discusses three critical aspects of the Reserve Bank - governance, human resource management and risk monitoring, apart from covering the activities of departments dealing with internal audit, corporate strategy and budgeting, Rajbhasha and Premises. The chapter reviews the major developments, evaluates their outcomes during 2021-22 *vis-a-vis* the goals set at the beginning of the year and sets out priorities for 2022-23.

XI.2 In pursuance of the goals set for 2021-22, human resources were strengthened through recruitments, and in-house and external trainings. In response to the pandemic, online and e-Learning modes were relied upon extensively. The Reserve Bank's training establishments (TEs) and Zonal Training Centres (ZTCs) conducted training programmes, through the online mode in the pandemic environment. The Reserve Bank also encouraged its officers to attend training programmes, seminars and conferences in India and abroad through online mode in order to benefit from the expertise available in leading external institutes.

XI.3 While ensuring business continuity through smooth functioning of its critical business processes in the Reserve Bank during COVID-19 period, the Reserve Bank also ensured the safety and health of its human resources through organising camps at office premises as well as at residential quarters to vaccinate employees, their family members and outsourced staff against COVID-19. As at end-March 2022, 98 per cent of the Reserve Bank's employees had received both doses of the vaccine.

XI.4 Under the enterprise-wide risk management (ERM) framework adopted in 2012, the roll-out of risk tolerance limits (RTLs) has been achieved for all of the identified operational areas. Further, a broad set of indicators to provide the maturity ratings for the effectiveness of controls have been deployed at process and technology levels to strengthen the cyber security in the Reserve Bank.

XI.5 During the year, the Inspection Department endeavoured to achieve the targeted convergence of the risk ratings assessed under risk-based internal audit (RBIA) methodology of the Department with those determined under risk assessment methodology for operational risk (RAM-OR). Project audits were also undertaken for enhancing the effective internal control mechanisms towards timely implementation of various projects in the Reserve Bank.

XI.6 Corporate Strategy and Budget Department (CSBD), being the nodal Department for business continuity management (BCM) framework of the Reserve Bank, continued to play a key role during the year amidst pandemic for ensuring the smooth working of critical systems and business processes in the Reserve Bank, along with the safety of the human resources.

XI.7 Alongside, during the year, the Rajbhasha Department implemented Annual Programme on Rajbhasha issued by Government of India (GoI) and also ensured compliance of various statutory requirements under the Official Language Policy. The Department also took various initiatives, conducted numerous activities, organised programmes and imparted trainings to create more conducive environment for promotion and propagation of Rajbhasha Hindi in the Reserve Bank.

XI.8 The Premises Department pursued its mandate of creating, maintaining and upgrading the Reserve Bank's infrastructure while pursuing green initiatives. Generation of renewable energy through solar power generation plants, installation of rain water harvesting systems, sewage treatment and waste water treatment systems at various offices and residential colonies were undertaken as part of the Reserve Bank's 'Green Initiative'.

XI.9 The chapter is organised into nine sections. The developments relating to the governance structure of the Reserve Bank are set out in section 2. Section 3 delineates the initiatives undertaken by the Human Resource Management Department (HRMD) during the year in the areas of human resource management and development. Developments relating to enterprise-wide risk management framework are presented 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 for the Reserve Bank, is covered in section 6. The activities and accomplishments of the Rajbhasha and Premises departments are presented in sections 7 and 8, respectively. The chapter has been summarised at the end.

2. GOVERNANCE STRUCTURE

XI.10 The Central Board of Directors is entrusted with the governance functions of the Reserve Bank in accordance with the Reserve Bank of India (RBI) Act, 1934. It comprises the Governor as the Chairperson, Deputy Governors and Directors nominated by the Central Government. There are four Local Boards, one each for the Northern, Southern, Eastern and Western areas, to advise the Central Board on matters referred to them and perform duties delegated by the Central Board. Members of the Local Boards are also appointed by the Central Government in accordance with the RBI Act, 1934.

XI.11 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 (B-SC); the Information Technology Sub-Committee (IT-SC) and the Strategy Sub-Committee (S-SC). These sub-committees are headed by an external Director.

Meetings of the Central Board and CCB

XI.12 The Central Board held six meetings[1] during April 2021 to March 31, 2022.

XI.13 The CCB held 46 meetings during April 2021 to March 31, 2022, 34 of which were held as e-meetings and 12 through video conferencing. The CCB attends to the current business of the Reserve Bank, including approval of its Weekly Statements of Affairs.

XI.14 A Standing Committee of the Central Board is functioning *in lieu* of those Local Boards which are unable to function for want of quorum. At present, the Standing Committee is looking after the affairs of the Western, Eastern and Southern Areas. The Standing Committee of the Central Board was reconstituted on March 27, 2021 with two independent Directors as Members. The Standing Committee of the Central Board held two meetings each during April 1, 2021 to March 31, 2022, for Eastern and Southern Areas and three meetings for Western Area. Northern Area Local Board held four meetings during the same period. The 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 in *lieu* of Local Board/s are given in Annex Tables XI.1-5.

Central Board/Local Boards

XI.15 The Central Government re-appointed Shri Shaktikanta Das as Governor, Reserve Bank of India for a further period of three years beyond December 10, 2021, or until further orders, whichever is earlier. On reappointment, Shri Das assumed office with effect from December 11, 2021.

XI.16 The Central Government re-appointed Shri Mahesh Kumar Jain as Deputy Governor, Reserve Bank of India for a period of two years with effect from June 22, 2021, or until further orders, whichever is earlier, upon completion of his existing term on June 21, 2021. On reappointment, Shri Jain assumed office on June 22, 2021.

XI.17 The Central Government nominated Shri Sanjay Malhotra, Secretary, Department of Financial Services, Ministry of Finance, Government of India with effect from February 16, 2022 and until further orders *vice* Shri Debasish Panda.

XI.18 The term of Central Board Director Shri N. Chandrasekaran ended on March 3, 2022.

Executive Directors

XI.19 Shri P. Vijaya Kumar, Executive Director superannuated on May 31, 2021 and Dr. Mridul K. Saggar, Executive Director superannuated on April 29, 2022. Shri Ajay Kumar was promoted as Executive Director on August 20, 2021. Shri Ajay Kumar Choudhary and Shri Deepak Kumar were promoted as Executive Directors on January 3, 2022. Dr. Rajiv Ranjan and Dr. Sitikantha Pattanaik were promoted as Executive Directors on May 2, 2022.

3. HUMAN RESOURCE DEVELOPMENT INITIATIVES

XI.20 The Reserve Bank has a wide canvas of operations, requiring diversified skills and a robust set of internal capabilities to fulfill its mandate. The Human Resource Management Department (HRMD) plays the role of an enabler and a facilitator to build and maintain an efficient and motivated workforce in the Reserve Bank.

[1] The accounting year for the Reserve Bank was changed to April-March from 2020-21 onwards.

During the year, the Department continued its focus on skilling through recruitment and training, including e-learning, and prioritised staff welfare, especially in the backdrop of second wave of pandemic. It also maintained business continuity. Major developments in these and other areas undertaken during the year are highlighted below, along with status of implementation of agenda set for 2021-22 as also agenda for 2022-23.

Agenda for 2021-22

XI.21 Last year, the Department had set out the following goals:

- To develop a pool of domain experts to represent Reserve Bank's (India's) views in international/multi-lateral meetings including having an appropriate succession plan in place for international meetings/conferences to ensure continuity in knowledge of meetings *(Utkarsh)* [Paragraph XI.22];
- Review and reframe the organisational structure to effectively implement all strategies *(Utkarsh)* [Paragraph XI.23];
- To continue its efforts to lend sharper focus to its training and development related endeavours. A learning management system is envisaged to be introduced in the Reserve Bank, with e-Learning material procured from reputed vendors to facilitate implementation of the concept of blended learning (Paragraph XI.24*)*; and
- To take steps to enhance efficiency of recruitment policies, particularly at officer level, with suitable changes carried out in consultation with the Reserve Bank Services Board (Paragraph XI.25*)*.

Implementation Status

XI.22 A comprehensive database of domain experts who have represented the Reserve Bank in international meetings/forums has been prepared in coordination with other Central Office Departments (CODs).

XI.23 An Inter-Departmental Committee was set up for reviewing the organisational structure and to suggest suitable changes. The Committee's recommendations are presently being examined.

XI.24 Learning Management System (LMS) has been put in place for RBI Academy. Going forward, this would be replicated bank-wide in partnership with training establishments.

XI.25 In the case of recruitment of officers in Grade 'B' (Direct Recruits), a recruitment calendar was designed to reduce the turnaround time. Further, to broad base the competencies of the pool of candidates recruited, the pattern of examination was modified to include a descriptive component in addition to the objective portion. A psychometric test was also introduced, the observations of which serve as an additional input for assessing the candidates. A panel of external agencies to handle support services in connection with lateral recruitment process has been set up.

Major Developments

In-house Training

XI.26 The Reserve Bank's training infrastructure continued to focus upon upgradation of technical and behavioural skills of employees with a view to enhancing their efficiency and effectiveness. A number of programmes were conducted during the year by the Reserve Bank's training establishments (TEs) and Zonal Training Centres (ZTCs) towards achieving these objectives (Table XI.1).

Training at External Institutions

XI.27 The Reserve Bank enlisted its officers to attend training programmes, seminars and

Table XI.1: Programmes Conducted at Reserve Bank's Training Establishments

Training Establishment	2019-20 (July-June)		2020-21 (July-March) #		2021-22 (April-March)	
	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	21	476 (2)	25	840	18	1,185
CoS##	-	-	3	74	43	1,726
RBSC, Chennai	110	2,826 (85)	89	3,629 (72)	122	4,267 (325)
CAB, Pune	126	3,891 (37)	183	10,308 (45)	216	13,308 (134)
ZTCs (Class I)	92	1,667	135	3,682	127	3,140
ZTCs (Class III)	94	2,648	104	4,568	109	3,920
ZTCs (Class IV)	30	604	11	417	23	820

RBSC: Reserve Bank Staff College. CAB: College of Agricultural Banking.
- : Not applicable.
: With change in the Reserve Bank's accounting year to April-March from 2020-21 onwards, the first year of Reserve Bank's transition period was of nine months (July 2020 - March 2021).
: College of Supervisors (CoS) was established on May 22, 2020 in a virtual mode and formally operationalised with a full-time Director *w.e.f.* January 5, 2021. The college is administratively attached to Department of Supervision (DoS), and has a vision of creating a world-class, reputed capacity-building institution, committed to developing knowledgeable, skilled and proactive supervisors, regulators and regulated entity personnel in India and around the world.
Note: Figures in parentheses pertain to foreign participants and/or participants from external institutions, out of the total number of participants.
Source: RBI.

conferences in India and abroad through online mode in order to tap the expertise available in leading external institutes (Table XI.2). In addition, 295 officers are known to have attended webinars on various contemporary topics offered by foreign institutions.

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
2019 - 20 (July-June)	696	139
2020 - 21 (July-March)*#	194	258
2021 - 22 (April-March)*	326	496

*: Online mode.
#: Refer to footnote of Table XI.1.
Source: RBI.

Other Initiatives

Grants and Endowments

XI.28 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 ₹16.50 crore to the Indira Gandhi Institute of Development Research (IGIDR), Mumbai; ₹5.10 crore to the Centre for Advanced Financial Research and Learning (CAFRAL), Mumbai; ₹0.75 crore to London School of Economics (LSE) India Observatory and IG Patel Chair; ₹0.65 crore to the Indian Institute of Bank Management (IIBM), Guwahati and ₹0.43 crore to the National Institute of Bank Management (NIBM), Pune.

Box XI.1
Setting up of Employee Interface and Analytics Division (EIAD)

Employee Interface and Analytics Division (EIAD) has been set up with the aim of building and establishing effective connect and channels of communication with employees (both working and retired), to provide an efficient interface to employees for better communication, enhanced engagement, and positive employee experience. The broad mandate of EIAD is anchored towards exploring and implementing global best practices and policies in the areas of employee engagement and motivation, HR interface, organisation culture and HR technological solutions. EIAD is also focusing on HR research and data analytics in order to develop a deeper understanding and implement a structured and solution-driven approach concerning matters that are of interest to the Reserve Bank.

Given the Reserve Bank's continuous endeavour to build a 'listening-oriented' organisational culture, EIAD has taken up a novel initiative titled, VOICE - Voicing Opinion to Inspire, Contribute, and Excel. The VOICE platform facilitates interaction between HR personnel and employees in an informal environment, while focusing on mutual exploration of career and self-development opportunities through sharing personal success stories.

The initiative intends to provide impetus to the Reserve Bank's vision of 'Building Innovative, Dynamic and Skilled Human Resources' as envisaged under '*Utkarsh* 2022'.

Source: RBI.

Industrial Relations

XI.29 Industrial relations in the Bank remained cordial during the year. Due to the pandemic, meetings with recognised Associations/ Federations were held through virtual mode on issues related to service conditions of employees. During April 2021 – March 2022, HRMD, Central Office held 21 meetings with central units of the recognised Associations/ Federations, representing officers and workmen employees. Regional Offices (ROs), too, kept their communication channels open with local units of these recognised Associations/Federations. In line with the wage settlement in the banking industry, the wage revision of all employees in the Reserve Bank for the period November 1, 2017 to October 31, 2022 was successfully completed. The Department also carried out a comprehensive employee engagement survey during the year. Responses received are presently being examined.

Interface with Employees

XI.30 During the year, the Department set up a new Division, Employee Interface and Analytics Division (EIAD), as a part of its efforts to service its internal customers better (Box XI.1).

Recruitments and Staff Strength

XI.31 During 2021 (January-December), the Reserve Bank recruited a total of 1,448 employees in various cadres (Table XI.3).

XI.32 The total staff strength of the Reserve Bank as at end-December 2021 was 12,856, registering an increase of 4.7 per cent from the position as at end-December of last year (Table XI.4). As at end-March 2022, the staff strength of the Reserve Bank stood at 12,782, comprising 6,556 in Class I, 3,371 in Class III and 2,855 in Class IV.

Table XI.3: Recruitments by the Reserve Bank in 2021*

Category	Total	*of which:*			
		SC	ST	OBC	EWS
1	2	3	4	5	6
Class I	440	72	36	113	26
Class III	875	118	37	354	68
Class IV	133	25	16	44	4
Total	**1,448**	**215**	**89**	**511**	**98**

*: January - December. EWS: Economically Weaker Section.
Source: RBI.

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
	2020	2021	2020	2021	2020	2021	2020	2021	2021		
1	2	3	4	5	6	7	8	9	10	11	12
Class I	6,121	6,598	976	1,071	413	462	1,159	1,399	16.23	7.00	21.20
Class III	3,051	3,337	468	489	191	191	866	1,077	14.65	5.72	32.27
Class IV	3,104	2,921	724	648	249	231	672	693	22.18	7.91	23.72
Total	**12,276**	**12,856**	**2,168**	**2,208**	**853**	**884**	**2,697**	**3,169**	**17.17**	**6.88**	**24.65**

*: End-December 2020 and 2021.
Source: RBI.

XI.33 The total strength of ex-servicemen in the Reserve Bank stood at 1,034 as at end-December 2021, while the total number of differently abled employees stood at 288 (Table XI.5). During January-December 2021, 140 ex-servicemen and 6 persons with benchmark disabilities (PWBD) were recruited in the Reserve Bank.

XI.34 During 2021 (January-December), three meetings between the management and representatives of the All-India Reserve Bank Scheduled Castes (SC)/Scheduled Tribes (ST) and the Buddhist Federation were held to discuss issues pertaining to implementation of the Reserve Bank's reservation policy. Two meetings were also held with the representatives of Other Backward Class (OBC) Association.

Prevention of Sexual Harassment of Women at the Workplace

XI.35 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 April 2021-March 2022, one complaint was received, which was disposed of. Awareness programmes were organised at various ROs as well as at Central Office for sensitising the staff, including the newly recruited employees.

Table XI.5: Total Strength of Ex-Servicemen and PWBD*

Category	Ex-Servicemen (ESM)	PWBD (Persons with Benchmark Disabilities)			
		Visually Impaired (VI)	Hearing Impaired (HI)	Orthopedically Handicapped (OH)	Intellectual Disabilities**
1	2	3	4	5	6
Class I	246	42	5	101	-
Class III	145	38	1	49	4
Class IV	643	8	3	37	-

* : End-December 2021. -: 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.

Right to Information (RTI)

XI.36 The Reserve Bank received 19,435 requests for information and 1,897 appeals under the RTI Act during April 2021-March 2022. Two training programmes on RTI Act were also conducted by Zonal Training Centres, Kolkata and Chennai during this period.

Staff Welfare

XI.37 A Committee was set up to review the policy and processes regarding allotment of Reserve Bank's accommodation to officers. Recommendations made by the Committee are presently being examined.

Response to COVID-19 Pandemic

XI.38 Initiatives undertaken at the onset of the first wave of the COVID-19 pandemic continued to be followed at the time of the second wave. These included, *inter alia*, operationalisation of work from home to ensure business continuity, making regular payments to the outsourced agency/contractual staff along with payment of minimum wages to the contract workers employed in canteens and officers' lounge; introduction of special ex-gratia package and special compassionate appointment scheme for dependents of deceased employees, among others.

XI.39 Keeping in mind the safety and well-being of its employees, the Reserve Bank took the initiative to conduct camps to vaccinate employees, their family members and outsourced staff against COVID-19 at office premises as well as at residential quarters. Vaccination camps were organised in co-ordination with vaccine manufacturing companies, reputed hospitals and local authorities at different centres. As at end-March 2022, 98 per cent of the Reserve Bank's employees were fully vaccinated. The initiative not only ensured staff welfare, but also facilitated reopening of offices of the Reserve Bank. The proportion of staff working from home was regularly assessed in relation to the spread of COVID-19 infections and office reopened in full capacity whenever the high infection rates dropped.

XI.40 A broad strategic framework to deal with a potential third wave was worked out which revolved around the approach of 'Test, Track and Treat' policy at various centres along with operationalisation of work from home to ensure business continuity. Arrangements included setting up of a COVID-19 Response Group to respond to the COVID-related medical and logistical requirements of all employees of Central Office and ROs/Sub-Offices, tie up with hospitals including paediatric hospitals, having dedicated home treatment packages and isolation arrangements at hotels, and reimbursement of cost of reverse transcription - polymerase chain reaction (RT-PCR) tests to employees and their eligible dependents.

Agenda for 2022-23

XI.41 The roadmap for the year would include the following milestones for the Department:

- Ensuring optimum opportunities and upgradation of skills and knowledge of officers who go for international meetings/conferences/seminars (IMF/BIS/G-20/SAARC, *etc.*) *[Utkarsh];*
- To devise a policy on 'Working from Anywhere' for building a seamless work environment as part of business continuity planning;
- To review the Reserve Bank's training establishments apart from reviewing and consolidating the various training related schemes;

- To set up an 'employee assistance programme' on wellness related matters; and
- To develop an 'employee engagement platform' as a single access point to online resources of the Reserve Bank and for strengthening Bank-employee and employee-employee communication.

4. ENTERPRISE-WIDE RISK MANAGEMENT

XI.42 The Risk Monitoring Department (RMD) is the nodal Department for the formulation and operationalisation of enterprise-wide risk management (ERM) in the Reserve Bank. During the year, the focus of the Department was on improving incident reporting, strengthening risk analysis and risk reporting through formulation of risk tolerance limits (RTLs), insightful risk dashboards and risk indices.

Agenda for 2021-22

XI.43 Last year, the Department had set out the following goals:

- Roll-out of risk tolerance limits (RTLs) for other operational areas (*Utkarsh*) [Paragraph XI.44];
- Quantification of IT and cyber risk (*Utkarsh*) [Paragraph XI.45]; and
- Review of the risk assessment methodology for operational risk (RAM-OR) [Paragraph XI.46].

Implementation Status

Roll-out of RTLs for Other Operational Areas

XI.44 Roll-out of RTLs has been achieved for all identified operational areas, *viz.,* audit, accounting unit, budget & business continuity, communication, currency management, customer education, human resource, infrastructure management, information technology, legal, payments & settlement, Rajbhasha and supervision.

Quantification of IT and Cyber Risk

XI.45 A broad set of indicators to provide the maturity ratings for the effectiveness of controls have been deployed at process and technology levels to strengthen the cyber security in the Reserve Bank.

Review of the Risk Assessment Methodology for Operational Risk (RAM-OR)

XI.46 Based on feedback, outcomes, international best practices and taking into account the changing scope of activities in various business areas, the revised RAM-OR is being finalised in consultation with stakeholders and is expected to be completed by September 2022.

Agenda for 2022-23

XI.47 For the year, the following goals for the Department have been proposed:

- *Harmonisation of Risk-Rating*: Harmonisation of risk-rating as per RAM-OR with the risk assessment under risk based internal audit (RBIA) and creating an institutional feedback loop;
- *Automation of Risk Register Module*: Operationalising the automation of the risk register module in the web-based Integrated Risk Monitoring and Incident Reporting System (IRIS);
- Framework for models used by different departments and outsourcing policy; and
- *Strengthening Application Security*: This shall comprise application profiling at functional and technical level and reviewing and establishing perimeter security (web application firewalls) protection for applications and developing a proper response framework.

5. INTERNAL AUDIT/INSPECTION

XI.48 The Inspection Department of the Reserve Bank examines, evaluates and reports on internal control and governance processes and provides risk assurance to the top management and the Central Board through risk-based internal audit (RBIA) framework. Thus, the Department acts as the third line of defence[2] (*viz.,* assurance) under enterprise-wide risk management (ERM) function in the Reserve Bank while RMD, as second line of defence, monitors and facilitates implementation of effective risk management practices, including reporting of risks to Risk Monitoring Committee (RMC) and Audit and Risk Management Sub-Committee (ARMS) of the Central Board. The Department also oversees the functioning of the concurrent audit (CA) system and control self-assessment audit (CSAA) in the Reserve Bank. The RBIA, CA and CSAA functions are performed through an automated system named audit management and risk monitoring system (AMRMS). The Department acts as secretariat to the Audit and Risk Management Sub-Committee of the Central Board and also to the Executive Directors' Committee (EDC) in overseeing the internal audit function.

Agenda for 2021-22

XI.49 Last year, the Department had set out the following goals:

- Implementing full-fledged project audit for all the identified high value IT and non-IT projects of the Reserve Bank to assess effective management of cost, time and deliverables and to ensure that the management of projects are in-sync with the established project objectives (*Utkarsh*) [Paragraph XI.50];
- Endeavouring to achieve full convergence of risk-rating assessed under RBIA with risk-rating assessed as per RAM-OR (*Utkarsh*) [Paragraph XI.51]; and
- Implementing the revised risk rating and scoring methodology across the Reserve Bank from January 2022 after making suitable changes in the AMRMS package and testing it under parallel run mode during the second half of the year 2021 (Paragraph XI.52).

Implementation Status

XI.50 Four project audits (two IT including one on pilot basis and two non-IT) were successfully conducted covering three auditee offices, *viz.,* two CODs and one RO. The primary objective of these exercises was to assess, evaluate and provide an independent, objective assessment regarding execution of the project by evaluating the project plan, nature and extent of responsibilities, authority and accountability of the project management team, use of resources, timely completion and delivery of the project.

XI.51 The targeted convergence of risk ratings assessed under RBIA with those as determined under RAM-OR was satisfactory. There was, however, continuous monitoring and generation of convergence report to keep track of the achievements and for reporting to the top management.

XI.52 The revised risk rating and scoring model, based on core and criticality of operations, would

[2] The first line of defence is management control, while the second line of defence involves various risk control, compliance and oversight functions established by the management.

be implemented early, as per the recommendations of Internal Working Group (IWG) constituted for relooking the entire gamut of issues of RBIA, making it more risk focused.

Major Developments

Risk-based Internal Audit – Constitution of Internal Working Group (IWG)

XI.53 For making the RBIA process more risk focused and to have a relook at the entire gamut of issues of RBIA, based on the role, risk, core and critical functions of the CODs/ROs, an Internal Working Group (IWG) was constituted in August 2021 under the Chairmanship of ED-in-Charge of Inspection Department, with select Heads of CODs and Regional Directors of ROs as members. The IWG has met twice during 2021-22 and submitted its final report in January 2022. RBIA processes will be reoriented based on core/criticality of operations as per the recommendations of the IWG.

Other Initiatives

XI.54 A "Compliance Index", reflecting the overall compliance position of CODs/ROs, based on recommendations of the Internal Group comprising members of select Departments [*viz.,* Risk Monitoring Department (RMD), Department of Government and Bank Account (DGBA), Department of Economic and Policy Research (DEPR), Department of Statistics and Management (DSIM) and Department of Supervision (DoS)] has been developed to assess the overall level of compliance of various audits in a particular auditee office and also to ensure whether the risk ratings, arrived at after completion of the current cycle of RBIA and the position as reflected in the Compliance Index, indicate identical direction of compliance. Going forward, other aspects like budget utilisation variance and additional budget requisition, and inputs from RMD will be considered while computing the Compliance Index.

XI.55 Automation of control self-assessment audit (CSAA) module in AMRMS has been implemented and necessary training support has been provided. Handbooks of all AMRMS modules were updated and shared with all offices and the systems are scheduled to be upgraded. Automation in AMRMS facilitated improvements in planning and conduct of audit; provided uniformity and standardisation in audit reporting, submission, processing and monitoring of compliances; enabled data analytics and reporting dashboards on key performance indicators (KPIs), documentation and record management, and alerts in an integrated manner. This aided in creating synergy and efficiency among the internal audit operations and also in risk management and risk assurance functions.

XI.56 A Quality Assurance Division (QAD) was created within the Department during the year with the objective of ensuring usage of proper formats, style and language in RBIA inspection reports, quoting latest instructions besides providing assurance that the reports are prepared and presented well.

Agenda for 2022-23

XI.57 During the year, the Department will focus on the following goals:

- Putting in place, a framework for feedback loop with RMD so as to get near convergent outcomes on the overall operational risks (*Utkarsh*);
- Full development and generation of visual analytics reports for data mining and analysis purpose, and for management information system (MIS) [*Utkarsh*];

- Implementation of revised risk rating and scoring model based on the decisions/ recommendations of IWG;
- Making the RBIA more risk-focused (*Utkarsh*);
- Pursuing specialisation and capacity building as an area of priority (*Utkarsh*);
- Developing a framework for deployment of skilled officers for inspection of specialised areas of departments (*Utkarsh*)*;* and
- Creation of zonal inspectorates (ZIs) in four zones for close monitoring of quality of compliance by auditee offices with independent reporting to Inspection Department (*Utkarsh*).

6. CORPORATE STRATEGY AND BUDGET MANAGEMENT

XI.58 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 also formulates and executes the Reserve Bank's business continuity plan (BCP) for its critical operations and acts as the nodal Department for external institutions funded by the Reserve Bank.

XI.59 CSBD, being the nodal Department for business continuity management (BCM) framework of the Reserve Bank, continued to play a key role during the year in ensuring the smooth working of critical systems and business processes in the Reserve Bank from a secured, quarantine environment (bio bubble arrangements) through the pandemic with a view to ensuring that critical activities function with zero downtime and with full efficacy.

XI.60 Amidst the second wave of the pandemic in March 2021, the Crisis Management Team (CMT) met during the year to facilitate smooth functioning of the time-sensitive critical activities (TSCAs) while ensuring the safety of the Reserve Bank's human resources. As the pandemic situation improved, the CMT decided to gradually wind up the bio-bubble arrangements with an alternate plan in place for the future. With the onset of the third wave, however, bio-bubble arrangements were put back in place and dismantled only after the ebbing of the pandemic wave.

XI.61 As part of the oversight of External Funded Institutions (EFIs), the Department continued to reinforce their governance by facilitating meetings of their Governing Boards and sub-committees. During the year, appointments were made to the vacant positions of Director in the National Institute of Bank Management (NIBM), the Centre for Advanced Financial Research and Learning (CAFRAL) and the Indian Institute of Bank Management (IIBM) in a transparent and fair manner. A Memorandum of Understanding (MoU) was executed between the Reserve Bank and CAFRAL to ensure that CAFRAL moves in the direction of financial self-sufficiency in the long-run. Also, the Memorandum of Association (MoA) and Rules and Regulations of the Indira Gandhi Institute of Development and Research (IGIDR) were revised in accordance with the statutory provisions.

XI.62 Understanding the need for efficient settlement of provident fund balances, especially in times of distress, the Reserve Bank introduced successive nomination facility for the members of the Reserve Bank of India Employees Provident Fund (RBIEPF), wherein members can make up to three successive nominations.

Agenda for 2021-22

XI.63 For 2021-22, the Department had set out the following goals:

- Operationalising '*Utkarsh*' dashboard with an inbuilt early warning system for potential non-achievement of strategic goals/milestones (Paragraph XI. 64);
- Conducting a mid-term review of the strategy framework *'Utkarsh* 2022*'* by the Strategy Sub-Committee (Paragraph XI. 65);
- Putting in place a BCM framework for pandemic (Paragraph XI. 66); and
- Rationalising additional budget sanction and automating the process (Paragraph XI. 67).

Implementation Status

XI.64 The work on implementation of *'Utkarsh'* dashboard was delayed due to the disruptions induced by COVID-19. The *'Utkarsh'* dashboard application is in an advanced stage of development and is expected to be launched by mid-June 2022.

XI.65 As part of the mid-term review, a peer review of the milestones under '*Utkarsh* 2022' was carried out. As at end-March 2022, 254 out of 352 milestones have been implemented, with around 9 months left for the goal implementation (December 31, 2022).

XI.66 In pursuance of the goals set for the year, a survey on ensuring business continuity during the pandemic was undertaken and inputs were obtained from the business units (BUs) to put in place a stronger BCM framework for the pandemic, which may be finalised by June 2022.

XI.67 Steps were initiated for development of a new Systems Applications and Products (SAP)[3] based budget module for fully automated budget administration with multi-dimensional MIS facility. The module is expected to be rolled out in 2022-23.

Agenda for 2022-23

XI.68 The Department's agenda for the year includes the following:

- Introducing a framework for rating budgeting units for promoting efficient and effective budget management *(Utkarsh);*
- Preparing, finalising and launching '*Utkarsh* 2.0' the Strategy Framework for the period 2023-25;
- Streamlining operations in the 'Unclaimed PF accounts'; and
- Review of Reserve Bank of India Expenditure Rules.

7. RAJBHASHA

XI.69 The Rajbhasha Department serves as the nodal department to promote the usage of Hindi for ensuring compliance to the statutory provisions of the Official Language Act, 1963; Rajbhasha Rules, 1976; the orders of the President of India and instructions from the Government Departments. This involves various aspects of Official Language Implementation Committee (OLIC) of the Reserve Bank, Hindi training inspections, Hindi correspondence, mandatory expenses involved on the purchase of Hindi books and Hindi advertisements, and other requirements of bilingualisation. During the year, the Department has fulfilled the assurances given to the Hon'ble

[3] A data processing software commonly used for enterprise resource planning (ERP).

Committee of Parliament on Official Language and has achieved the goals under the Annual Programme 2021-22 regarding use of Hindi laid down by the Central Government. Also, notwithstanding the practical constraints imposed by the pandemic, the Department organised lectures, training, workshops, Hindi Day functions and allied Hindi competitions for the staff to promote the use of Hindi. Through all these measures and other initiatives such as showcasing the "12प"[4] framework and strategy as envisaged in the "Annual Programme 2021-22" regarding the use of Hindi issued by the Department of Official Language, Government of India (GoI) and those reflecting the spirit of *"Azadi Ka Amrit Mahotsav"*[5], Rajbhasha Department spearheaded its mission and vision for promoting the use of Hindi in the day-to-day work and functions of the Reserve Bank.

Agenda for 2021-22

XI.70 Last Year, the Department had set out the following goals:

- To publish a booklet on 'Rajbhasha Policy: An Introduction' and disseminate it to increase awareness among staff members (Paragraph XI.71);
- To prepare Annual Work Plan for implementation of Official Language Policy in accordance with the annual programme and other instructions issued by the Government of India and circulate it as a ready reckoner to all the ROs/CODs (Paragraph XI.72);
- To organise programmes on Rajbhasha Policy for the senior officers of the Reserve Bank (Paragraph XI.73);
- To impart training to Rajbhasha officers on Rajbhasha inspection to increase the efficacy of Rajbhasha inspections (Paragraph XI.73);
- To organise region-wise review meeting for all the three linguistic regions (*i.e.,* A, B and C) with the Rajbhasha officers posted in the respective ROs/CODs to strengthen the monitoring system regarding use of Hindi (Paragraph XI.74);
- To monitor application softwares and materials uploaded on the Reserve Bank's website/EKP to ensure their bilingualisation (Paragraph XI.75); and
- To strengthen the translation system by arranging training programmes on translation for Rajbhasha officers; and also organising meetings of Translation Review Committee at regular intervals (Paragraph XI.75).

Implementation Status

XI.71 The booklet, 'Rajbhasha Policy: An Introduction', comprising the policies and mandatory provisions related to Official Language, which would serve as a handy and one-point ready

[4] 12प covers 12 Pillars, *viz., Prerna* (inspiration and motivation), *Protsahan* (encouragement), *Prem* (love and affection), Prize (rewards), *Prashikshan* (training), *Prayog* (usage), *Prachar* (advocacy), *Prasar* (transmission), *Prabandhan* (administration and management), Promotion, *Pratibaddhta* (commitment) and *Prayas* (efforts), under "Annual Programme for transacting the official work of the Union in Hindi" released by the Department of Official Language, Ministry of Home Affairs, GoI.

[5] *Azadi Ka Amrit Mahotsav* is an initiative of the Government of India to celebrate and commemorate 75 years of progressive India and the glorious history of its people, culture and achievements. It commenced on March 12, 2021 starting a 75-week countdown to the 75th anniversary of Independence and will end on August 15, 2023.

reference for the staff in their official routine work, was released on March 21, 2022.

XI.72 Keeping in mind all the directives and implementation targets given in the Annual Programme 2021-22 for transacting the Rajbhasha-related official work issued by Government of India, an elaborate 'Annual Work Plan 2021-22' regarding use of Hindi has been prepared. This target based comprehensive work plan was published on April 2, 2021 and implemented in the Reserve Bank.

XI.73 The programme on Rajbhasha policy for senior officers was organised on February 15, 2022, where 37 officers participated.

XI.74 In order to strengthen the monitoring system regarding use of Hindi, review meetings with the Rajbhasha officers posted in region 'A', was organised on June 29, 2021, and that for regions 'B' and 'C' were organised on December 29 and 30, 2021, respectively.

XI.75 The Reserve Bank's website is regularly monitored to ensure bilingualisation and compliance with the Rajbhasha policy. Three training programmes on translation, two at Reserve Bank Staff College (RBSC), Chennai and one by Central Translation Bureau, New Delhi were conducted during the year, in which 53 Rajbhasha officers were trained. Also, the Department regularly organised the meetings of the Translation Review Committee on a quarterly basis.

Major Developments

XI.76 A scheme for e-magazines in Hindi was launched last year to encourage and reward 'Hindi in-house e-magazines' *('Hindi e-Grih Patrikayen'),* published by ROs located in the linguistic regions, *viz.,* 'A', 'B' and 'C', for the promotion of original creative writing in Hindi in the Reserve Bank. Under this scheme, results for the year 2020-21 were published on November 24, 2021. Also, on the occasion of Hindi Diwas 2021, *i.e.,* September 14, 2021; various Hindi competitions were conducted for the staff members to promote the use of Hindi by organising Hindi week/fortnight/month by all CODs/ROs.

Training

XI.77 In pursuance of the Reserve Bank's vision statement "*Utkarsh* 2022" to enhance the skillset of human resources for current and emerging challenges, one batch of Rajbhasha officers was imparted training on general banking by ZTC, Kolkata during January 3-5, 2022.

Publications

XI.78 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 Bulletins were published in bilingual form and are available on the Reserve Bank's website. Apart from the half-yearly e-magazine, *Rajbhasha Samachar,* covering the progressive use of Hindi in the Reserve Bank, the half-yearly Hindi journal *'Banking Chintan Anuchintan'*, covering banking and finance related topics, was published by the Department.

Integrated Rajbhasha Reporting System

XI.79 Integrated Rajbhasha Reporting System (IRRS), a software application was developed by the Department to fulfil the reporting requirements of the Rajbhasha policy, which is currently being used by CODs/ROs/TEs of the Reserve Bank for the online submission of Rajbhasha related reports. The application also provides a review of the implementation status of various Rajbhasha policies at ROs and CODs.

Agenda for 2022-23

XI.80 During the year, the Department plans to focus on the following goals:

- Publication of new edition of Banking Glossary by December 2023 *(Utkarsh)*;
- Preparation of Annual Work Plan of the Reserve Bank for the implementation of Official Language Policy in accordance with the Annual Programme and other instructions issued by GoI;
- To organise region-wise review meetings with the Rajbhasha officers to assess the effectiveness of implementation regarding the use of Hindi; and
- To organise training programmes for Rajbhasha officers to upgrade their translation skills.

8. PREMISES DEPARTMENT

XI.81 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 2021-22

XI.82 Last year, the Department had set out the following goals:

- Achieve and improve upon the targets set under *Utkarsh* for January 2022 (Paragraph XI.83);
- Takeover residential projects at Chennai (Anna Nagar) and Delhi (Hauz Khas) which are nearing completion (Paragraph XI.84);
- Commence construction of office premises at *Naya* Raipur, residential projects at Dehradun and Jammu and residential-cum-ZTC project at Mumbai (Kharghar) [Paragraph XI.84];
- Construct boundary walls at Shillong and Ranchi Office plots (Paragraph XI.84);
- Shift from User Acceptance Test (UAT) to production environment for implementation of enterprise project management software for monitoring major projects' plots (Paragraph XI.85);
- Implement GREEN data platform for online consolidation and analysis of *Utkarsh* data and information on other green initiatives and energy/water audit received from the ROs' plots (Paragraph XI.85); and
- Continue with green initiatives (Paragraph XI.86).

Implementation Status

XI.83 In 2021-22, developments were inspired by the vision, as the Department endeavoured to fulfill the goals set out in these areas. Several of the goals set under *Utkarsh* have been surpassed by the Department. As against the goal for obtaining relevant green rating from GRIHA/IGBC[6] for at least two existing office buildings and seven existing residential buildings by January 2022, green rating from IGBC has been received for

[6] Green Rating for Integrated Habitat Assessment (GRIHA)/Indian Green Building Council (IGBC).

total of three office buildings and eight residential buildings during January 2021 to January 2022. Further, as against the target of achieving 4.5 per cent of base year (year ended June 2018) power consumption from renewable sources by all Reserve Bank's premises, aggregate energy generation from renewable sources was at 5.5 per cent till January 2022. Reserve Bank achieved energy saving of 22.7 per cent as against the target of 3.5 per cent by January 2022 over the annual consumption in the base year ended June 2018. Water conservation/savings stood at 24.0 per cent in January 2022 (y-o-y) over the consumption in the base year ended June 2018 as against the target of 7.5 per cent. The increase in energy savings and conservation of water was also due to the restricted office working hours on account of localised and region-specific containment measures induced by second wave of COVID-19.

XI.84 Construction of residential project at Chennai (Anna Nagar) is completed, and occupation certificate for four residential towers of project at Delhi (Hauz Khas) have been received and of these, possession of two towers has been taken up for allotment. The permission for construction has been obtained from local authorities for the residential-cum-ZTC project at Mumbai (Kharghar). Construction work has commenced for Raipur office building and work has been awarded for construction at Ranchi and Shillong office plots. Work on Dehradun residential project will be starting in 2022-23 as groundwork, including planning, is mostly done. Progress of certain projects was hampered due to restrictions induced by the second wave of the COVID-19 pandemic.

XI.85 Implementation of Enterprise Project Management software as well as the GREEN (Generation of Renewable Energy, Energy Conservation and *Neer* Conservation) platform is operating in production environment mode and training of end-users has been conducted. The ecosystem is expected to stabilise by end of September 2022.

XI.86 As part of GREEN initiatives (other than targeted under *Utkarsh*), the Reserve Bank has been generating renewable energy through solar power plants installed at various offices and residential colonies. During April 2021-March 2022, solar power plants have been installed at 2 office and 7 residential premises. Consequently, 28 office premises and 51 residential premises had such solar power plants by end of March 2022, with solar power generation capacity enhanced from 2,504 kWp (kilowatts Peak) [March 2021] to 3150 kWp (March 2022). Rainwater harvesting systems have been installed at 20 offices and 47 residential buildings and sewage treatment plants at 4 offices and 12 residential buildings for conservation and efficient management of water resources. Organic waste converters have also been installed at 14 offices and 52 residential premises.

Major Developments

Construction Activities

XI.87 The structure of the institutional building for Centre for Advanced Financial Research and Learning (CAFRAL) at Mumbai has been completed. The remaining structural work (mechanical, electrical and plumbing) and finishing works are in progress.

Other Initiatives

XI.88 Land for construction of Greenfield Data Centre for the Reserve Bank has been acquired in Bhubaneswar. In Mumbai, additional office premises were taken on lease.

XI.89 Adoption of the RFID (Radio Frequency Identification) Technology for tagging and reconciliation of fixed assets has been completed by all ROs. As at end-March 2022, 22 CODs have also completed RFID tagging and reconciliation.

XI.90 During the year, 679 e-tenders were floated by CODs, ROs and TEs. Presently tenders beyond ₹5 lakh are being invited through e-tendering, using the MSTC portal.

Agenda for 2022-23

XI.91 For the year 2022-23, the Department has set the following goals:

- Achieve the targets set under *Utkarsh* 2022;
- Complete construction of CAFRAL and Dehradun Office Projects;
- Complete construction of boundary wall at Ranchi and Shillong office plots;
- Commence construction of residential premises at Dehradun;
- Execute MoU with Central Public Works Department (CPWD) and take up the enabling works for starting the office building project at Panaji;
- Complete execution of MoU with CPWD and enabling works for residential premises at Chakala, Malad Phase I and Tapovan in Mumbai;
- Take forward construction of office premises at *Naya* Raipur and residential-cum-ZTC project at Mumbai (Kharghar);
- Strengthen and stabilise implementation of enterprise project management software for monitoring major projects; and
- Strengthen and stabilise GREEN data platform for online consolidation and analysis of *Utkarsh* data and information on other green initiatives and energy/water audit received from the ROs.

9. CONCLUSION

XI.92 In sum, this chapter discussed developments in the areas of governance, human resources, and also the measures adopted during the year for strengthening the risk monitoring and internal audit mechanism in the Reserve Bank. Human resources were strengthened through recruitments, and in-house and external trainings, relying extensively on online and e-Learning modes. While Rajbhasha Department ensured compliance with the statutory provisions of the Official Languages Act of the Government of India, the Premises Department continued with its efforts to provide environment friendly physical infrastructure. The departments have evaluated their goals set for the year and set out the agenda for 2022-23. In the pandemic-induced environment, the Reserve Bank responded swiftly and comprehensively for securing critical business processes and ensured business continuity in the financial system along with safety and health of its human resources.

Annex

Table XI.1: Attendance in the Meeting of the Central Board of Directors during April 1, 2021 – March 31, 2022

Name of the Member	Appointed/Nominated under RBI Act, 1934 (Section)	No. of Meetings Held	No. of Meetings Attended
1	2	3	4
Shaktikanta Das	8(1)(a)	6	6
Mahesh Kumar Jain	8(1)(a)	6	6
Michael Debabrata Patra	8(1)(a)	6	6
M. Rajeshwar Rao	8(1)(a)	6	6
T. Rabi Sankar*	8(1)(a)	6	6
Revathy Iyer	8(1)(b)	6	5
Sachin Chaturvedi	8(1)(b)	6	6
Natarajan Chandrasekaran#	8(1)(c)	5	3
Satish Kashinath Marathe	8(1)(c)	6	6
Swaminathan Gurumurthy	8(1)(c)	6	6
Debasish Panda^	8(1)(d)	4	4
Ajay Seth	8(1)(d)	6	5
Sanjay Malhotra$	8(1)(d)	1	1

*: Deputy Governor *w.e.f.* May 3, 2021. ^: Director till January 31, 2022.
$: Director *w.e.f.* February 16, 2022. #: Director till March 3, 2022.

Table XI.2: Attendance in the Meeting of the Committees of Central Board during April 1, 2021 – March 31, 2022

Name of the Member	Appointed/Nominated under RBI Act,1934 (Section)	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	45
Mahesh Kumar Jain	8(1)(a)	46	43
Michael Debabrata Patra	8(1)(a)	46	42
M. Rajeshwar Rao	8(1)(a)	46	45
T. Rabi Sankar*	8(1)(a)	42	41
Revathy Iyer	8(1)(b)	27	27
Sachin Chaturvedi	8(1)(b)	28	28
Natarajan Chandrasekaran#	8(1)(c)	24	10
Satish Kashinath Marathe	8(1)(c)	26	26
Swaminathan Gurumurthy	8(1)(c)	24	07
Tarun Bajaj^	8(1)(d)	02	02
Ajay Seth	8(1)(d)	28	28

^: Director till April 23, 2021. *: Deputy Governor *w.e.f.* May 3, 2021.
#: Director till March 3, 2022.

II. Board for Financial Supervision (BFS)			
Shaktikanta Das	Chairman	12	12
Mahesh Kumar Jain	Vice-Chairman	12	12
Michael Debabrata Patra	Member	12	10
M. Rajeshwar Rao	Member	12	10
T. Rabi Sankar*	Member	11	11
Satish Kashinath Marathe	Member	12	11
Sachin Chaturvedi	Member	12	10

*: Deputy Governor *w.e.f.* May 3, 2021.

III. Board for Regulation and Supervision of Payment and Settlement Systems (BPSS)			
Shaktikanta Das	Chairman	1	1
T. Rabi Sankar*	Vice-Chairman	1	1
Mahesh Kumar Jain	Member	1	1
Michael Debabrata Patra	Member	1	1
M. Rajeshwar Rao	Member	1	1
Natarajan Chandrasekaran#	Member	1	1
Sachin Chaturvedi$	Member	1	1

*: Deputy Governor *w.e.f.* May 3, 2021. $: Member *w.e.f.* September 27, 2021. #: Director till March 3, 2022.

Table XI.3: Attendance in the Meeting of the Sub-Committees of the Board
April 1, 2021 – March 31, 2022

Name of the Member	Appointed/Nominated under RBI Act, 1934	No. of Meetings Held	No. of Meetings Attended
1	2	3	4
I. Audit and Risk Management Sub-Committee (ARMS)			
Revathy Iyer	Chairperson	7	7
Shri Satish K. Marathe#	Member	4	4
M. Rajeshwar Rao	Member	7	7

#: Nominated as Member *w.e.f.* September 27, 2021.

II. Building Sub-Committee (BSC)			
Satish K. Marathe	Chairman	1	1

III. Human Resource Management Sub-Committee (HRM-SC)			
N. Chandrasekaran*	Chairman	-	-

*: Nominated as the Chairperson *w.e.f.* September 27, 2021 till March 3, 2022.

IV. Information Technology Sub-Committee (IT-SC)			
Sachin Chaturvedi	Chairman	2	2
Revathy Iyer#	Member	2	1

#: Nominated as Member *w.e.f.* September 27, 2021.

V. Strategy Sub-Committee (S-SC)			
N. Chandrasekaran*	Chairperson	-	-
Revathy Iyer#	Member	1	1
Michael Debabrata Patra	Member	1	1

*: Nominated as the Chairperson *w.e.f.* September 27, 2021 till March 3, 2022.
: Chairperson for the meeting held on July 8, 2021.

Table XI.4: Attendance in the Meetings of Local Boards during April 1, 2021 to March 31, 2022

Name of the Member	Appointed/Nominated under RBI Act, 1934	No. of Meetings Held	No. of Meetings Attended
1	2	3	4
Revathy Iyer, NALB	Section 9(1)	4	4
R. N. Dubey, NALB	Section 9(1)	4	4

NALB: Northern Area Local Board.

Table XI.5: Attendance in the Meeting of Standing Committee of the Central Board of Directors in *lieu* of Local Board/s during April 1, 2021 to March 31, 2022

Name of the Member	No. of Meetings Held	No. of Meetings Attended
1	2	3
Revathy Iyer	7	7
Satish Kashinath Marathe	7	7

Note: Two meetings each were held for Eastern and Southern Areas and three meetings for Western Area.

XII THE RESERVE BANK'S ACCOUNTS FOR 2021-22

The year 2020-21 was a transition year for the Reserve Bank as the accounting year was changed from 'July to June' to 'April to March' and therefore, the accounting year 2020-21 was of nine months period, i.e., 'July 2020 to March 2021'. Thus, data presented in the Chapter for the current year, i.e., 2021-22 and earlier years (July to June) are for twelve months as compared to the nine months period for the previous year (July 2020 to March 2021). The size of the Reserve Bank's balance sheet increased by 8.46 per cent as on March 31, 2022, mainly reflecting its liquidity and foreign exchange operations during the year. While income for the year increased by 20.14 per cent, expenditure increased by 280.13 per cent. The year 2021-22 ended with an overall surplus of ₹30,307.45 crore as against ₹99,122 crore in the previous year, resulting in its decrease of 69.42 per cent.

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.

XII.2 The form and content of the balance sheet and income statement have undergone changes over the years based on the recommendations of certain committees (Box XII.1).

Box XII.1
Form of Presentation of the Balance Sheet and Income Statement

The form and presentation of the balance sheet and income statement of the Reserve Bank has been prescribed in the RBI General Regulations, 1949. Over the years, there have been changes in the form of presentation of the balance sheet and income statement based on the recommendations of certain Committees.

The recommendations of the Technical Committee I (Chairman: Shri Y. H. Malegam) in respect of form and content of the financial statements were implemented from the year 2014-15. Based on this, following changes have been introduced – (i) the Issue and Banking Department balance sheets were merged to prepare a single balance sheet displaying at one place the total liabilities and assets of the Reserve Bank (however, the assets and liabilities of Issue Department are shown distinctly on the face of the single balance sheet); (ii) only main items of assets and liabilities are reported in the balance sheet while related details are given in accompanying schedules; (iii) as details are given in the schedules, items of similar nature are grouped and shown as a single item; (iv) the nomenclature of 'Profit and Loss Account' has been changed to 'Income Statement'; and (v) since interest income is major source of income, all items of non-interest earning nature have been grouped under a single head and shown as 'Other Income'. Single income statement continues to be prepared for the Reserve Bank as a whole.

Subsequently, based on the recommendations of the Expert Committee to review the Economic Capital Framework of the Reserve Bank (Chairman: Dr. Bimal Jalan), certain changes have also been introduced from the year 2020-21. These include – (i) change in accounting year of the Reserve Bank from 'July to June' to 'April to March', in sync with the Government's fiscal year; (ii) with a view to providing a more transparent presentation of RBI's Annual Accounts in respect of the components of economic capital, the 'Risk Provisions (Contingency Fund and Asset Development Fund)' and the balance in the 'Revaluation Accounts' which earlier formed part of the balance sheet head 'Other Liabilities and Provisions', are now shown as distinct balance sheet heads; and (iii) as risk provisions are shown separately now, the nomenclature 'Other Liabilities and Provisions' has been changed to 'Other Liabilities'.

Source: RBI.

Table XII.1: Trends in Income, Expenditure and Net Income

(Amount in ₹ crore)

Item	2017-18	2018-19	2019-20	2020-21	2021-22
1	2	3	4	5	6
a) Income	78,280.66	1,93,035.88	1,49,672.46	1,33,272.75	1,60,112.13
b) Total Expenditure[1]	28,276.66[2]	17,044.15[3]	92,540.93[4]	34,146.75[5]	1,29,800.68[6]
c) Net Income (a-b)	50,004.00	1,75,991.73	57,131.53	99,126.00	30,311.45
d) Transfer to funds[7]	4.00	4.00	4.00	4.00	4.00
e) Surplus transferred to the Central Government (c-d)	50,000.00	1,75,987.73	57,127.53	99,122.00	30,307.45

Note: 1. Includes provisions towards CF and ADF.
2. Includes a provision of ₹14,189.27 crore towards transfer to CF.
3. Includes a provision of ₹63.60 crore towards transfer to ADF
4. Includes a provision of ₹73,615 crore towards transfer to CF.
5. Includes a provision of ₹20,710.12 crore towards transfer to CF.
6. Includes provisions of ₹1,14,567.01 crore and ₹100 crore towards transfer to CF and ADF, respectively.
7. An amount of ₹1 crore each has been transferred to the National Industrial Credit (Long Term Operations) Fund, the National Housing Credit (Long Term Operations) Fund, the National Rural Credit (Long Term Operations) Fund and the National Rural Credit (Stabilisation) Fund during each of the five years.

XII.3 The key financial results of the Reserve Bank's operations during the year 2021-22 are set out in the following paragraphs.

XII.4 The size of the balance sheet increased by ₹4,82,633.14 crore, *i.e.,* 8.46 per cent from ₹57,07,669.13 crore as on March 31, 2021 to ₹61,90,302.27 crore as on March 31, 2022. The increase on the asset side was due to increase in foreign investments, domestic investments, gold, and loans and advances by 4.28 per cent, 11.67 per cent, 30.07 per cent and 54.53 per cent, respectively. On the liability side, the increase was due to increase in deposits and notes issued by 16.24 per cent and 9.86 per cent, respectively. Domestic assets constituted 28.22 per cent while the foreign currency assets and gold (including gold deposit and gold held in India) constituted 71.78 per cent of total assets as on March 31, 2022 as against 26.42 per cent and 73.58 per cent, respectively, as on March 31, 2021.

XII.5 Provisions of ₹1,14,567.01 crore and ₹100 crore were made and transferred to Contingency Fund (CF) and Asset Development Fund (ADF), respectively. The trends in income, expenditure, net disposable income and the surplus transferred to the Central Government are given in Table XII.1.

XII.6 The Independent Auditors' Report, the balance sheet and the Income Statement for the year 2021-22 along with 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 of the Reserve Bank of India

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 March 31, 2022 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 accounts of the Bank, the Balance Sheet read with Schedules and 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 ("the RBI Act, 1934") and Regulations framed there under so as to exhibit true and correct view of the state of affairs of the Bank as on March 31, 2022 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 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 the 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 RBI 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.

As per the RBI Act, 1934, the Bank can be liquidated only by the Central Government by order and in any other manner as it may direct. Also, while the fundamental basis of preparation of Financial Statements of the Bank are based on provisions of the RBI Act, 1934 and Regulations framed thereunder, the Management has adopted the accounting policies and practices which reflects its continuity as a Going concern.

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 the 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 auditors' 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 auditors' report.
- Evaluate the overall presentation, structure and content of the Financial Statements, and whether the Financial Statements represent the underlying transactions and events in a manner that achieves fair presentation.

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.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

Other Matters

The audit of the Financial Statements of the Bank for the year ended March 31, 2021, was carried out and reported jointly by M/s Prakash Chandra Jain & Co. and M/s G. M. Kapadia & Co., Chartered Accountants, *vide* their unmodified audit report dated May 21, 2021, 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 Chandabhoy & Jassoobhoy
Chartered Accountants
(ICAI Firm Registration No. 101647W)

Ambesh Dave
Partner
Membership No. 049289
UDIN:22049289AJHKHA6587

For G. M. Kapadia & Co.
Chartered Accountants
(ICAI Firm Registration No. 104767W)

Atul Shah
Partner
Membership No. 039569
UDIN:22039569AJHLDU6907

Place: Mumbai
Date: May 20, 2022

RESERVE BANK OF INDIA
BALANCE SHEET AS ON MARCH 31, 2022

(Amount in ₹ crore)

Liabilities	**Schedule**	**2020-21**	**2021-22**	**Assets**	**Schedule**	**2020-21**	**2021-22**
Capital		5.00	5.00	**Assets of Banking Department (BD)**			
Reserve Fund		6,500.00	6,500.00	Notes, Rupee Coin, Small Coin	6	12.02	17.13
Other Reserves	1	234.00	236.00	Gold - BD	7	1,43,582.87	1,96,864.38
Deposits	2	14,91,537.70	17,33,787.56	Investments-Foreign-BD	8	12,29,940.41	11,41,127.75
Risk Provisions				Investments-Domestic-BD	9	13,33,173.90	14,88,815.96
Contingency Fund		2,84,542.12	3,10,986.94	Bills Purchased and Discounted		0.00	0.00
Asset Development Fund		22,874.68	22,974.68	Loans and Advances	10	1,35,118.91	2,08,792.85
Revaluation Accounts	3	9,24,454.99	9,34,544.00	Investment in Subsidiaries	11	1,963.60	2,063.60
Other Liabilities	4	1,50,657.97	75,547.53	Other Assets	12	37,014.75	46,900.04
Liabilities of Issue Department				**Assets of Issue Department (ID) (As backing for Notes Issued)**			
Notes Issued	5	28,26,862.67	31,05,720.56	Gold - ID	7	1,04,140.13	1,25,348.98
				Rupee Coin		743.40	508.29
				Investments-Foreign-ID	8	27,21,979.14	29,79,863.29
				Investments-Domestic-ID	9	0.00	0.00
				Domestic Bills of Exchange and other Commercial Papers		0.00	0.00
						28,26,862.67	**31,05,720.56**
Total Liabilities		**57,07,669.13**	**61,90,302.27**	**Total Assets**		**57,07,669.13**	**61,90,302.27**

R. Kamalakannan	T. Rabi Sankar	M. Rajeshwar Rao	M. D. Patra	M. K. Jain	Shaktikanta Das
Chief General Manager	Deputy Governor	Deputy Governor	Deputy Governor	Deputy Governor	Governor

RESERVE BANK OF INDIA
INCOME STATEMENT FOR THE YEAR ENDED MARCH 31, 2022

(Amount in ₹ crore)

INCOME	Schedule	2020-21	2021-22
Interest	13	69,057.09	95,088.76
Other Income	14	64,215.66	65,023.37
Total		**1,33,272.75**	**1,60,112.13**
EXPENDITURE			
Printing of Notes		4,012.09	4,984.80
Expenditure on Remittance of Currency		54.80	82.95
Agency Charges	15	3,280.06	4,400.62
Employee Cost		4,788.03	3,869.43
Interest		1.10	1.77
Postage and Telecommunication Charges		105.46	140.09
Printing and Stationery		17.00	22.58
Rent, Taxes, Insurance, Lighting, *etc.*		122.24	145.56
Repairs and Maintenance		76.49	109.17
Directors' and Local Board Members' Fees and Expenses		0.36	1.48
Auditors' Fees and Expenses		4.90	6.49
Law Charges		8.57	14.03
Depreciation		200.09	280.99
Miscellaneous Expenses		765.44	1,073.71
Provisions		20,710.12	1,14,667.01
Total		**34,146.75**	**1,29,800.68**
Available Balance		**99,126.00**	**30,311.45**
Less:			
(a) Contribution to:			
i) National Industrial Credit (Long Term Operations) Fund		1.00	1.00
ii) National Housing Credit (Long Term Operations) Fund		1.00	1.00
(b) Transferable to NABARD:			
i) National Rural Credit (Long Term Operations) Fund[1]		1.00	1.00
ii) National Rural Credit (Stabilisation) Fund[1]		1.00	1.00
(c) Others			
Surplus payable to the Central Government		**99,122.00**	**30,307.45**

1. These funds are maintained by the National Bank for Agriculture and Rural Development (NABARD).

R. Kamalakannan Chief General Manager	T. Rabi Sankar Deputy Governor	M. Rajeshwar Rao Deputy Governor	M. D. Patra Deputy Governor	M. K. Jain Deputy Governor	Shaktikanta Das Governor

SCHEDULES FORMING PART OF BALANCE SHEET AND INCOME STATEMENT

(Amount in ₹ crore)

		2020-21	2021-22
Schedule 1:	**Other Reserves**		
	(i) National Industrial Credit (Long Term Operations) Fund	30.00	31.00
	(ii) National Housing Credit (Long Term Operations) Fund	204.00	205.00
	Total	**234.00**	**236.00**
Schedule 2:	**Deposits**		
	(a) Government		
	(i) Central Government	5,000.15	5,000.04
	(ii) State Governments	42.48	42.45
	Sub total	***5,042.63***	***5,042.49***
	(b) Banks		
	(i) Scheduled Commercial Banks	6,51,748.12	8,23,632.33
	(ii) Scheduled State Co-operative Banks	8,893.19	7,592.50
	(iii) Other Scheduled Co-operative Banks	9,848.31	10,871.51
	(iv) Non-Scheduled State Co-operative Banks	4,560.21	5,089.60
	(v) Other Banks	23,817.12	29,540.22
	Sub total	***6,98,866.95***	***8,76,726.16***
	(c) Financial Institutions outside India		
	(i) Repo borrowing-Foreign	9,038.44	74,438.88
	(ii) Reverse Repo Margin-Foreign	120.51	1,289.10
	Sub total	***9,158.95***	***75,727.98***
	(d) Others		
	(i) Administrators of RBI Employee PF A/c	4,302.70	4,503.16
	(ii) Depositors' Education and Awareness Fund	39,264.25	48,262.85
	(iii) Balances of Foreign Central Banks	1,226.67	491.28
	(iv) Balances of Indian Financial Institutions	1,439.68	1,007.61
	(v) Balances of International Financial Institutions	522.50	542.64
	(vi) Mutual Funds	1.35	1.34
	(vii) Others	7,31,712.02	7,21,482.05
	Sub total	***7,78,469.17***	***7,76,290.93***
	Total	**14,91,537.70**	**17,33,787.56**
Schedule 3:	**Revaluation accounts**		
	(i) Currency and Gold Revaluation Account (CGRA)	8,58,877.53	9,13,389.29
	(ii) Investment Revaluation Account-Foreign Securities (IRA-FS)	8,853.67	0.00
	(iii) Investment Revaluation Account-Rupee Securities (IRA-RS)	56,723.79	18,577.81
	(iv) Foreign Exchange Forward Contracts Valuation Account (FCVA)	0.00	2,576.90
	Total	**9,24,454.99**	**9,34,544.00**
Schedule 4:	**Other Liabilities**		
	(i) Provision for Forward Contracts Valuation Account (PFCVA)	6,127.35	0.00
	(ii) Provision for payables	3,240.73	3,281.08
	(iii) Gratuity and Superannuation Fund	28,497.67	28,872.79
	(iv) Surplus payable to the Central Government	99,122.00	30,307.45
	(v) Bills Payable	4.36	0.14
	(vi) Miscellaneous	13,665.86	13,086.07
	Total	**1,50,657.97**	**75,547.53**
Schedule 5:	**Notes Issued**		
	(i) Notes held in the Banking Department	11.98	17.07
	(ii) Notes in circulation	28,26,850.69	31,05,703.49
	Total	**28,26,862.67**	**31,05,720.56**

			2020-21	2021-22
Schedule 6:	**Notes, Rupee Coin, Small Coin**			
	(i) Notes		11.98	17.07
	(ii) Rupee Coin		0.03	0.05
	(iii) Small Coin		0.01	0.01
		Total	**12.02**	**17.13**
Schedule 7:	**Gold**			
	(a) Banking Department			
	(i) Gold		1,43,582.87	1,92,169.72
	(ii) Gold Deposit		0.00	4,694.66
		Sub Total	***1,43,582.87***	***1,96,864.38***
	(b) Issue Department		1,04,140.13	1,25,348.98
		Total	**2,47,723.00**	**3,22,213.36**
Schedule 8:	**Investments-Foreign**			
	(i) Investments-Foreign-BD		12,29,940.41	11,41,127.75
	(ii) Investments-Foreign-ID		27,21,979.14	29,79,863.29
		Total	**39,51,919.55**	**41,20,991.04**
Schedule 9:	**Investments-Domestic**			
	(i) Investments-Domestic-BD		13,33,173.90	14,88,815.96
	(ii) Investments-Domestic-ID		0.00	0.00
		Total	**13,33,173.90**	**14,88,815.96**
Schedule 10:	**Loans and Advances**			
	(a) Loans and Advances to:			
	(i) Central Government		0.00	0.00
	(ii) State Governments		3,382.79	1,666.56
		Sub total	***3,382.79***	***1,666.56***
	(b) Loans and Advances to:			
	(i) Scheduled Commercial Banks		90,252.18	94,365.75
	(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		25,425.56	23,010.10
	(vi) Others		6,905.32	14,506.94
		Sub total	***1,22,583.06***	***1,31,882.79***
	(c) Loans and Advances to Financial Institutions outside India:			
	(i) Reverse Repo Lending-Foreign		9,129.72	75,190.78
	(ii) Repo Margin-Foreign		23.34	52.72
		Sub total	***9,153.06***	***75,243.50***
		Total	**1,35,118.91**	**2,08,792.85**
Schedule 11:	**Investment in Subsidiaries/Associates**			
	(i) Deposit Insurance and Credit Guarantee Corporation (DICGC)		50.00	50.00
	(ii) Bharatiya Reserve Bank Note Mudran (P) Ltd. (BRBNMPL)		1,800.00	1,800.00
	(iii) Reserve Bank Information Technology (P) Ltd. (ReBIT)		50.00	50.00
	(iv) National Centre for Financial Education (NCFE)		30.00	30.00
	(v) Indian Financial Technology & Allied Services (IFTAS)		33.60	33.60
	(vi) Reserve Bank Innovation Hub (RBIH)		0.00	100.00
		Total	**1,963.60**	**2,063.60**

		2020-21	2021-22
Schedule 12:	**Other Assets**		
	(i) Fixed Assets (net of accumulated depreciation)	923.46	882.46
	(ii) **Accrued income (a + b)**	34,643.53	41,769.61
	a. on loans to employees	*355.37*	*366.08*
	b. on other items	*34,288.16*	*41,403.53*
	(iii) Swap Amortisation Account (SAA)	0.00	0.00
	(iv) Revaluation of Forward Contracts Account (RFCA)	0.00	2,576.90
	(v) Miscellaneous	1,447.76	1,671.07
	Total	**37,014.75**	**46,900.04**
Schedule 13:	**Interest**		
	(a) Domestic Sources		
	(i) Interest on holding of Rupee Securities	59,824.79	96,396.42
	(ii) Net Interest on LAF Operations	-17,957.86	-35,501.29
	(iii) Interest on MSF Operations	12.38	37.63
	(iv) Interest on Loans and Advances	1,709.00	1,501.82
	Sub total	***43,588.31***	***62,434.58***
	(b) Foreign Sources		
	(i) Interest Income from Foreign Securities	23,059.63	31,559.33
	(ii) Net Interest on Repo/Reverse Repo transactions	9.83	42.32
	(iii) Interest on Deposits	2,399.32	1,052.53
	Sub total	***25,468.78***	***32,654.18***
	Total	**69,057.09**	**95,088.76**
Schedule 14:	**Other Income**		
	(a) Domestic Sources		
	(i) Exchange	0.00	0.00
	(ii) Discount	964.16	403.76
	(iii) Commission	2,073.97	3,058.09
	(iv) Rent Realised	5.19	11.38
	(v) Profit/Loss on sale and redemption of Rupee Securities	5,193.94	6,028.19
	(vi) Depreciation on Rupee Securities inter portfolio transfer	-8.12	-20.07
	(vii) Amortisation of premium/discount on Rupee Securities	846.48	-1,717.97
	(viii) Profit/Loss on sale of Bank's property	1.38	6.72
	(ix) Provision no longer required and Miscellaneous Income	-108.38	325.09
	Sub total	***8,968.62***	***8,095.19***
	(b) Foreign Sources		
	(i) Amortisation of premium/discount on Foreign Securities	-6,715.95	-15,286.09
	(ii) Profit/Loss on sale and redemption of Foreign Securities	11,348.84	3,002.39
	(iii) Exchange gain/loss from Foreign Exchange transactions	50,629.18	68,990.55
	(iv) Miscellaneous Income	-15.03	221.33
	Sub total	***55,247.04***	***56,928.18***
	Total	**64,215.66**	**65,023.37**
Schedule 15:	**Agency Charges**		
	(i) Agency Commission on Government Transactions	2,611.05	3,858.95
	(ii) Underwriting Commission paid to the Primary Dealers	642.95	486.95
	(iii) Sundries (Handling charges and turnover commission paid to banks for Relief/ Savings Bonds subscriptions; SBLA *etc.*)	6.30	12.29
	(iv) Fees paid to the External Asset Managers, Custodians, Brokers, *etc.*	19.76	42.43
	Total	**3,280.06**	**4,400.62**

STATEMENT OF SIGNIFICANT ACCOUNTING POLICIES FOR THE YEAR ENDED MARCH 31, 2022

(a) General

1.1 Among other things, the Reserve Bank of India was established under the Reserve Bank of India Act, 1934 (the RBI Act, 1934) "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 Reserve Bank are:-

a) Issue of Bank notes and circulation of coins;

b) Acts as monetary authority and formulates, implements and monitors the monetary policy, including acting as the Lender of Last Resort;

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 RBI Act, 1934 requires that the issue of Bank notes should be conducted by the Reserve Bank in an Issue Department which shall be separated 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 RBI Act, 1934 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 RBI Act, 1934 requires that the liabilities of the Issue Department shall be an amount equal to the total of the amount of the currency notes of the Government of India and Bank notes for the time being in circulation.

(b) Significant Accounting Policies

2.1 Convention

The financial statements are prepared in accordance with the RBI Act, 1934 and the notifications issued thereunder and, in the form, prescribed by the Reserve Bank of India General Regulations, 1949. These are based on historical cost except where it is modified to reflect revaluation and/or amortisation. The accounting policies followed in preparing the financial statements are consistent with those followed in the previous year unless otherwise stated.

2.2 Revenue Recognition

a) Income and expenditure are recognised on accrual basis except penal interest charged from 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 Deposit Account-

Miscellaneous-BD, 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 ending Friday/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 deposit) is revalued on the last business day of each week ending Friday and the last business day of each 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 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 swaps that are in the nature of repos and contracts where the rates are fixed contractually) are translated at market exchange rates on the last business day of each week ending Friday and the last business day of each 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 on the last business day of each week ending Friday and the last business day of each 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 Contingency Fund (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 daily 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 amortised 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 mark-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), mark-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 outstanding forward contracts.

Debit balance in FCVA, if any, on the balance sheet date, 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 forward contracts.

In 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 forms part of 'Revaluation Accounts', PFCVA forms part of 'Other Liabilities' and RFCA and SAA forms part of 'Other Assets'.

d) Repurchase Transactions

The Reserve Bank participates in foreign Repurchase transactions (Repo and Reverse Repo) as part of Reserve Management operations. Repo transactions are treated as borrowing of foreign currencies and are shown under 'Deposits', whereas Reverse Repo transactions are treated as lending of foreign currencies and are shown under 'Loans and Advances'.

e) Transactions in Derivatives

Transactions in derivatives like Interest Rate Futures, Currency Futures, Interest Rate Swaps and Overnight Indexed Swaps undertaken as part of Reserve Management operations are marked-to-market periodically and the resultant gain/loss is booked in income account.

f) **Security Lending Transactions**

The Reserve Bank participates in Security Lending transactions as part of Reserve Management operations. The securities lent remain a part of the Reserve Bank's Investments and continue to be amortised, accrue interest and are marked-to-market.

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 T-Bills and those mentioned in (d), are marked-to-market as on the last business day of each week ending Friday and the last business day of each month. The unrealised gains/losses on revaluation are 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 (MAF)], Depositors' Education and Awareness (DEA) Fund and Payments Infrastructure Development Fund (PIDF) 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 'Deposits-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) Fixed Assets, costing up to ₹1 lakh (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.

c) Individual items of computer software costing ₹1 lakh and above are capitalised and depreciation is calculated on monthly *pro-rata* basis at applicable rates.

d) Depreciation on fixed assets, other than land and buildings, acquired and capitalised during the year (from April 1 to March 31) 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.

e) Depreciation on the following fixed assets 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)
1	2
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)

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 calculated 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.

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 income 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.7 LIABILITIES OF THE RESERVE BANK

XII.7.1 Capital

The Reserve Bank was constituted as a private shareholders' bank in 1935 with an initial paid-up capital of ₹5 crore. 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 ₹5 crore in terms of Section 4 of the RBI Act, 1934.

XII.7.2 Reserve Fund

The original Reserve Fund of ₹5 crore 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 ₹6,495 crore was credited to this fund from out of gains on periodic revaluation of gold up to October 1990, taking it to ₹6,500 crore. 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 Currency and Gold Revaluation Account (CGRA) which appears under the head 'Revaluation Accounts'.

XII.7.3 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 ₹10 crore. The fund witnessed annual contributions from the Reserve Bank for financial assistance to eligible financial institutions. Since 1992-93, a token amount of ₹1 crore is being contributed each year to the Fund. The balance in the fund stood at ₹31 crore as on March 31, 2022.

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 ₹50 crore has been enhanced by annual contributions from the Reserve Bank thereafter. From the year 1992-93, only a token amount of ₹1 crore is being contributed each year. The balance in the fund stood at ₹205 crore as on March 31, 2022.

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 the National Bank for Agriculture and Rural Development (NABARD) for which a token amount of ₹1 crore each is set aside and transferred to NABARD every year.

XII.7.4 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 (EXIM Bank), NABARD, *etc.*, Foreign Central Banks, International Financial Institutions, balances in Administrator of RBI Employees' Provident Fund, DEA Fund, amount outstanding against Reverse Repo, MAF, PIDF, *etc*. Total deposits increased by 16.24 per cent from ₹14,91,537.70 crore as on March 31, 2021 to ₹17,33,787.56 crore as on March 31, 2022.

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 ₹5,000.04 crore and ₹42.45 crore, respectively, as on March 31, 2022 as compared to ₹5,000.15 crore and ₹42.48 crore, respectively, as on March 31, 2021.

b) *Deposits – Banks*

Banks maintain balance 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 increased by 25.45 per cent from ₹6,98,866.95 crore as on March 31, 2021 to ₹8,76,726.16 crore as on March 31, 2022. The increase in this head is on account of restoration of CRR in a phased manner, with banks required to maintain CRR at 4 percent of Net Demand and Time Liabilities (NDTL) at March end 2022, as compared to CRR requirement of 3.5 percent of NDTL as on March 31, 2021 as also increase in excess CRR holdings by banks.

c) *Deposits – Financial Institutions outside India*

The balance under the head increased from ₹9,158.95 crore as on March 31, 2021 to ₹75,727.98 crore as on March 31, 2022, due to increase in volume of repo transactions during the year.

d) *Deposits – Others*

'Deposits – Others' consists of balances of Administrator of RBI Employees Provident Fund, balance in DEA Fund, balances of Foreign Central Banks, Indian and International Financial Institutions, MAF, PIDF, amount outstanding under Reverse Repo, *etc*. The amount under 'Deposits-Others' decreased marginally by 0.28 per cent from ₹7,78,469.17 crore as on March 31, 2021 to ₹7,76,290.93 crore as on March 31, 2022.

XII.7.5 Risk Provisions

There are two risk provisions of the Reserve Bank, *viz.,* Contingency Fund (CF) and Asset Development Fund (ADF). The provision 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 March 31, 2022, an amount of ₹94,249.54 crore was charged to CF on account of debit balance of Investment Revaluation Account-Foreign Securities (IRA-FS). The charge to CF is reversed on the first working day of the following year. Further, an amount of ₹1,14,567.01 crore was also provided for towards CF. Accordingly, the balance in CF as on March 31, 2022 was ₹3,10,986.94 crore as compared to ₹2,84,542.12 crore as on March 31, 2021.

b) *Asset Development Fund (ADF)*

The Asset Development Fund was created in 1997-98 and the balance therein represents provision specifically made till date towards investments in subsidiaries and associate institutions and meet internal capital expenditure. An amount of ₹100 crore was provided towards ADF on account of new investment in Reserve Bank Innovation Hub (RBIH). Based on the above, the balance in ADF as on March 31, 2022 was ₹22,974.68 crore as compared to ₹22,874.68 crore as on March 31, 2021.

Table XII.2: Balances in Risk provisions

(₹ crore)

As on	Balance in CF	Balance in ADF	Total	CF and ADF as Percentage to Total Assets
1	2	3	4=(2+3)	5
June 30, 2018	2,32,107.76	22,811.08	2,54,918.84	7.05
June 30, 2019	1,96,344.35@	22,874.68@@	2,19,219.03	5.34
June 30, 2020	2,64,033.94$	22,874.68	2,86,908.62	5.38
March 31, 2021	2,84,542.12*	22,874.68	3,07,416.80	5.39
March 31, 2022	3,10,986.94^	22,974.68^^	3,33,961.62	5.39

@: The decline in the CF is due to writing back of excess provision of ₹52,637 crore as on June 30, 2019.

@@: Increase in ADF is due to provision of ₹30 crore and ₹33.60 crore on account of investment in NCFE and IFTAS, respectively.

$: Increase in CF is the net impact of provision of ₹73,615 crore and charging of the debit balance in the FCVA amounting to ₹5,925.41 crore as on June 30, 2020.

*: Increase in CF is the net impact of provision of ₹20,710.12 crore and charging of the debit balance in the FCVA amounting to ₹6,127.35 crore as on March 31, 2021.

^: Increase in CF is the net impact of provision of ₹1,14,567.01 crore and charging of the debit balance in the IRA-FS amounting to ₹94,249.54 crore as on March 31, 2022.

^^: Increase in ADF is due to provision of ₹100 crore on account of investment in RBIH.

XII.7.6 Revaluation Accounts

The unrealised marked-to-market gains/losses are recorded in revaluation heads, *viz.*, Currency and Gold Revaluation Account (CGRA), Investment Revaluation Accounts (IRA) and Foreign Exchange Forward Contracts Valuation Account (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 the 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 2021-22, the balance in CGRA increased from ₹8,58,877.53 crore as on March 31, 2021 to ₹9,13,389.29 crore as on March 31, 2022 mainly due to depreciation of rupee and 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 ending Friday and the last business day of each month and the unrealised gains/losses arising therefrom are transferred to the IRA-FS. The balance in IRA-FS decreased from

₹8,853.67 crore as on March 31, 2021 to ₹(-)94,249.54 crore as on March 31, 2022 because of increase in yields across the maturities for all major markets. As per the extant policy, the debit balance of ₹94,249.54 crore in IRA-FS was adjusted against the CF on March 31, 2022 which was reversed on the first working day of the following year. Accordingly, the balance in IRA-FS as on March 31, 2022 was Nil.

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 week ending Friday and the last business day of each month and the unrealised gains/losses arising therefrom are booked in IRA-RS. The balance in IRA-RS decreased from ₹56,723.79 crore as on March 31, 2021 to ₹18,577.81 crore as on March 31, 2022 due to net impact of: (a) hardening of yields across the yield curve leading to mark-to-market losses; and (b) booking of unrealised gain into realised gain on sale of rupee securities.

d) *Foreign Exchange Forward Contracts Valuation Account (FCVA)*

Marking to market of outstanding forward contracts as on March 31, 2022 resulted in a net unrealised gain of ₹2,576.90 crore, which was credited to the FCVA with contra debit to Revaluation of Forward Contracts Account (RFCA) as compared to net unrealised loss of ₹6,127.35 crore in 2020-21, which was debited to the FCVA with contra credit to PFCVA and the said debit balance of FCVA was, accordingly, adjusted with CF in 2020-21.

XII.7.7 Other Liabilities

'Other Liabilities' decreased by 49.85 per cent from ₹1,50,657.97 crore as on March 31, 2021 to ₹75,547.53 crore as on March 31, 2022, primarily due to decrease in surplus payable to the Central Government.

i. *Provision for Forward Contracts Valuation Account (PFCVA)*

The balance was Nil in this account as on March 31, 2022 as against ₹6,127.35 crore as on March 31, 2021.

Balances in Revaluation Accounts and PFCVA for the last five years is given in Table XII.3.

Table XII.3: Balances in CGRA, IRA-FS, IRA-RS, FCVA and PFCVA

(₹ crore)

As on	CGRA	IRA-FS	IRA-RS	FCVA	PFCVA
1	2	3	4	5	6
June 30, 2018	6,91,640.97	0.00	13,285.22	3,261.92	0.00
June 30, 2019	6,64,479.74	15,734.96	49,476.26	1,303.96	0.00
June 30, 2020	9,77,141.23	53,833.99	93,415.50	0.00	5,925.41
March 31, 2021	8,58,877.53	8,853.67	56,723.79	0.00	6,127.35
March 31, 2022	9,13,389.29	0.00	18,577.81	2,576.90	0.00

ii. *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 1.25 per cent from ₹3,240.73 crore as on March 31, 2021 to ₹3,281.08 crore as on March 31, 2022.

iii. *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, provisions for CF and ADF and contribution of ₹4 crore to four statutory funds, the surplus payable to the Central Government for the year 2021-22 amounted to ₹30,307.45 crore (including ₹493.92 crore, same as previous year, payable towards the difference in interest expenditure borne by the Government, consequent on conversion of special securities into marketable securities).

iv. *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 ₹4.36 crore as on March 31, 2021 to ₹0.14 crore as on March 31, 2022.

v. *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 decreased from ₹13,665.86 crore as on March 31, 2021 to ₹13,086.07 crore as on March 31, 2022.

XII.7.8 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 banknotes 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 9.86 per cent from ₹28,26,862.67 crore as on March 31, 2021 to ₹31,05,720.56 crore as on March 31, 2022. Earlier, an amount of ₹10,719.37 crore, representing the value of Specified Bank Notes (SBNs) not paid was transferred to 'Other Liabilities' as on June 30, 2018. In terms of Gazette Notification issued by Government of India on May 12, 2017, the Reserve Bank has made payments to the extent of ₹4.30 crore towards exchange value of SBNs to eligible tenderers during the year ended March 31, 2022.

XII.8 ASSETS OF THE RESERVE BANK

XII.8.1 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, 10 and 20 and small coins kept to meet the day to day requirements of banking functions conducted by the Reserve Bank. The balance as on March 31, 2022 was ₹17.13 crore as against ₹12.02 crore as on March 31, 2021.

ii) Gold - Banking Department (BD)

As on March 31, 2022, total gold held by the Reserve Bank was 760.42 metric tonnes as compared to 695.31 metric tonnes as on March 31, 2021. The increase is on account of addition of 65.11 metric tonnes of gold during the year.

Of 760.42 metric tonnes as on March 31, 2022, 295.82 metric tonnes of gold is held as backing for Notes Issued as compared to 292.30 metric tonnes as on March 31, 2021 and is shown separately as an asset of Issue Department. The balance 464.60 metric tonnes as on March 31, 2022 as compared to 403.01 metric tonnes on March 31, 2021 is treated as an asset of Banking Department (Table XII.4).

The value of gold (including gold deposit) held as asset of Banking Department increased by 37.11 per cent from ₹1,43,582.87 crore as on March 31, 2021 to ₹1,96,864.38 crore as on March 31, 2022. This increase is on account of addition of 61.59 metric tonnes of gold and also due to increase in the price of gold and depreciation of INR *vis-à-vis* USD.

Table XII.4: Physical Holding of Gold

	As on March 31, 2021	As on March 31, 2022
	Volume in metric tonnes	Volume in metric tonnes
1	2	3
Gold held as backing for Notes Issued (held in India)	292.30	295.82
Gold (including Gold Deposit) held as asset of Banking Department (held abroad)	403.01	464.60
Total	**695.31**	**760.42**

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 2021-22. Consequently, there was no such asset in the books of the Reserve Bank as on March 31, 2022.

iv) Investments-Foreign-Banking Department (BD)

Foreign Currency Assets (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 (GoI).

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 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, State Development Loans, T-Bills and Special Oil Bonds. The Reserve Bank's holding of domestic securities increased by 11.67 per cent, from ₹13,33,173.90 crore as on March 31, 2021

Table XII.5: Details of Foreign Currency Assets (FCA)

(₹ crore)

Particulars	As on March 31	
	2021	2022
1	2	3
I Investments-Foreign-BD*	12,29,940.41	11,41,127.75
II Investments-Foreign-ID	27,21,979.14	29,79,863.29
Total	**39,51,919.55**	**41,20,991.04**

*: Includes shares in BIS and Society for Worldwide Interbank Financial Telecommunications (SWIFT) and SDR transferred from GoI valued at ₹11,286.57 crore as on March 31, 2022 compared to ₹11,155.96 crore as on March 31, 2021.

Note:

1. The Reserve Bank has agreed to make resources available under the IMF's New Arrangements to Borrow (NAB). Effective January 1, 2021, India's commitment under NAB stands at SDR 8.88 billion (₹93,035.29 crore/US$12.29 billion). As on March 31, 2022, investments amounting to SDR 0.09 billion (₹928.33 crore/US$0.12 billion) have been made under NAB.
2. The Reserve Bank has agreed to invest up to an amount, the aggregate of which shall not exceed US$5 billion (₹37,861.90 crore), in the bonds issued by India Infrastructure Finance Company (UK) Limited. As on March 31, 2022, the Reserve Bank has invested US$1.44 billion (₹10,904.23 crore) in such bonds.
3. During the year 2013-14, the Reserve Bank and GoI entered into a MoU for transfer of SDR holdings from GoI to RBI in a phased manner. As on March 31, 2022, SDR 1.05 billion (₹10,975 crore/US$1.45 billion) were held by the Reserve Bank.
4. 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 March 31, 2022, Swap with Bhutan and Sri Lanka, amounting to US$0.20 billion (₹1,517.87 crore) and US$0.40 billion (₹3,028.96 crore) respectively, is outstanding.
5. The nominal value of foreign securities posted as collateral and margin in repurchase and IRF transactions was ₹74,830.06 crore/US$9.88 billion and the nominal value of those received under reverse repurchase transactions was ₹77,984.34 crore/US$10.30 billion as on March 31, 2022.
6. The nominal value of foreign securities lent under Security Lending arrangement was ₹42.03 crore/ US$0.006 billion.

to ₹14,88,815.96 crore as on March 31, 2022. The increase was mainly on account of liquidity management operations conducted by way of net purchase of government securities amounting to ₹2,13,976 crore (face value).

A part of Investments-Domestic-BD is also earmarked for various staff funds, DEA Fund and PIDF as explained in para 2.5(d). As on March 31, 2022, ₹85,178 crore (face value) was earmarked for the said funds.

vi) Loans and Advances

a) Central and State Governments

These loans are extended in the form of Ways and Means Advances (WMA) and Overdraft (OD) to the Central Government and in the form of WMA/ OD and Special Drawing Facility (SDF) to the State Governments in terms of Section 17(5) of the RBI Act, 1934. The WMA limit, in case of the Central Government, is fixed from time to time in consultation with the GoI and in case of State Governments, the limits are fixed based on the recommendations of Advisory Committee/Group constituted for this purpose. There were no loans and advances lying outstanding to the Central Government as on March 31, 2021 as well as on March 31, 2022 as the Central Government was in surplus on both the days whereas loans and advances to State Governments decreased by 50.73 per cent from ₹3,382.79 crore as on March 31, 2021 to ₹1,666.56 crore as on March 31, 2022.

b) *Loans and Advances to Commercial, Co-operative Banks, NABARD and Others*

- *Loans and Advances to Commercial and Co-operative Banks:* These include amounts outstanding against Repo under Liquidity Adjustment Facility (LAF) and Marginal Standing Facility (MSF) and special liquidity facility to banks. The amount outstanding increased from ₹90,252.18 crore as on March 31, 2021 to ₹94,365.75 crore as on March 31, 2022 due to increase in funds availed by banks under Special Long-Term Repo Operations (SLTRO) and on-tap Targeted Long-Term Repo Operations (TLTRO) during the year.
- *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 decreased from ₹25,425.56 crore as on March 31, 2021 to ₹23,010.10 crore as on March 31, 2022.
- *Loans and Advances to Others:* The balance under this head represents loans and advances to National Housing Bank (NHB), Small Industries Development Bank of India (SIDBI) and liquidity support provided to Primary Dealers (PDs). The balance under this head increased by 110.08 per cent from ₹6,905.32 crore as on March 31, 2021 to ₹14,506.94 crore as on March 31, 2022, primarily due to increase in loans and advances to SIDBI.

c) *Loans and Advances to Financial Institutions outside India*

The balances under the head increased from ₹9,153.06 crore as on March 31, 2021 to ₹75,243.50 crore as on March 31, 2022 due to increase in volume of reverse repo transactions during the year.

vii) Investment in Subsidiaries/Associates

The total holding of the Reserve Bank in its subsidiaries/associate institutions increased from ₹1,963.60 crore as on March 31, 2021 to ₹2,063.60 crore as on March 31, 2022 as the Reserve Bank invested an amount of ₹100 crore in Reserve Bank Innovation Hub (RBIH). The comparative position of investment in subsidiaries/associate institutions as on March 31, 2021 and March 31, 2022 is given in Table XII.6.

viii) Other Assets

'Other Assets' comprise fixed assets (net of depreciation), accrued income, Swap Amortisation Account (SAA), Revaluation of Forward Contracts Account (RFCA) and miscellaneous assets. Miscellaneous assets comprise mainly loans and advances to staff, amount spent on projects pending completion, security deposit paid, *etc*. The amount outstanding under 'Other Assets' increased by 26.71 per cent from ₹37,014.75 crore as on March 31, 2021 as compared to ₹46,900.04 crore as on March 31, 2022.

Table XII.6: Holdings in Subsidiaries/Associates in 2021-22

(₹ crore)

Subsidiaries/ Associates	2020-21	2021-22	Per cent Holding as on March 31, 2022
1	2	3	4
a) Deposit Insurance and Credit Guarantee Corporation (DICGC)	50.00	50.00	100
b) Bharatiya Reserve Bank Note Mudran (P) Ltd. (BRBNMPL)	1,800.00	1,800.00	100
c) Reserve Bank Information Technology (P) Ltd. (ReBIT)	50.00	50.00	100
d) National Centre for Financial Education (NCFE)	30.00	30.00	30
e) Indian Financial Technology & Allied Services (IFTAS)	33.60	33.60	100
f) Reserve Bank Innovation Hub (RBIH)	0.00	100.00	100
Total	**1,963.60**	**2,063.60**	

a) *Swap Amortisation Account (SAA)*

As on March 31, 2022 as well as on March 31, 2021, the balance in SAA was NIL as there were no outstanding contracts of swaps which were in nature of repo at off market rate.

b) *Revaluation of Forward Contracts Account (RFCA)*

The balance in RFCA was ₹2,576.90 crore as on March 31, 2022 representing net marked-to-market gain on outstanding forward contracts as against Nil on March 31, 2021.

XII.8.2 Assets of Issue Department

The eligible assets of the Issue Department held as backing for Notes Issued consist of gold coins, gold bullion, foreign securities, rupee coins, rupee securities and Domestic Bills of Exchange. The Reserve Bank holds 760.42 metric tonnes of gold, of which 295.82 metric tonnes are held as backing for Notes Issued as on March 31, 2022 (Table XII.4). The value of gold held as asset of Issue Department increased by 20.37 per cent from ₹1,04,140.13 crore as on March 31, 2021 to ₹1,25,348.98 crore as on March 31, 2022. This increase in the value of gold during the year is on account of addition of 3.52 metric tonnes and, also due to increase in the price of gold and depreciation of INR *vis-à-vis* USD. Consequent upon the increase in Notes Issued, Investments-Foreign-ID held as its backing increased by 9.47 per cent from ₹27,21,979.14 crore as on March 31, 2021 to ₹29,79,863.29 crore as on March 31, 2022. The balance of Rupee Coins held by the Issue Department decreased by 31.63 per cent from ₹743.40 crore as on March 31, 2021 to ₹508.29 crore as on March 31, 2022.

FOREIGN EXCHANGE RESERVES

XII.9 Foreign Exchange Reserves (FER) comprises FCA, Gold, SDR holdings and Reserve Tranche Position (RTP). The SDR holdings acquired from GoI form part of the Reserve Bank's balance sheet and is included under 'Investments-Foreign-BD'. The SDR holdings remaining with GoI and the RTP, which represents India's quota contribution to IMF in foreign currency, is not a part of the Reserve Bank's balance sheet. The position of FER as on March 31, 2021 and March 31, 2022 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 (Rupee)

(₹ crore)

Components	As on		Variation	
	March 31, 2021	March 31, 2022	Absolute	Per cent
1	2	3	4	5
Foreign Currency Assets (FCA)	39,24,167.84^	40,94,564.98#	1,70,397.14	4.34
Gold (including gold deposit)	2,47,723.00@	3,22,213.36*	74,490.36	30.07
Special Drawing Rights (SDR)	10,863.73	1,43,051.88	1,32,188.15	1,216.78
Reserve Tranche Position (RTP) in IMF	36,198.01	38,988.28	2,790.27	7.71
Foreign Exchange Reserves (FER)	**42,18,952.58**	**45,98,818.50**	**3,79,865.92**	**9.00**

^: Excludes (a) SDR holdings of the Reserve Bank amounting to ₹10,847.81 crore, which is included under the SDR holdings; (b) Investment of ₹13,621.79 crore in bonds issued by IIFC (UK); and (c) ₹1,454.19 crore lent to Bhutan and ₹1,827.92 crore lent to Maldives under the Currency Swap arrangement made available for SAARC countries.

#: Excludes (a) SDR holdings of the Reserve Bank amounting to ₹10,975 crore, which is included under the SDR holdings; (b) Investment of ₹10,904.23 crore in bonds issued by IIFC (UK); and (c) ₹1,517.87 crore lent to Bhutan and ₹3,028.96 crore lent to Sri Lanka under the Currency Swap arrangement made available for SAARC countries.

@: Of this, Gold valued at ₹1,04,140.13 crore is held as an asset of Issue Department and Gold (including gold deposit) valued at ₹1,43,582.87 crore is held as an asset of Banking Department.

*: Of this, Gold valued at ₹1,25,348.98 crore is held as an asset of Issue Department and Gold (including gold deposit) valued at ₹1,96,864.38 crore is held as an asset of Banking Department.

Table XII.7(b): Foreign Exchange Reserves (USD)

(US$ billion)

Components	As on		Variation	
	March 31, 2021	March 31, 2022	Absolute	Per cent
1	2	3	4	5
Foreign Currency Assets (FCA)	536.69*	540.72**	4.03	0.75
Gold (including gold deposit)	33.88	42.55	8.67	25.59
Special Drawing Rights (SDR)	1.49	18.89	17.40	1,167.79
Reserve Tranche Position (RTP) in IMF	4.92	5.14	0.22	4.47
Foreign Exchange Reserves (FER)	**576.98**	**607.30**	**30.32**	**5.25**

*: Excludes (a) SDR holdings of the Reserve Bank amounting to US$1.48 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$0.20 billion equivalent of INR currency lent to Bhutan and US$0.25 billion lent to Maldives under the Currency Swap arrangement made available for SAARC countries.

**: Excludes (a) SDR holdings of the Reserve Bank amounting to US$1.45 billion, which is included under the SDR holdings; (b) US$1.44 billion invested in bonds of IIFC (UK); and (c) BTN equivalent to US$0.20 billion equivalent of INR currency lent to Bhutan and US$0.40 billion lent to Sri Lanka under the Currency Swap arrangement made available for SAARC countries.

ANALYSIS OF INCOME AND EXPENDITURE

INCOME

XII.10 The components of Reserve Bank's income are 'Interest' 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/Loss on sale of Bank's property and (ix) Provision 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.

Table XII.8: Earnings from Foreign Sources

(₹ crore)

Item	2020-21	2021-22	Variation Absolute	Variation Per cent
1	2	3	4	5
Foreign Currency Assets (FCA)	39,51,919.55	41,20,991.04	1,69,071.49	4.28
Average FCA	38,49,940.15	42,42,514.17	3,92,574.02	10.20
Earnings from FCA (interest, discount, exchange gain/loss, capital gain/loss on securities)	80,715.82	89,582.36	8,866.54	10.98
Earnings from FCA as per cent of average FCA	2.10	2.11	0.01	0.48

Earnings from Foreign Sources

XII.11 The income from foreign sources increased by 10.98 per cent from ₹80,715.82 crore in 2020-21 to ₹89,582.36 crore in 2021-22. The rate of earnings on foreign currency assets was 2.11 per cent in 2021-22 as compared to 2.10 per cent in 2020-21 (Table XII.8).

Earnings from Domestic Sources

XII.12 The net income from domestic sources increased by 34.20 per cent from ₹52,556.93 crore in 2020-21 to ₹70,529.77 crore in 2021-22 mainly on account of net impact of: (a) increase in interest income on holding of Rupee Securities (including oil bonds); and (b) increase in net outgo of interest under LAF/MSF due to absorption of surplus liquidity in the banking system (Table XII.9).

Table XII.9: Earnings from Domestic Sources

(₹ crore)

Item	2020-21	2021-22	Variation Absolute	Variation Per cent
1	2	3	4	5
Earnings (I+II+III+IV)	**52,556.93**	**70,529.77**	**17,972.84**	**34.20**
I. Earnings from Rupee Securities and Discounted Instruments				
i) Interest on holding of Rupee Securities (including oil bonds)	59,824.79	96,396.42	36,571.63	61.13
ii) Profit/Loss on sale and redemption of Rupee Securities	5,193.94	6,028.19	834.25	16.06
iii) Depreciation on Rupee Securities inter portfolio transfer	-8.12	-20.07	-11.95	-147.17
iv) Amortisation of premium/discount on Rupee Securities (including oil bonds)	846.48	-1,717.97	-2,564.45	-302.95
v) Discount	964.16	403.76	-560.40	-58.12
Sub total (i+ii+iii+iv+v)	***66,821.25***	***1,01,090.33***	***34,269.08***	***51.28***
II. Interest on LAF/MSF				
i) Net Interest on LAF Operations	-17,957.86	-35,501.29	-17,543.43	-97.69
ii) Interest on MSF operations	12.38	37.63	25.25	203.96
Sub total (i+ii)	**-17,945.48**	**-35,463.66**	**-17,518.18**	**-97.62**
III. Interest on Other Loans and Advances				
i) Government (Central & States)	264.04	296.34	32.30	12.23
ii) Banks & Financial Institutions	1,400.63	1,149.57	-251.06	-17.92
iii) Employees	44.33	55.91	11.58	26.12
Sub total (i+ii+iii)	**1,709.00**	**1,501.82**	**-207.18**	**-12.12**
IV. Other Earnings				
i) Exchange	0.00	0.00	0.00	0.00
ii) Commission	2,073.97	3,058.09	984.12	47.45
iii) Rent realised, Profit/Loss on sale of Bank's Property, provision no longer required and miscellaneous income	-101.81	343.19	445.00	437.09
Sub total (i+ii+iii)	**1,972.16**	**3,401.28**	**1,429.12**	**72.46**

XII.13 *Interest on holding of Rupee Securities (including oil bonds)* increased from ₹59,824.79 crore in 2020-21 to ₹96,396.42 crore in 2021-22 on account of higher holding of rupee securities in 2021-22 and current accounting year being of twelve months as compared to the nine months period for 2020-21.

XII.14 The *Net Interest Income from Liquidity Adjustment Facility (LAF)/Marginal Standing Facility (MSF)* operations decreased from ₹(-) 17,945.48 crore in 2020-21 to ₹(-)35,463.66 crore in 2021-22 due to higher surplus liquidity in the banking system leading to higher net interest outgo under LAF/MSF and current accounting year being of twelve months as compared to the nine months period for 2020-21.

XII.15 *Profit on sale and redemption of Rupee Securities* increased from ₹5,193.94 crore in 2020-21 to ₹6,028.19 crore in 2021-22 primarily on account of sale operations amounting to ₹64,085 crore (Face Value) in 2021-22 and conversion of securities by the GoI with the Reserve Bank for ₹1,19,701 crore in 2021-22.

XII.16 *Amortisation of premium/discount on Rupee Securities (including oil bonds):* The premium/discount on Rupee Securities and oil bonds held by the Reserve Bank, are amortised on daily basis during the period of residual maturity. The net income from premium/discount on amortisation of Rupee Securities decreased from ₹846.48 crore in 2020-21 to ₹(-)1,717.97 crore in 2021-22.

XII.17 *Discount:* The income from holding of discounted instruments (T-Bills) decreased from ₹964.16 crore in 2020-21 to ₹403.76 crore in 2021-22.

XII.18 *Interest on Loans and Advances*

a) *Central and State Governments:* Interest income on loans and advances extended to Central and State Governments increased by 12.23 per cent from ₹264.04 crore in 2020-21 to ₹296.34 crore in 2021-22. Of the total, interest income received from the Central Government on account of WMA/OD decreased from ₹2.28 crore in 2020-21 to Nil in 2021-22 and interest income received from the State Governments on account of WMA/OD/SDF increased by 13.21 per cent from ₹261.76 crore in 2020-21 to ₹296.34 crore in 2021-22. The net increase in earning was due to higher utilisation of SDF/WMA/OD facility by the State Governments in 2021-22, primarily on account of current accounting year being of twelve months as compared to the nine months period for 2020-21.

b) *Banks & Financial Institutions*: Interest on loans and advances to banks and financial institutions decreased by 17.92 per cent from ₹1,400.63 crore in 2020-21 to ₹1,149.57 crore in 2021-22.

c) *Employees*: Interest on loans and advances to employees increased by 26.12 per cent from ₹44.33 crore in 2020-21 to ₹55.91 crore in 2021-22.

XII.19 *Commission:* The commission income increased by 47.45 per cent from ₹2,073.97 crore in 2020-21 to ₹3,058.09 crore in 2021-22. This was mainly due to the net effect of: (a) increase in management commission received for servicing outstanding Central and State Government loans including savings bonds, T-Bills and Cash Management Bills (CMBs);

(b) increase in floatation charges recovered from the Central and State Governments for the loans issued during the year; and (c) current accounting year being of twelve months as compared to the nine months period for 2020-21.

XII.20 *Rent Realised, Profit/Loss on sale of Bank's property, Provision No Longer Required and Miscellaneous Income*: Earnings from these income heads increased from ₹(-)101.81 crore in 2020-21 to ₹343.19 crore in 2021-22.

EXPENDITURE

XII.21 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 employee related and other expenses. The total expenditure of the Reserve Bank increased by 280.13 per cent from ₹34,146.75 crore in 2020-21 to ₹1,29,800.68 crore in 2021-22 (Table XII.10).

i) Interest payment

During 2021-22, an amount of ₹1.77 crore 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 decreased by 19.19 per cent from ₹4,788.03 crore in 2020-21 to ₹3,869.43 crore in 2021-22. The decrease was due to decrease in Reserve Bank's expenditure towards accrued liabilities of various superannuation funds in 2021-22.

iii) Agency Charges/Commission

a) Agency Commission on Government Transactions

The Reserve Bank discharges the function of banker to governments through a large network of agency bank branches that serve as retail outlets for governments' receipts and payments. The Reserve Bank pays commission to these agency banks at prescribed rates. The agency commission paid on account of government business increased by 47.79 per cent from ₹2,611.05 crore in 2020-21 to ₹3,858.95 crore in 2021-22. The increase was primarily on account of current accounting year being of twelve months as compared to the nine months period for 2020-21.

Table XII.10: Expenditure

(₹ crore)

Item		2017-18	2018-19	2019-20	2020-21	2021-22
1		2	3	4	5	6
i.	Interest payment	0.97	1.16	1.34	1.10	1.77
ii.	Employee Cost	3,848.51	6,851.07	8,928.06	4,788.03	3,869.43
iii.	Agency Charges/Commission	3,903.06	3,910.21	3,876.08	3,280.06	4,400.62
iv.	Printing of Notes	4,912.52	4,810.67	4,377.84	4,012.09	4,984.80
v.	Provisions	14,189.27	63.60	73,615.00	20,710.12	1,14,667.01
vi.	Others	1,422.33	1,407.44	1,742.61	1,355.35	1,877.05
Total (i+ii+iii+iv+v+vi)		**28,276.66**	**17,044.15**	**92,540.93**	**34,146.75**	**1,29,800.68**

b) *Underwriting Commission Paid to Primary Dealers (PDs)*

The expenditure on account of underwriting commission to Primary Dealers decreased from ₹642.95 crore [inclusive of reimbursement of ₹159.92 crore on account of legacy Service Tax (ST) and GST payments] in 2020-21 to ₹486.95 crore in 2021-22. The large quantum of government borrowing and uncertainty in domestic and global economic conditions continued to weigh on market sentiments and resulted in Primary Dealers demanding a higher commission to underwrite the issuances of dated government securities.

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 ₹6.30 crore in 2020-21 to ₹12.29 crore in 2021-22.

d) *Fees Paid to the External Asset Managers, Custodians, Brokers, etc*.

Fees paid for external asset managers, custodial and broker services increased from ₹19.76 crore in 2020-21 to ₹42.43 crore in 2021-22.

iv) Printing of Notes

The supply of notes during the year 2021-22 at 2,22,505 lakh pieces was 0.36 per cent lower than that of the year 2020-21 (2,23,301 lakh pieces). The expenditure incurred on printing of Bank notes increased from ₹4,012.09 crore in 2020-21 to ₹4,984.80 crore in 2021-22.

v) Provisions

In 2021-22, provisions of ₹1,14,567.01 crore and ₹100 crore were made towards transfer to Contingency Fund (CF) and Asset Development Fund (ADF), respectively.

vi) Others

Other expenses comprises expenditure on remittance of currency, printing and stationery, audit fees and related expenses, miscellaneous expenses, *etc*., which increased by 38.49 per cent from ₹1,355.35 crore in 2020-21 to ₹1,877.05 crore in 2021-22.

CONTINGENT LIABILITIES

XII.22 Total contingent liabilities of the Reserve Bank amounted to ₹958.98 crore. The main component of it being partly paid shares, denominated in SDR, of Bank for International Settlements (BIS) held by the Reserve Bank. The uncalled liability on partly paid shares of the BIS as on March 31, 2022 was ₹934.68 crore. The balances are callable at three months' notice by a decision of the BIS Board of Directors.

PRIOR PERIOD TRANSACTIONS

XII.23 For the purpose of disclosure, prior period transactions of ₹1 lakh and above only have been considered. The prior period transactions under expenditure and income amounted to ₹61.45 crore and ₹(-)978.37 crore, respectively.

Payment to Micro and Small Enterprises under the Micro, Small & Medium Enterprises Development Act, 2006

XII.24 The following table sets forth the cases of delayed payments of the principal amount or interest due thereon to Micro and Small Enterprises:

(₹ crore)

Particulars		Principal	Interest
1		2	3
i.	the principal amount and the interest due thereon remaining unpaid (due for more than 45 days) to any supplier (micro or small enterprises) as at March 31, 2022;	-	-
ii.	the amount of interest paid along with the principal amount paid to the supplier for delay beyond 45 days during the year;	0.04	0.001
iii.	the amount of delayed payment paid to the supplier during the year beyond 45 days without adding the interest due thereon (for the period of delay in making payment);	-	-
iv.	the amount of interest accrued and remaining unpaid at the end of the accounting year;	-	-
v.	the amount of further interest remaining due and payable even in the succeeding years, until such date when the interest dues as above are actually paid to the small enterprise, for the purpose of disallowance as a deductible expenditure under section 23.	NA	NA

NA: Not Applicable.

PREVIOUS YEAR'S FIGURES

XII.25 Figures for the previous year have been rearranged, wherever necessary, to make them comparable with the current year.

AUDITORS

XII.26 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 2021-22 were audited by M/s Chandabhoy & Jassoobhoy, Mumbai and M/s G. M. Kapadia & Co., Mumbai, as the Statutory Central Auditors and M/s Ray & Ray, Kolkata, M/s Sundaram & Srinivasan, Chennai and M/s S. K. Mittal & Co., New Delhi as Statutory Branch Auditors.

ANNEX I

CHRONOLOGY OF MAJOR POLICY ANNOUNCEMENTS: APRIL 2021 TO MARCH 2022[1]

Date of Announcement	Policy Initiative
Monetary Policy Department	
April 7, 2021	• The monetary policy committee (MPC) decided to keep the policy repo rate unchanged at 4.0 per cent and to continue with the accommodative stance as long as necessary to revive and sustain growth on a durable basis and continue to mitigate the impact of COVID-19 on the economy, while ensuring that inflation remains within the target going forward.[2] • Special refinance facilities for a total amount of ₹50,000 crore were granted to National Bank for Agriculture and Rural Development (NABARD), Small Industries Development Bank of India (SIDBI) and National Housing Bank (NHB) to enable them to meet sectoral credit needs.[3]
May 5, 2021	To further incentivise inclusion of unbanked micro, small, and medium enterprises (MSMEs) into the banking system, cash reserve ratio (CRR) exemption available to scheduled commercial banks (SCBs) for exposures up to ₹25 lakh and for credit disbursed up to the fortnight ending October 1, 2021 was extended till December 31, 2021.
June 4, 2021	Special refinance facility for a total amount of ₹16,000 crore was provided to SIDBI to meet short- and medium-term credit needs of MSMEs to kick-start the investment cycle with additional focus on smaller MSMEs and businesses, including those in credit deficient and aspirational districts.
August 6, 2021	The enhanced limit for availing funds up to 3 per cent of net demand and time liabilities (NDTL) under the marginal standing facility (MSF) was extended for a further period of six months, *i.e.,* up to December 31, 2021, to provide comfort to banks on their liquidity requirements.
December 8, 2021	The borrowing limit under the MSF was restored to the pre-pandemic level of 2 per cent from 3 per cent, effective January 1, 2022.
Financial Inclusion and Development Department	
April 7, 2021	• The priority sector lending (PSL) classification was extended to cover lending by banks to non-banking financial companies (NBFCs) for on-lending up to September 30, 2021. • The PSL limit for loans against negotiable warehouse receipts (NWRs)/electronic negotiable warehouse receipts (eNWRs) was enhanced from ₹50 lakh to ₹75 lakh per borrower.
May 5, 2021	The PSL classification was permitted to the fresh credit extended by small finance banks (SFBs) to registered NBFC - microfinance institutions (NBFC - MFIs) and other MFIs (societies, trusts, *etc.*), which are members of the Reserve Bank recognised 'self-regulatory organisation' of the sector, and which have a 'gross loan portfolio' of up to ₹500 crore as on March 31, 2021, for the purpose of on-lending to individuals. Bank credit as above was permitted up to 10 per cent of the bank's total priority sector portfolio as on March 31, 2021.

[1] The list is indicative in nature and details are available on the Reserve Bank's website.

[2] The MPC maintained *status quo* on the repo rate and the accommodative stance in all its subsequent meetings in 2021-22.

[3] This comprised ₹25,000 crore to NABARD for refinancing regional rural banks (RRBs), cooperative banks and microfinance 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
July 7, 2021	A new definition was provided for MSMEs. Further, retail and wholesale trade were included under the definition of MSMEs for the limited purpose of priority sector lending and were allowed to be registered on *Udyam* Portal.
August 9, 2021	The limit of collateral free loans to self-help groups (SHGs) under *Deendayal Antyodaya Yojana* - National Rural Livelihoods Mission (DAY- NRLM) was enhanced from ₹10 lakh to ₹20 Lakh.
August 17, 2021	A composite financial inclusion index (FI Index) was developed in consultation with the government and respective sectoral regulators, to capture the extent of financial inclusion across the country.
October 8, 2021	In view of the increased traction observed in the delivery of credit to the underserved/unserved segments of the economy, the PSL facility - banks' lending to NBFCs for on-lending - was further extended till March 31, 2022.
February 18, 2022	The validity of the existing Entrepreneurs Memorandum (EM) and *Udyog Aadhaar* Memorandum (UAMs) of the MSMEs was extended up to March 31, 2022.
Financial Markets Regulation Department	
April 1, 2021	Directions on call, notice and term money markets were issued, allowing participants the flexibility of setting their own lending limits in the call, notice and term money markets within extant prudential regulatory norms.
May 31, 2021	Investment limit for foreign portfolio investors (FPIs) in government securities, under the medium-term framework, for the financial year 2021-22, was notified.
June 4, 2021	• Directions on certificates of deposit (CDs) were issued, allowing regional rural banks (RRBs) to issue CDs and banks to buyback CDs. • Authorised dealer (AD) category-I banks were permitted to lend to FPIs for placing margins with Clearing Corporation of India Limited (CCIL) for the settlement of transactions in government securities within their credit risk management frameworks.
June 7, 2021	FPIs/custodian banks were provided with an extended time window for reporting their government securities transactions to Negotiated Dealing System-Order Matching (NDS-OM) platform.
June 25, 2021	The prudential borrowing limits for transactions in call, notice and term money markets were revised.
July 8, 2021	With a view to enabling an orderly, safe and sound transition from the London Interbank Offered Rate (LIBOR) regime, the Reserve Bank regulated entities (REs) were advised to (i) cease entering into new financial contracts that reference LIBOR and instead use any widely accepted alternative reference rate (ARR) as soon as practicable and in any event by December 31, 2021; (ii) incorporate provisions for fallbacks to ARRs in financial contracts that reference LIBOR and the maturity of which falls after the cessation of the LIBOR setting; (iii) undertake a comprehensive review of all direct and indirect LIBOR exposures and put in place a framework to mitigate risks arising from such exposures; and (iv) continue efforts to sensitise clients about the transition.
September 16, 2021	Directions for market-makers in over-the-counter (OTC) derivative products were revised for setting robust standards of governance, risk management and assessment of customer suitability and appropriateness in derivative business, in line with best international practices.

Date of Announcement	Policy Initiative
November 8, 2021	In pursuance of the Union Budget 2021-22 announcement, FPIs were permitted to invest in debt securities issued by Infrastructure Investment Trusts (InvITs) and Real Estate Investment Trusts (REITs).
February 10, 2022	• The investment limit under the voluntary retention route (VRR) was increased by ₹1,00,000 crore to ₹2,50,000 crore with effect from April 1, 2022. • The revised credit derivative directions were issued, permitting market participants to utilise single name credit default swap (CDS) contracts in the OTC segment and the stock exchanges. Retail users have been permitted to buy protection only for hedging. Non-retail users, *viz.,* regulated financial entities, FPIs, *etc.,* have been permitted to (i) buy protection for hedging and for purposes other than hedging; and (ii) sell protection. • Banks in India having AD category-I licence under the Foreign Exchange Management Act (FEMA), 1999 were permitted to undertake transactions in the offshore foreign currency settled overnight indexed swap (FCS-OIS) market with non-residents and other AD category-I banks.
Financial Markets Operations Department	
April 7, 2021	• The secondary market G-sec acquisition programme (G-SAP) was announced, under which the Reserve Bank committed upfront to a specific amount of open market purchases of government securities with a view to enable stable and orderly evolution of the yield curve amidst comfortable liquidity conditions. The first such auction was conducted on April 15, 2021 for an amount of ₹25,000 crore. • With a view to increase the focus of liquidity measures on the revival of activity in specific sectors, the on-tap targeted long-term repo operations (TLTRO) scheme announced on October 9, 2020 and initially made available up to March 31, 2021, was extended by a period of six months, *i.e.,* up to September 30, 2021. It was later extended up to December 31, 2021.
May 5, 2021	• To boost provision of immediate liquidity for ramping up COVID-19 related healthcare infrastructure and services in the country, the on-tap liquidity window of ₹50,000 crore with tenors of up to three years at the repo rate was opened till March 31, 2022, and later extended up to June 30, 2022. Under the scheme, banks could provide fresh lending support to a wide range of entities including vaccine manufacturers; importers/suppliers of vaccine and priority medical devices; hospitals/ dispensaries; pathology labs and diagnostic centres; manufacturers and suppliers of oxygen and ventilators; importers of vaccines and COVID-related drugs; COVID-related logistics firms and also patients for treatment. By way of an additional incentive, such banks were eligible to park their surplus liquidity up to the size of the COVID-19 loan book with the Reserve Bank under the reverse repo window at a rate which is 25 basis points (bps) lower than the repo rate or, termed in a different way, 40 bps higher than the reverse repo rate. • To provide further support to small business units, micro and small industries, and other unorganised sector entities adversely affected during the second wave of the pandemic, it was decided to conduct special three-year long-term repo operations (SLTRO) of ₹10,000 crore at repo rate for the SFBs, to be deployed for fresh lending of up to ₹10 lakh per borrower. This facility was initially made available till October 31, 2021. It was later extended to December 31, 2021 and made on-tap.

Date of Announcement	Policy Initiative
June 4, 2021	• A separate liquidity window of ₹15,000 crore with tenors of up to three years at the repo rate was opened till March 31, 2022 for certain contact intensive sectors, *i.e.,* hotels and restaurants; tourism - travel agents, tour operators and adventure/heritage facilities; aviation ancillary services - ground handling and supply chain; and other services that include private bus operators, car repair services, rent-a-car service providers, event/conference organisers, spa clinics and beauty parlours/saloons. By way of an incentive, banks were permitted to park their surplus liquidity up to the size of the loan book created under this scheme with the Reserve Bank under the reverse repo window at a rate which is 25 bps lower than the repo rate or, termed in a different way, 40 bps higher than the reverse repo rate. The scheme was later extended till June 30, 2022. • It was decided to undertake G-SAP 2.0 in Q2:2021-22 and conduct secondary market purchase operations of ₹1.20 lakh crore to support the market.
August 6, 2021	• In view of the prevailing liquidity conditions, it was decided to conduct 14-day variable rate reverse repo (VRRR) auctions of ₹2.5 lakh crore on August 13, 2021; ₹3.0 lakh crore on August 27, 2021; ₹3.5 lakh crore on September 9, 2021; and ₹4.0 lakh crore on September 24, 2021. • On March 27, 2020, banks were allowed to avail of funds under the MSF by dipping into the statutory liquidity ratio (SLR) up to an additional one per cent of NDTL, *i.e.,* cumulatively up to 3 per cent of NDTL. This facility, which was initially available up to June 30, 2020, was later extended in phases up to December 31, 2021. From January 1, 2022, banks were again allowed to dip up to 2 per cent of NDTL for overnight borrowing under the MSF.
December 8, 2021	• As a step towards rebalancing the liquidity surplus, it was decided to provide one more option to banks to prepay the outstanding amount of funds availed under the targeted long-term repo operations (TLTRO 1.0 and 2.0) announced on March 27, 2020, and April 17, 2020. • In an effort to continue to rebalance the liquidity surplus, it was decided to enhance the 14-day VRRR auction amounts on a fortnightly basis in the following manner: ₹6.5 lakh crore on December 17; and further to ₹7.5 lakh crore on December 31. Consequently, from January 2022 onwards, liquidity absorption was announced to be undertaken mainly through the auction route.
Foreign Exchange Department	
May 12, 2021	It has been notified v*ide* circular dated May 12, 2021 that financial contribution from an Indian sponsor to an Alternative Investment Fund (AIF) set up in an overseas jurisdiction, including International Financial Services Centres (IFSCs) in India, will be treated as overseas direct investment (ODI).
June 17, 2021	AD category-I banks were directed *vide* circular dated June 17, 2021 to upload the data in respect of number of applications received and the total amount remitted under the liberalised remittance scheme through the extensible business reporting language (XBRL) system instead of the online return filing system (ORFS), from July 1, 2021, onwards.
September 8, 2021	In view of the impending cessation of LIBOR as benchmark rate, clause (ii) of sub-regulation 1 of Regulation 15 relating to Foreign Exchange Management Act (FEMA) was amended *vide* notification dated September 8, 2021 indicating the rate of interest, if any, payable on the advance payment shall not exceed 100 bps above the LIBOR or other applicable benchmark as may be directed by the Reserve Bank, as the case may be.

Date of Announcement	Policy Initiative
September 28, 2021	In view of the impending cessation of LIBOR as benchmark rate, a circular was issued on September 28, 2021, advising the use of any alternative reference rate (ARR) in place of LIBOR for interest payable in respect of export/import transactions.
December 8, 2021	In view of the imminent discontinuance of LIBOR, extant guidelines of external commercial borrowings, trade credits, and structured obligations have been revised with effect from December 8, 2021, to include any widely accepted interbank rate or ARR of 6-month tenor, applicable to the currency of borrowing, as benchmark rate. Further, to account for differences in credit risk and term premia between LIBOR and the ARRs, for all new foreign currency (FCY) external commercial borrowings (ECBs) and trade credits (TCs), the maximum spread has been revised upwards by 50 bps, to 500 bps and 300 bps, respectively.
December 10, 2021	It has been directed *vide* circular dated December 10, 2021 that with effect from October 1, 2022, AD category-I banks shall obtain legal entity identifier (LEI) number from the resident entities (non-individuals) intending to undertake capital or current account transactions of ₹50 crore and above (per transaction) under FEMA, 1999.
December 15, 2021	Indian passport holders as well as persons of Indian origin (PIO), carrying the Overseas Citizen of India Card along with their passports, have been allowed to carry outside and bring into India, at the time of his/her return, only Indian currency notes and/or foreign currency in USD, the total value of which may not exceed ₹11,000, while traveling to Gurdwara Darbar Sahib, Kartarpur, Narowal, Pakistan through the Sri Kartarpur Sahib Corridor.
January 6, 2022	Based on a Directorate General of Foreign Trade (DGFT) notification, the Master Direction on import of goods and services was amended to permit qualified jewellers, as notified by International Financial Services Centres Authority (IFSCA), to import gold under specific Indian Trade Classification – Harmonised System [ITC (HS)] Codes through India International Bullion Exchange IFSC Limited (IIBX).
February 18, 2022	As part of the implementation of the interim recommendations of the Regulations Review Authority (RRA 2.0), *vide* circular dated February 18, 2022, it has been proposed to convert certain paper-based/e-mail-based returns into online filing and to discontinue/merge a few returns.
Department of Regulation	
April 1, 2021	Customer due diligence of all the members of SHGs may be undertaken at the time of credit linking of SHGs. Master Direction on know your customer (KYC) was amended in this regard.
April 5, 2021	The Master Directions on gold monetisation scheme (GMS), 2015 was amended, with the change of instructions regarding GMS mobilisation, collection & testing agent (GMCTA), amount of deposit, reference rate to be used for valuation of gold into Indian rupees, among others.
April 7, 2021	Guidelines were issued to ensure consistency of approach across lending institutions in applying the asset classification norms in respect of their borrowers and the methodology adopted for refund of the compound interest charged during March 1, 2020 to August 31, 2020.
April 8, 2021	The limit of maximum balance at the end of the day has been enhanced from ₹1 lakh to ₹2 lakh per individual customer of payments banks with immediate effect.

Date of Announcement	Policy Initiative
April 12, 2021	Government of India (GoI) has extended the validity of the interest equalisation scheme (IES) for pre and post shipment rupee export credit by three months, *i.e.,* up to June 30, 2021. Accordingly, a circular was issued stating that the extension of IES takes effect from April 1, 2021 and ends on June 30, 2021, covering a period of three months and that operational instructions under the scheme would continue to remain in force during the extended period.
April 22, 2021	In view of the continuing uncertainty caused by the second wave of COVID-19 in the country, it was crucial that banks remain resilient and proactively raise and conserve capital as a bulwark against unexpected losses. Therefore, it was decided to allow commercial banks to declare dividend on equity shares from the profits for the financial year ended March 31, 2021, subject to the quantum of dividend being not more than 50 per cent of the amount determined as per the dividend pay-out ratio prescribed under extant instructions. Cooperative banks were allowed to declare dividend on equity shares from the profits of the financial year ended March 31, 2021, as per the extant instructions.
April 26, 2021	• Shivalik Small Finance Bank Limited commenced operations as a SFB with effect from April 26, 2021. • Based on the feedback received on the discussion paper on 'Governance in Commercial Banks in India' issued by the Reserve Bank in June 2020, comprehensive review of corporate governance framework of banks has been carried out. The operative part of the framework was issued as a prelude to the Master Direction on Corporate Governance, proposed to be issued in due course.
April 29, 2021	The Reserve Bank joined the Network for Greening the Financial System (NGFS) as a Member on April 23, 2021. The NGFS is a group of central banks and supervisors willing to share best practices and contribute to the development of environment and climate risk management in the financial sector, while mobilising mainstream finance to support the transition towards a sustainable economy. The Reserve Bank expects to benefit from the membership of NGFS by learning from and contributing to global efforts on green finance which has assumed significance in the context of climate change.
May 5, 2021	• In view of the resurgence of COVID-19, the Resolution Framework 2.0 was announced, which permits lending institutions to restructure eligible loans, which had not been restructured under Resolution Framework 1.0 dated August 6, 2020, and were classified as standard as on March 31, 2021, while classifying the restructured exposures as standard subject to conditions. The framework shall have to be invoked by September 30, 2021 and will have to be implemented within 90 days from the date of invocation. Even in respect of MSME accounts as well as other eligible accounts restructured under earlier schemes, lending institutions have been permitted, as a one-time measure, to review the working capital sanctioned limits and/or drawing power based on a reassessment of the working capital cycle, reduction of margins, *etc.* without the same being treated as restructuring. • In view of the impact on banks due to COVID-19, as a measure to enable capital conservation, banks have been permitted to utilise 100 per cent of floating provisions/countercyclical provisioning buffer held by them as on December 31, 2020 for making specific provisions for non-performing assets (NPAs) with prior approval of their boards. Such utilisation is permitted with immediate effect and up to March 31, 2022.

Date of Announcement	Policy Initiative
	• In terms of the Master Direction on KYC, REs have been instructed to carry out periodic updation of KYC of existing customers. Keeping in view the COVID-19 related restrictions in various parts of the country, REs were advised, that in respect of the customer accounts where periodic updation of KYC is due and pending as on date, no restrictions on operations of such account shall be imposed till December 31, 2021, for this reason alone, unless warranted under instructions of any regulator/enforcement agency/court of law, *etc.* REs were also advised to continue engaging with such customers to get their KYC updated.
May 6, 2021	Exclusion of “Lakshmi Vilas Bank Ltd.” from the Second Schedule of the Reserve Bank of India Act, 1934.
May 10, 2021	• The periodic updation of the KYC information is to be carried out by REs at least once in 2 years, 8 years and 10 years for high-risk, medium-risk and low-risk customers, respectively. Master Direction on KYC was amended to simplify the process. • The video-based customer identification process (V-CIP), introduced in January 2020, was expanded in scope *vide* amendment dated May 10, 2021, to the Master Direction on KYC. Following major changes have been carried out in this regard: (i) customer due diligence (CDD) of proprietor of proprietorship firm and authorised signatories & beneficial owners (BOs) of legal entities (LEs) have been allowed using V-CIP; (ii) updation/periodic updation of KYC of account holders can be carried out using V-CIP; (iii) conversion of existing accounts opened in non-face to face mode using *Aadhaar* OTP based e-KYC authentication into a fully KYC compliant account can be carried out using V-CIP; (iv) the scope of V-CIP has been expanded to include the use of KYC records downloaded from the central KYC registry (CKYCR) and equivalent e-document of officially valid documents (OVDs) including OVDs issued through Digilocker; and (v) certain amendments have been made to enhance the robustness and security of the V-CIP infrastructure and processes.
May 11, 2021	Considering the reduction in the interest rates paid on savings bank account by banks, it has been decided that interest rate payable by banks on unclaimed interest-bearing deposit shall be 3 per cent simple interest per annum with effect from May 11, 2021.
May 24, 2021	A circular on voluntary amalgamation of district central cooperative banks (DCCBs) with state cooperative bank (StCB) under the provisions of Section 44A, read with Section 56 of the Banking Regulation (BR) Act, 1949 was amended *vide* BR (Amendment) Act, 2020 (39 of 2020). The circular was issued for dissemination of the amended statutory provisions and consequent changes in the procedure/indicative benchmarks for amalgamation of DCCBs with StCB.
May 31, 2021	REs were advised against citing/quoting the April 6, 2018 circular on ‘Prohibition on dealing in Virtual Currencies (VCs)’. It was also advised to them that they may continue to carry out customer due diligence processes in line with regulations governing standards for KYC, Anti-Money Laundering (AML), Combating of Financing of Terrorism (CFT) and obligations of REs under Prevention of Money Laundering Act (PMLA), 2002 in addition to ensuring compliance with relevant provisions under FEMA for overseas remittances.
June 4, 2021	Under Resolution Framework 2.0 for resolution of COVID-19 related stress, the aggregate exposure thresholds for individuals, small businesses and MSMEs was ₹25 crore. On a review, the above exposure threshold was increased to ₹50 crore.
June 14, 2021	The consultative document on review of regulatory framework for microfinance was released.

Date of Announcement	Policy Initiative
June 23, 2021	Gold (Metal) Loans (GML) are extended by nominated/designated banks to exporters or domestic manufacturers of gold jewellery. So far, borrowers had no option to use physical gold to repay the outstanding loan as they were required to repay the amount only in Indian rupee (INR) representing the value of the borrowed gold. Guidelines in this regard were reviewed and banks are now required to provide an option to borrowers to repay a part of the GML in physical gold in lots of one kg or more, provided the GML was extended out of locally sourced/GMS-linked gold and the gold used for repayment conforms to the prescribed standards and is delivered on behalf of the borrower to the lending bank directly by a refiner or a central agency acceptable to the bank, without the borrower's involvement.
June 24, 2021	Unlike banks, there were no guidelines in place with regard to distribution of dividend by NBFCs. Keeping in view the increasing significance of NBFCs in the financial system and their inter-linkages with different segments, it was decided to formulate guidelines on dividend distribution by NBFCs. Accordingly, a draft circular on 'Declaration of Dividend by NBFCs' was issued on December 9, 2020, for public comments. Based on the feedback received, final guidelines were issued on June 24, 2021.
June 25, 2021	• With the growing complexities in the banking sector and increase in size and scope of business, primary (urban) cooperative banks (UCBs) face diverse and greater degree of risks in their business. Therefore, UCBs having asset size of ₹5,000 crore or above have been advised to appoint a Chief Risk Officer (CRO). They have also been advised to set up a risk management committee of the board in order to provide the required level of attention on various aspects of risk management. • A circular on appointment of Managing Director (MD)/Whole-Time Director (WTD) in UCBs was issued by the Reserve Bank on June 25, 2021. The circular prescribes 'fit and proper' criteria, remuneration, tenure, *etc.* for the post of MD/WTD in UCBs. It also advises UCBs to seek the Reserve Bank's prior approval (and process thereof) for appointment/re-appointment/termination of appointment of MD/WTD. The circular was issued to enhance the governance standards in UCBs and to give effect to the provisions of the BR (Amendment) Act, 2020.
June 28, 2021	In order for cooperative banks to put in place necessary safeguards for addressing the risks inherent in outsourcing, the 'Guidelines for Managing Risk in Outsourcing of Financial Services by Cooperative Banks' were issued.
July 1, 2021	GoI extended the validity of the interest equalisation scheme (IES) for pre and post shipment rupee export credit for three months up to September 30, 2021.
July 2, 2021	The extant instructions on interest on overdue domestic term deposits as contained in Section 9 (b) of Master Direction – Reserve Bank of India (Interest Rate on Deposits) Directions, 2016 and the Master Direction – Reserve Bank of India (Cooperative Banks – Interest Rate on Deposits) Directions, 2016 were amended. It was advised that if a term deposit (TD) matures and proceeds are unpaid, the amount left unclaimed with the bank shall attract rate of interest as applicable to savings account or the contracted rate of interest on the matured TD, whichever is lower.
July 7, 2021	Inclusion of "Shivalik Small Finance Bank Limited" in the second schedule of the Reserve Bank of India Act, 1934.
July 9, 2021	The instructions on mandatory leave for employees posted in sensitive positions or areas of operation were reviewed and accordingly a revised circular was issued.

Date of Announcement	Policy Initiative
July 14, 2021	To implement provisions of the Banking Regulation (Amendment) Act, 2020 [as applicable to primary (urban) cooperative banks (UCBs) from June 29, 2020] and with a view to undertake a general review of the extant instructions in the matter, draft guidelines on 'Issue and regulation of share capital and securities - Primary (Urban) Cooperative Banks' were placed in the public domain for comments from the sector participants and other interested parties.
July 20, 2021	Master Direction on CRR and SLR containing the instructions for all type of banks, was issued.
July 23, 2021	A circular was issued on the subject 'Loans and Advances - Regulatory Restrictions', wherein, the existing limits for loans to directors of other banks and relatives of directors (of own banks as also other banks) were revised.
July 29, 2021	The list of approved credit rating agencies and minimum investment grade credit rating for deposits of housing finance companies (HFCs), were aligned with the relevant regulations applicable for NBFCs.
August 4, 2021	Instructions were issued to banks *vide* circulars dated August 6, 2020, November 2, 2020 and December 14, 2020 on 'Opening of Current Accounts by Banks - Need for Discipline' with a view to enforce credit discipline among borrowers as well as to facilitate better monitoring by the lenders. Based on the requests from banks for additional time to resolve the ongoing operational issues, and in order to ensure non-disruptive implementation of the instructions, it was decided to permit banks time till October 31, 2021 to implement the provisions of the circular.
August 6, 2021	• In view of the discontinuance of LIBOR as a benchmark rate after December 2021, banks have been permitted to extend export credit using any other widely accepted ARR in the currency concerned. • For derivative contracts, as per extant instructions, change in any of the parameters of the original contract is treated as a restructuring and the resultant change in the mark-to-market value of the contract on the date of restructuring is required to be cash settled. Since the change in reference rate from LIBOR was a *"force majeure"* event, banks were advised that change in reference rate from LIBOR/LIBOR-related benchmarks to an ARR would not be treated as restructuring. • The resolution plans implemented in terms of the resolution framework for COVID-19 related stress issued on August 6, 2020 were required to achieve certain financial parameters by March 31, 2022. In view of the resurgence of the COVID-19 pandemic in 2021 and recognising the difficulties it may pose for the borrowers in meeting the operational parameters, it was decided to defer the target date to October 1, 2022 for meeting the specified thresholds in respect of the four operational parameters, *viz.,* total debt/earnings before interest, taxes, depreciation and amortisation (TD/EBITDA), current ratio, debt service coverage ratio (DSCR) and average debt service coverage ratio (ADSCR). However, the target date for achieving the total outside liabilities/adjusted tangible net worth (TOL/ATNW) ratio, as crystallised in terms of the resolution plan, was kept unchanged as March 31, 2022.
August 9, 2021	SCBs were allowed to avail of funds under the MSF by dipping into the SLR up to three per cent of their NDTL outstanding at the end of the second preceding fortnight. This facility, which was initially available up to June 30, 2020, was later extended up to December 31, 2021, providing comfort to banks on their liquidity requirements and also to enable them to meet their liquidity coverage ratio (LCR) requirements.

Date of Announcement	Policy Initiative
August 18, 2021	The instructions on providing safe deposit locker/safe custody article facility by banks have been revised on August 18, 2021, in the public interest. The revised instructions have come into force from January 1, 2022 (except where otherwise specified) and be applicable to both new and existing safe deposit lockers and safe custody articles facility with the banks.
August 25, 2021	• A Master Direction – Classification, Valuation and Operation of Investment Portfolio of Commercial Banks (Directions), 2021 - incorporating all the existing guidelines/instructions/directives on the subject has been issued to enable banks to have current instructions at one place. • Post simplification of the procedure of notification of HFCs having assets worth ₹100 crore and above as 'Financial Institution' under Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest (SARFAESI) Act, 2002 by the GoI, previously prescribed criteria for such notification of HFCs have been withdrawn.
August 30, 2021	• A Master Direction – Reserve Bank of India (Financial Statements - Presentation and Disclosures) Directions, 2021 - comprehensively consolidating the existing instructions for presentation of financial statements and disclosures in notes to accounts was issued for banks. This Master Direction also broadly harmonises the disclosure requirements across the banking industry by covering all commercial banks [including RRBs and local area banks (LABs)] and UCBs. • It was observed that though extant guidelines governing compensation of whole-time directors/ chief executive officers/material risk takers and control function staff in private sector banks issued on November 4, 2019 required share-linked instruments to be fair valued on the date of grant using Black-Scholes model, banks do not recognise grant of the share-linked compensation as an expense in their books of account concurrently. Therefore, in the interest of better clarity, the following sentence has been added to the extant instructions: "The fair value thus arrived at should be recognised as expense beginning with the accounting period for which approval has been granted".
September 9, 2021	In the absence of a formal cross-border resolution regime, there was a need to ring-fence the operations of the branches of a foreign bank in India. In this background, large exposure framework (LEF) was made applicable to exposure of foreign bank branches on their Head Office (HO). In order to address the additional capital burden on such banks due to introduction of LEF, instructions were issued introducing a credit risk mitigation (CRM) mechanism which allowed the gross exposure of foreign bank branches to HO (including overseas branches) to be offset with the CRM, while reckoning LEF limits, subject to certain conditions. The CRM can comprise of cash/unencumbered approved securities held under Section 11(2)(b)(i) of the Banking Regulation Act,1949, the sources of which should be interest-free funds from HO or remittable surplus retained in the Indian books (reserves). Foreign bank branches have been permitted to exclude all derivative contracts executed prior to April 1, 2019 (grandfathering), while computing derivative exposure on the HO.
September 13, 2021	NBFCs, payment system providers and payment system participants desirous of undertaking *Aadhaar* e-KYC authentication were advised to apply for *Aadhaar* authentication licence – KYC User Agency (KUA) or sub-KUA, to the Reserve Bank for forwarding to Unique Identification Authority of India (UIDAI) after following the due process.

Date of Announcement	Policy Initiative
September 24, 2021	In order to facilitate the diversification of credit risk originating in the banking sector and ensure market-based credit products for diversified set of investors having commensurate capacity and risk appetite, there has been a recognised need for the further development of credit risk market in India. In this regard, the Reserve Bank issued Master Directions on 'Securitisation of Standard Assets' and 'Transfer of Loan Exposures' to facilitate development of such a robust market.
October 4, 2021	• Guidelines were issued to provide clarity on the eligible limit for foreign currency and rupee denominated overseas additional tier 1 (AT1) bonds. • Consequent to the enhancement in family pension of employees of banks, a special dispensation was given: banks were allowed the option to amortise the additional expenditure over a period not exceeding five years beginning with the financial year ending March 31, 2022, subject to a minimum of 1/5th of the total amount involved being expensed every year.
October 7, 2021	Inclusion of "Paytm Payments Bank Limited" in the second schedule of the Reserve Bank of India Act, 1934.
October 14, 2021	A circular was issued to make it mandatory for credit institutions to report the relationship segment (RS) data to credit information companies (CICs) in a phased manner.
October 22, 2021	A discussion paper titled 'Revised Regulatory Framework for NBFCs - A Scale-based Approach' was issued for public comments on January 22, 2021. Based on the feedback received, the scale based regulatory framework for NBFCs has been put in place on October 22, 2021.
October 26, 2021	To enable LABs to have current instructions on the subject at one place, a Master Direction on prudential norms on capital adequacy, incorporating all the existing guidelines / instructions / directives, was issued.
October 28, 2021	The Master Directions on Gold Monetisation Scheme (GMS), 2015 did not contain specific instructions to designated banks for calculation of interest in case of premature closure of Medium- and Long-Term Government Deposit (MLTGD) under GMS before/after lock-in period in case of death of depositor and also in case of default of loan taken against MLTGD certificate. The requisite amendments in the Master Direction were carried out to include details of applicable interest rates, based on the actual period for which the deposit has run (divided into various time buckets). Being premature closure in nature, the applicable interest rates are lower than those applicable to MLTGD deposits in normal course. Nonetheless, in case of premature closure due to death, applicable interest rate is 0.125 per cent higher than those for premature closure due to loan default.
October 29, 2021	In order to enforce credit discipline amongst the borrowers as well as to facilitate better monitoring by the lenders, instructions on the manner of opening of cash credit/overdraft (CC/OD) and current/collection accounts by banks were issued on August 6, 2020. Taking into account the feedback received from Indian Banks Association (IBA) and other stakeholders, guidelines were revised, allowing borrowers, to whom the exposure of the banking system is less than ₹5 crore, to open current accounts and CC/OD accounts without any restrictions. Further, a borrower with CC/OD facility is permitted to maintain current accounts with any one of the banks with which it has CC/OD facility. Other lending banks have been permitted to open collection accounts for such customers.
November 1, 2021	Unity Small Finance Bank Limited (USFB) commenced operations as a SFB with effect from November 1, 2021.

Date of Announcement	Policy Initiative
November 2, 2021	Report of the committee to review the legal and regulatory framework applicable to asset reconstruction companies (ARCs) was released for public comments.
November 11, 2021	In view of the impending discontinuance of LIBOR as a benchmark rate, it was decided to permit banks to offer interest rates on Foreign Currency Non-Resident (Bank) Deposits [FCNR (B)] deposits using widely accepted 'Overnight ARR for the respective currency' with upward revision in the interest rates ceiling by 50 bps.
November 12, 2021	• In order to ensure uniformity in the implementation of income recognition, asset classification and provisioning pertaining to advances (IRACP norms) across all lending institutions, certain aspects of the extant regulatory guidelines were clarified and/or harmonised. The circular clarified on specification of due date/repayment date, operational aspect of classification of account as Special Mention Account (SMA) and NPA, definition of 'out of order', aligning 90 days delinquency norm for NPA classification in case of interest payments, upgradation of accounts classified as NPAs and income recognition policy for loans with moratorium on payment of interest. • Further, in order to increase awareness among the borrowers related to concept of asset classification of loan accounts, the Reserve Bank *vide* this circular required lending institutions, to put in place consumer education literature on their websites, explaining with examples, the concepts of date of overdue, SMA and NPA classification and upgradation, with specific reference to day-end process.
November 22, 2021	Members of the public were cautioned through a public notice informing that some of the cooperative societies are using the word "Bank" which is in violation of Section 7 of Banking Regulation (BR) Act and are accepting deposits from non-members/nominal members/associate members which tantamount to conducting banking business in violation of the provisions of the BR Act, 1949.
November 26, 2021	An Internal Working Group constituted on June 12, 2020 to review extant 'Ownership Guidelines and Corporate Structure for Indian Private Sector Banks' has made 33 recommendations. A press release was issued stating that the Reserve Bank had accepted 21 recommendations (some with partial modifications) including the recommendation on increasing the promoter holding to 26 per cent of paid-up voting equity share capital, reporting of pledge of shares by promoters, increasing minimum initial capital requirement for licensing new banks and relaxation of listing norms for SFBs to be set up in future. The remaining 12 recommendations are under examination.
December 8, 2021	To provide greater operational flexibility, general permission was granted to banks incorporated in India for infusion of capital in overseas branches and subsidiaries and retention in and repatriation/ transfer of profits therefrom, subject to the banks meeting the regulatory capital requirements and having approval of their boards for the same.
December 10, 2021	Scheduled banks were allowed to avail of funds under the MSF by dipping into the SLR up to three per cent of their NDTL outstanding at the end of the second preceding fortnight. This facility, which was initially available up to June 30, 2020, was later extended in phases up to December 31, 2021. However, with the return to normal dispensation, scheduled banks will be able to dip into the SLR up to two per cent of NDTL, instead of three per cent for overnight borrowing under the MSF, with effect from January 1, 2022.

Date of Announcement	Policy Initiative
December 15, 2021	As part of convergence of regulations for banks with Basel III standards, a draft Master Direction on minimum capital requirements for operational risk was issued for comments of stakeholders.
December 30, 2021	Keeping in view the COVID-19 related restrictions in various parts of the country, REs were advised that in respect of the customer accounts where periodic updation of KYC is due and pending as on date, no restrictions on operations of such account shall be imposed till December 31, 2021, for this reason alone, unless warranted under instructions of any regulator/enforcement agency/court of law, *etc*. REs were also advised to continue engaging with such customers to get their KYC updated. In view of the prevalent uncertainty due to new variant of COVID-19, the relaxation has been extended till March 31, 2022.
January 4, 2022	Inclusion of "Airtel Payments Bank Limited" in the second schedule of the Reserve Bank of India Act, 1934.
January 6, 2022	The limit for aggregate funding from small business customers was increased from ₹5 crore to ₹7.5 crore for the purpose of LCR and Net Stable Funding Ratio (NSFR).
January 14, 2022	• Extant regulatory instructions on classification and valuation of investment portfolio by SCBs are largely based on a framework introduced in October 2000, drawing upon the then prevailing global standards and best practices. In view of the subsequent significant developments in global standards on classification, measurement, and valuation of investments, the linkages with the capital adequacy framework as well as progress in the domestic financial markets, there is a need to review and update these norms. Accordingly, a discussion paper covering all the relevant aspects was placed in the public domain for comments. It, *inter alia,* proposes symmetric recognition of unrealised gains and losses with concerns on such recognition addressed through prudential filters on regulatory capital and dividend distribution supplemented by enhanced disclosures. • Regulations were issued pertaining to the manner of filing of particulars of transactions with the central registry by a trade receivables discounting system (TReDS) on behalf of factors in case of factoring transactions undertaken on TReDS platform. • Regulations were issued pertaining to the manner of granting the certificate of registration (CoR) to companies which propose to do factoring business. In addition to NBFC-Factors, all non-deposit taking NBFC-investment and credit companies (NBFC-ICCs) with asset size of ₹1,000 crore and above have been allowed to undertake factoring business, subject to meeting certain conditions.
February 15, 2022	A circular dated November 12, 2021 was issued on prudential norms on 'Income Recognition, Asset Classification and Provisioning pertaining to Advances – Clarifications', with the objective of bringing uniformity in application of extant IRACP norms by lending institutions, apart from increasing consumer education with respect to the concept of IRACP norms. On a review, it was decided to provide NBFCs time till September 30, 2022 to put in place the necessary systems to implement the above provision.
March 3, 2022	In order to facilitate investment in capital of umbrella organisation (UO) of UCB sector by primary (urban) cooperative banks, it was clarified that the investment in UO by UCBs shall be exempted from the prudential limits prescribed for investment in non-SLR securities and unlisted securities.

Date of Announcement	Policy Initiative
March 8, 2022	• The extant instructions for UCBs on issue and regulation of capital funds have been reviewed keeping in view the amended Banking Regulation Act, 1949. • The GoI extended the validity of the interest equalisation scheme (IES) for pre and post shipment rupee export credit up to March 31, 2024 or till further review, whichever is earlier. The extension takes effect from October 1, 2021 and ends on March 31, 2024.
March 9, 2022	National Bank for Financing Infrastructure and Development (NaBFID) has been set up as a Development Financial Institution to support the development of long-term infrastructure financing in India. NaBFID shall be regulated and supervised as an All India Financial Institution (AIFI) by the Reserve Bank. It shall be the fifth AIFI, after EXIM Bank, NABARD, NHB and SIDBI.
March 14, 2022	A comprehensive regulatory framework for microfinance loans was issued, which has been made applicable to all REs lending in the microfinance sector.
March 23, 2022	The Master Direction on 'Classification, Valuation and Operation of Investment Portfolio of Commercial Banks' was amended to provide clarification, *inter alia*, that the investment in category I and category II alternative investment funds, which includes venture capital funds (VCFs), shall receive the same prudential treatment as applicable for investment in VCFs.
March 31, 2022	• The Bilateral Netting of Qualified Financial Contracts Act, 2020 has been notified by the Government of India *vide* gazette notification dated October 1, 2020. The Act provides a legal framework for enforceability of bilateral netting of qualified financial contracts (QFC). The Reserve Bank *vide* notification dated March 9, 2021, has since notified (a) "derivatives"; and (b) "repo" and "reverse repo" transactions as defined under the Reserve Bank of India Act, 1934 as a QFC. Accordingly, select instructions contained in various circulars/directions of the Reserve Bank were modified/amended appropriately. • Master Direction on 'Classification, Valuation and Operation of Investment Portfolio of Commercial Banks' was amended to clarify that the investments in special securities received from the GoI towards banks' recapitalisation requirement from the financial year 2021-22 onwards shall be recognised at fair value/market value on initial recognition in held to maturity (HTM). The fair value/market value of these securities shall be arrived on the basis of the prices/yield to maturity of similar tenor central government securities put out by Financial Benchmarks India Pvt. Ltd.
Department of Supervision	
April 27, 2021	A circular on 'Guidelines for Appointment of Statutory Central Auditors (SCAs)/ Statutory Auditors (SAs) of Commercial Banks (excluding RRBs), UCBs and NBFCs (including HFCs)' was issued on April 27, 2021, with a view to improve the quality of financial reporting by REs. These guidelines provide necessary instructions for appointment of SCAs/SAs, the number of auditors, their eligibility criteria, tenure and rotation, *etc.* while ensuring the independence of auditors. The guidelines are applicable from financial year 2021-22 and onwards. However, UCBs and NBFCs were given the flexibility to adopt these guidelines from H2:2021-22 so that there is no disruption.
June 11, 2021	Risk-Based Internal Audit (RBIA) guidelines were extended to all deposit taking HFCs and non-deposit taking HFCs with asset size of ₹5,000 crore and above.
November 2, 2021	Revised prompt corrective action (PCA) framework for SCBs was issued to enable supervisory intervention at appropriate time and require the SCB to initiate and implement remedial measures in a timely manner, so as to restore its financial health.

Date of Announcement	Policy Initiative
November 16, 2021	16 redundant circulars were withdrawn as per the interim recommendations of Regulations Review Authority (RRA 2.0).
December 14, 2021	Considering the growing size of NBFCs and their substantial interconnectedness with other segments of the financial system, a PCA framework for NBFCs was introduced to further strengthen the supervisory tools applicable to NBFCs. The PCA framework for NBFCs shall come into effect from October 1, 2022, based on the financial position of NBFCs on or after March 31, 2022.
February 23, 2022	To provide for seamless customer interface in digital offerings and transactions relating to products and services with anywhere/anytime facility, enable integration of NBFCs' functions, provide centralised database and accounting records, and be able to generate suitable management information system (MIS), both for internal purposes and regulatory reporting, NBFCs-Middle Layer and NBFCs-Upper Layer with 10 and more 'fixed point service delivery units' as on October 1, 2022 were mandated to implement 'Core Financial Services Solution (CFSS)', akin to the Core Banking Solution (CBS) to be adopted by banks by September 30, 2025. NBFC-Base Layer, NBFC-Middle and Upper Layers with fewer than 10 'fixed point service delivery units' may consider implementation of a CFSS for their own benefit.
Consumer Education and Protection Department	
November 12, 2021	• Reserve Bank - Integrated Ombudsman Scheme (RB-IOS), 2021 was launched adopting 'One Nation One Ombudsman' approach to make the alternate dispute redress mechanism simpler and more responsive to the customers of entities regulated by the Reserve Bank by integrating the erstwhile three Ombudsman schemes – (i) the Banking Ombudsman Scheme, 2006, as amended up to July 1, 2017; (ii) the Ombudsman Scheme for Non-Banking Financial Companies, 2018; and (iii) the Ombudsman Scheme for Digital Transactions, 2019. • A 'Centralised Receipt and Processing Centre' was set up at the Reserve Bank, Chandigarh as a single point of contact for complainants and for receiving complaints by email and through physical modes. Additionally, a Contact Centre with a toll-free number - 14448 was operationalised in Hindi, English and in eight regional languages (nine regional languages as on March 31, 2022).
November 15, 2021	The Reserve Bank directed deposit-taking NBFCs (NBFCs-D) with 10 or more branches and Non-Deposit taking NBFCs (NBFCs-ND) with asset size of ₹5,000 crore and above having public customer interface to appoint Internal Ombudsman (IO) at the apex of their internal grievance redress mechanism within a period of six months from the date of issue of the direction, except for certain types of NBFCs as mentioned in the direction.
Internal Debt Management Department	
March 31, 2021	The ways and means advances (WMA) limit for the GoI for H1:2021-22 (April 2021 to September 2021) was fixed at ₹1,20,000 crore.
April 23, 2021	• The existing interim WMA limit of ₹51,560 crore for all states/ UTs was extended for six months, *i.e.*, up to September 30, 2021. • Relaxed overdraft (OD) regulations were continued to be in force, wherein, the number of days for which a state/UT can be in OD continuously was increased from 14 working days to 21 working days, and 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.

Date of Announcement	Policy Initiative
July 12, 2021	As part of continuing efforts to increase the retail participation in G-Secs, the 'RBI Retail Direct' scheme was announced on July 12, 2021 for improving ease of access by retail investors through online access to the G-secs market - both primary and secondary - along with the facility to open their gilt securities account with the Reserve Bank.
September 27, 2021	The WMA limit for the GoI for H2:2021-22 (October 2021 to March 2022) was fixed at ₹50,000 crore.
October 8, 2021	• The existing interim WMA limit of ₹51,560 crore for state governments/UTs were extended for another six months up to March 31, 2022. • Relaxed OD regulations for state governments/UTs were extended for six months, *i.e.*, up to March 31, 2022.
November 12, 2021	The RBI Retail Direct portal (https://rbiretaildirect.org.in) was launched by the Hon'ble Prime Minister on November 12, 2021.
January 4, 2022	To support the RBI Retail Direct Scheme by providing liquidity in the secondary market, a "Retail Direct Scheme - Market Making" was launched, in terms of which, the primary dealers (PDs) were required to be present on the NDS-OM platform (odd-lot and request for quotes segments) throughout market hours and respond to buy/sell requests from Retail Direct Gilt Account Holders.
Department of Currency Management	
August 10, 2021	A scheme of penalty for non-replenishment of ATMs was introduced for banks/white label ATM operators (WLAOs) to ensure that sufficient cash is made available to the public through ATMs.
August 27, 2021	Under the overarching objectives of better customer service to the public with regard to distribution of coins, the quantum of incentive payable to banks for distribution of coins was increased.
March 28, 2022	The Ink Manufacturing Unit (Varnika) of Bharatiya Reserve Bank Note Mudran Private Limited (BRBNMPL), set up at Mysuru, was dedicated to the nation by the Governor, RBI.
Department of Payment and Settlement Systems	
May 19, 2021	Guidelines were issued mandating Prepaid Payment Instruments (PPIs) interoperability, enhancing the limit for full KYC PPIs to ₹2 lakh, and permitting cash withdrawals using full-KYC PPIs of non-bank PPI issuers.
June 4, 2021	It was announced that National Automated Clearing House (NACH) shall be made available on all days of the week, effective August 1, 2021.
June 10, 2021	Guidelines were issued with the revised interchange fee and customer charges for ATM transactions.
June 14, 2021	• Mobile prepaid recharge was permitted as a biller category in Bharat Bill Payment System (BBPS). • Guidelines were issued regarding new investment from or through non-compliant Financial Action Task Force (FATF) jurisdictions in Payment System Operators (PSOs).
July 28, 2021	Access criteria was revised to permit authorised non-bank PSOs, *viz.,* PPI issuers, card networks and white label ATM operators to participate in Centralised Payment Systems (CPS) as direct members.
August 3, 2021	A framework for outsourcing of payment and settlement-related activities by PSOs was issued prescribing minimum standards to manage risks in outsourcing of payment and / or settlement-related activities.

Date of Announcement	Policy Initiative
August 25, 2021	Scope of device-based tokenisation was extended to include consumer devices – laptops, desktops, wearables (wrist watches, bands, *etc.*), Internet of Things (IoT) devices, *etc*.
August 26, 2021	Street vendors, identified as part of the Pradhan Mantri Street Vendor's *AatmaNirbhar Nidhi* (PM SVANidhi Scheme) in tier-1 and tier-2 centres, were included as beneficiaries under the Payments Infrastructure Development Fund (PIDF) scheme.
August 27, 2021	• Indo Nepal remittance facility scheme was enhanced with increase in the per-transaction ceiling to ₹2 lakh and removal of the cap of 12 remittances per year per remitter. • Master Direction on issuance and operation of PPIs (MD-PPIs) was revised with changes broadly related to change in classification of PPIs, clarifications to existing instructions, deletion of certain clauses which are no longer relevant, *etc*.
September 7, 2021	Instructions were issued to extend the device-based tokenisation framework to Card-on-File Tokenisation (CoFT).
September 14, 2021	A project was announced to link fast payment systems in India (UPI) and Singapore (PayNow).
October 8, 2021	The per-transaction limit in Immediate Payment Service (IMPS) was increased from ₹2 lakh to ₹5 lakh for channels other than SMS and Interactive Voice Response System (IVRS).
December 8, 2021	• Enablement of small value transactions through an "on-device" wallet in UPI application was announced. • The transaction limit for payments through UPI for Retail Direct Scheme and IPO applications was increased from ₹2 lakh to ₹5 lakh.
January 3, 2022	Framework was issued to enable small value digital payments in offline mode using cards, wallets, mobile devices, *etc*.
February 10, 2022	• The NACH mandate limit was increased from ₹1 crore to ₹3 crore for TReDS settlements. • Payment and Settlement Systems Regulations, 2008 were amended for discontinuing certain monthly/quarterly/annual returns prescribed and removing redundant operational guidelines.
February 22, 2022	Advisory was issued cautioning the public against PPIs (non-closed) issued by unauthorised entities.
March 8, 2022	• UPI123Pay was launched to enable UPI payments for feature phone users. • *DigiSaathi*, a 24x7 helpline to address the queries of digital payment users across products, was launched.
March 25, 2022	Framework was prescribed for capturing geo-tagging information of payment system touch points deployed by banks/non-bank PSOs.

ANNEX II

CHRONOLOGY OF MAJOR POLICY ANNOUNCEMENTS TO MITIGATE THE IMPACT OF COVID-19: APRIL 2021 TO MARCH 2022[1]

Date of Announcement	Policy Initiative
A. Government of India (GoI)	
April 1, 2021	• Credit guarantee scheme for subordinate debt (CGSSD) extended up to September 30, 2021. • The Ministry of Finance released an amount of ₹11,830 crore to 11 states for completing reforms under the scheme of financial assistance to states for capital expenditure.
April 11, 2021	GoI prohibited the export of Remdesivir injection and active pharmaceutical ingredient (API) in the wake of surge in COVID-19 cases.
April 26, 2021	A dedicated helpdesk was set up by the Central Board of Indirect Taxes and Customs (CBIC) for handling queries related to COVID-19 on imports and handhold the trade, industry and individuals for expeditious customs clearance.
April 30, 2021	• Additional amount of ₹15,000 crore to be provided to states as interest free 50-year loan for spending on capital projects under the scheme of financial assistance to states for capital expenditure during 2021-22. • Added import of oxygen concentrators for personal use to list of exempted categories, where customs clearance is sought as "gifts", till July 31, 2021.
May 1, 2021	• First instalment of ₹8,873.6 crore for state disaster response fund (SDRF) was released in advance and up to 50 per cent of the SDRF amount was allowed to be used by the states for COVID-19 containment measures. • Government extended timelines of certain tax compliances in view of the COVID-19 pandemic. These include extension of the last date of filing for objections to dispute resolution panel (DRP), filing of return of income, among others, from April 1, 2021 to May 31, 2021.
May 2, 2021	Announcement of various relief measures for taxpayers under the goods and services tax (GST) law in view of the COVID-19 pandemic, which include, waiver of late fee, reduction in rate of interest, amendments in central GST (CGST) rule, extension of due date of filing GST return 1 (GSTR-1), invoice furnishing facility (IIF), GST return 4 (GSTR-4) and input tax credit-04 (ITC-04), among others.
May 3, 2021	Notifications regarding *ad hoc* exemption from the integrated GST (IGST) on imports of specified COVID-19 relief material donated from abroad like Remdesivir injection, medical grade oxygen, COVID-19 vaccines, among others, until June 30, 2021.
May 5, 2021	*Pradhan Mantri Garib Kalyan Anna Yojana* (Phase III), under which additional free distribution of food grains over and above the normal National Food Security Act (NFSA) entitlements of 5 kilogram/ person/month to all NFSA beneficiaries was extended for two more months - May to June 2021. The programme intends to ensure food security of poor and vulnerable in both rural and urban areas.
May 18, 2021	Ministry of Agriculture and Farmers Welfare released a memorandum on continued benefit of 2 per cent interest subvention (IS) to banks and 3 per cent prompt repayment incentive (PRI) to farmers for short-term loans for agriculture and allied activities, including animal husbandry, dairying and fisheries (AHDF) up to ₹3 lakh per farmer (up to ₹2 lakh for AHDF), due between March 1, 2021, and June 30, 2021, for an extended repayment date up to June 30, 2021.

[1] The list is indicative in nature and details for government related measures and those of the Reserve Bank are available on their respective websites.

Date of Announcement	Policy Initiative
May 20, 2021	Extension of certain timelines in view of the COVID-19 pandemic: • The statement of financial transactions (SFT), statement of reportable account, statement of deduction of tax for 2020-21, required to be furnished on or before May 31, 2021 may be furnished on or before June 30, 2021. • The certificate of tax deducted at source required to be furnished to the employee by June 15, 2021, may be furnished on or before July 15, 2021.
May 28, 2021	Recommendations of 43rd GST Council meeting: • COVID-19 related medical goods, including amphotericin-B for free distribution to be given full exemption from custom duty and IGST up to August 31, 2021. • Amnesty scheme to provide relief to taxpayers regarding late fee for pending returns and rationalisation of late fee for future tax period. • Simplification of annual return for 2020-21, with the filing of annual return in form GSTR-9/9A for 2020-21 to be optional for taxpayers having aggregate annual turnover up to ₹2 crore. Self-certification of reconciliation statement, among others, were certain facilities that were additionally provided.
May 30, 2021	The scope of emergency credit line guarantee scheme (ECLGS) was enlarged as under: • Under ECLGS 4.0, 100 per cent guarantee cover to loans up to ₹2 crore to hospitals/nursing homes/clinics/medical colleges for setting up on-site oxygen generation plants with interest rate capped at 7.5 per cent. • Borrowers who are eligible for restructuring as per the Reserve Bank's guidelines of May 5, 2021 and had availed loans under ECLGS 1.0 of overall tenure of four years comprising of repayment of interest only during the first 12 months with repayment of principal and interest in 36 months thereafter, would be able to avail a tenure of five years for their ECLGS loan, *i.e.,* repayment of interest only for the first 24 months with repayment of principal and interest in 36 months thereafter. • Additional ECLGS assistance of up to 10 per cent of the outstanding as on February 29, 2020 to borrowers covered under ECLGS 1.0, in tandem with restructuring as per the Reserve Bank's guidelines of May 5, 2021. • Current ceiling of ₹500 crore of loan outstanding for eligibility under ECLGS 3.0 to be removed, subject to maximum additional ECLGS assistance to each borrower being limited to 40 per cent or ₹200 crore, whichever is lower. • Civil aviation sector to be eligible under ECLGS 3.0. • Validity of ECLGS extended to September 30, 2021 or till guarantees for an amount of ₹3 lakh crore are issued. Disbursement under the scheme permitted up to December 31, 2021.
June 1, 2021	Restricted exports of amphotericin-B injections.
June 15, 2021	GoI simplified registration process for micro, small and medium enterprises (MSMEs). Now only permanent account number (PAN) and *Aadhaar* are required for MSME registration.
June 23, 2021	Extension of *Pradhan Mantri Garib Kalyan Anna Yojana* (Phase-IV), from July 2021 up to November 2021.

Date of Announcement	Policy Initiative
June 28, 2021	Announcement of relief package of ₹6,28,993 crore to support Indian economy in its fight against the COVID-19 pandemic: • ₹1.1 lakh crore loan guarantee scheme for COVID-19 affected sectors. • Additional ₹1.5 lakh crore for ECLGS. • Credit guarantee scheme to facilitate loans to 25 lakh persons through microfinance institutions (MFIs). • Financial support to more than 11,000 registered tourists/guides/travel and tourism stakeholders. • Free one month tourist visa to first 5 lakh tourists. • Additional subsidy of ₹14,775 crore for Di Ammonium Phosphate (DAP) and Phosphatic and Potassic (P&K) fertilisers. • An additional amount of ₹23,220 crore for public health with emphasis on children and paediatric care/paediatric beds. • 21 varieties of bio-fortified crops for nutrition, climate resilience and other traits to be dedicated to the nation. • Revival of North Eastern Regional Agricultural Marketing Corporation (NERAMAC) with a package of ₹77.5 crore. • ₹33,000 crore boost for project exports through national export insurance account (NEIA). • ₹88,000 crore boost to export insurance cover. • ₹19,041 crore for broadband to each village through *BharatNet* public-private partnership (PPP) model. • Extension of tenure of production linked incentive (PLI) scheme for large scale electronics manufacturing till 2025-26. • ₹3.03 lakh crore for reform-based result-linked power distribution scheme. • New streamlined process for PPP projects and asset monetisation.
June 30, 2021	• Loan guarantee scheme for COVID affected sectors (LGSCAS), would be applicable to all eligible loans sanctioned up to March 31, 2022, or till an amount of ₹50,000 crore is sanctioned, whichever is earlier, to provide financial guarantee cover for brownfield expansion and greenfield projects related to health/medical infrastructure. • Approval for additional funding up to ₹1,50,000 crore under ECLGS, till September 30, 2021, or till an amount of ₹4,50,000 crore is sanctioned under the guaranteed emergency credit line (GECL), whichever is earlier. • Extension of last date of registration under *AatmaNirbhar Bharat Rojgar Yojana* (ABRY), from June 30, 2021 to March 31, 2022.
July 8, 2021	Approval provided for India COVID-19 emergency response and health systems preparedness package (Phase II), at a cost of ₹23,123 crore.
July 14, 2021	GoI approved continuation of rebate of state and central taxes and levies (RoSCTL) on export of apparel/garments and made-ups till March 31, 2024 at the existing rates.

Date of Announcement	Policy Initiative
July 19, 2021	• Tax exemption to taxpayers who suffered on account of the COVID-19 and had to incur sum for medical treatment of the COVID-19 after taking help from employer or any person. • Financial support to public research institutes and industry for developing COVID-19 vaccine.
August 16, 2021	Restricted exports of COVID-19 rapid antigen testing kits.
September 17, 2021	Extension of timelines for compliances under the Income Tax Act, 1961 in the following cases, as under: • Time limit for intimation of *Aadhaar* number to the Income Tax Department for linking of PAN with *Aadhaar* was extended from September 30, 2021 to March 31, 2022. • The due date for completion of penalty proceedings under the Act was extended from September 30, 2021 to March 31, 2022. • Further, the time limit for issuance of notice and passing of order by the adjudicating authority under the Prohibition of *Benami* Property Transactions Act, 1988, was extended to March 31, 2022.
September 28, 2021	Extension of foreign trade policy (FTP) 2015-20 till March 31, 2022.
September 29, 2021	Extension of ECLGS till March 31, 2022 or till guarantees for an amount of ₹4.5 lakh crore are issued under the scheme, whichever is earlier. Further, the last date of disbursement under the ECLGS was also extended to June 30, 2022.
October 4, 2021	• CGSSD extended up to March 31, 2022. It will aid stressed MSMEs. • Restricted exports of syringes with or without needles.
November 19, 2021	Ministry of MSMEs launched the special credit linked capital subsidy scheme (SCLCSS) for services sector. This scheme has a provision of 25 per cent capital subsidy for procurement of plant and machinery and service equipment.
November 24, 2021	Extension of *Pradhan Mantri Garib Kalyan Anna Yojana* (Phase V), for a period of another 4 months, *i.e.*, December 2021 till March 2022 at 5 kg foodgrains per person per month free of cost for all the beneficiaries covered under the NFSA.
January 10, 2022	Restricted exports of enoxaparin (formulation and API) and intra-venous immunoglobulin (IVIG) [formulations and API].
February 1, 2022	The Union Budget 2022-23 seeks to complement macro-economic level growth with a focus on micro-economic level all-inclusive welfare. The key announcements included: • Extension of ECLGS up to March 2023 and its guarantee cover to be expanded by ₹50,000 crore. The total cover would be ₹5 lakh crore. • Extension of CGSSD up to March 2023. • Additional credit of ₹2 lakh crore for MSMEs through revamped credit guarantee trust for micro and small enterprises (CGTMSE). • Government to roll out raising and accelerating MSME performance (RAMP) programme with an outlay of ₹6,000 crore. • Interlinking the portals of *Udyam, e-Shram*, national career service (NCS) and *ASEEM* [2].

[2] *AatmaNirbhar* Skilled Employee Employer Mapping.

<table>
<tr><th>Date of Announcement</th><th>Policy Initiative</th></tr>
<tr><td></td><td>₹1 lakh crore allocated to assist states in catalysing overall investments in 2022-23. The outlay for the scheme for financial assistance to states for capital investment to be enhanced from ₹10,000 crore in 2021-22 (budget estimates) to ₹15,000 crore in 2021-22 (revised estimates).
Tax incentive was earlier available to eligible start-ups established before March 31, 2022. In order to assist the start-ups for recouping from the effects of pandemic, the period for incorporation of the eligible start-up was extended by one more year up to March 31, 2023.
Announcement of national tele mental health programme to provide better access to quality mental health counselling and care services.
To impart supplementary teaching and to build a resilient mechanism for education delivery, one class-one TV channel programme of Pradhan Mantri eVIDYA, would be introduced.</td></tr>
<tr><td>March 26, 2022</td><td>Extension of Pradhan Mantri Garib Kalyan Anna Yojana (Phase-VI), for another 6 months (April-September 2022).</td></tr>
<tr><td>March 30, 2022</td><td>The coverage, scope and extent of benefits under ECLGS 3.0 pertaining to hospitality, travel, tourism and civil aviation sectors has been expanded as follows:
New borrowers in the sectors covered under ECLGS 3.0 who have borrowed after March 31, 2021 and up to January 31, 2022 will also now be eligible to avail of emergency credit facilities under ECLGS 3.0.
The extent of emergency credit facilities that may be availed of under ECLGS 3.0 has been increased for eligible borrowers in all sectors covered under ECLGS 3.0. Eligible borrowers in all such sectors (other than the civil aviation sector) are now permitted to avail up to 50 per cent of their highest fund-based credit. This is subject to the existing maximum limit of ₹200 crore per borrower. Eligible borrowers in the civil aviation sector can avail of up to 50 per cent of their highest total fund and non-fund-based credit outstanding, subject to a maximum of ₹400 crore per borrower.</td></tr>
<tr><td>March 31, 2022</td><td>Extension of FTP 2015-20 till September 30, 2022.</td></tr>
<tr><td colspan="2">B. Reserve Bank of India</td></tr>
<tr><td colspan="2">Monetary Policy Department</td></tr>
<tr><td>April 7, 2021</td><td>The monetary policy committee (MPC) decided to keep the policy repo rate unchanged at 4.0 per cent and to continue with the accommodative stance as long as necessary to revive and sustain growth on a durable basis and continue to mitigate the impact of COVID-19 on the economy, while ensuring that inflation remains within the target going forward.[3]
Special refinance facilities for a total amount of ₹50,000 crore were granted to National Bank for Agriculture and Rural Development (NABARD), Small Industries Development Bank of India (SIDBI) and National Housing Bank (NHB) to enable them to meet sectoral credit needs.[4]</td></tr>
</table>

[3] The MPC maintained *status quo* on the repo rate and the accommodative stance in all its subsequent meetings in 2021-22.

[4] This comprised ₹25,000 crore to NABARD for refinancing regional rural banks (RRBs), cooperative banks and microfinance 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 5, 2021	To further incentivise inclusion of unbanked MSMEs into the banking system, cash reserve ratio (CRR) exemption available to scheduled commercial banks (SCBs) for exposures up to ₹25 lakh and for credit disbursed up to the fortnight ending October 1, 2021 was extended till December 31, 2021.
June 4, 2021	Special refinance facility for a total amount of ₹16,000 crore was provided to SIDBI to meet short- and medium-term credit needs of MSMEs to kick-start the investment cycle with additional focus on smaller MSMEs and businesses, including those in credit deficient and aspirational districts.
August 6, 2021	The enhanced limit for availing funds up to three per cent of net demand and time liabilities (NDTL) under the marginal standing facility (MSF) was extended for a further period of six months, *i.e.,* up to December 31, 2021, to provide comfort to banks on their liquidity requirements.
December 8, 2021	The borrowing limit under the MSF was restored to the pre-pandemic level of 2 per cent from 3 per cent, effective January 1, 2022.
Financial Inclusion and Development Department	
May 5, 2021	The priority sector lending (PSL) classification was permitted to the fresh credit extended by small finance banks (SFBs) to registered NBFC - microfinance institutions (NBFC - MFIs) and other MFIs (societies, trusts, *etc.*), which are members of the Reserve Bank recognised 'self-regulatory organisation' of the sector, and which have a 'gross loan portfolio' of up to ₹500 crore as on March 31, 2021, for the purpose of on-lending to individuals. Bank credit as above was permitted up to 10 per cent of the bank's total priority sector portfolio as on March 31, 2021.
Financial Markets Operations Department	
April 7, 2021	• The on-tap targeted long-term repo operations (TLTRO) scheme announced on October 9, 2020, and initially made available up to March 31, 2021, was extended by a period of six months, *i.e.,* up to September 30, 2021. It was later extended till December 31, 2021.
May 5, 2021	• It was decided to open an on-tap term liquidity window of ₹50,000 crore to ease access to emergency health services, with tenors of up to three years at the repo rate till March 31, 2022. It aimed to boost provision of immediate liquidity for ramping up COVID-related healthcare infrastructure and services in the country. The scheme was later extended up to June 30, 2022. • To provide further support to small business units, micro and small industries, and other unorganised sector entities adversely affected during the pandemic, it was decided to conduct special three-year long-term repo operations (SLTRO) of ₹10,000 crore at repo rate for SFBs, to be deployed for fresh lending of up to ₹10 lakh per borrower. This facility was initially made available till October 31, 2021. It was later extended to December 31, 2021 and made on-tap.
June 4, 2021	It was decided to open a separate liquidity window for contact intensive sectors for an amount of ₹15,000 crore with tenors of up to three years at the repo rate till March 31, 2022. It was later extended up to June 30, 2022.
Foreign Exchange Department	
April 7, 2021	In the normal course, borrowers of external commercial borrowings (ECBs) are allowed to park ECB proceeds in term deposits with authorised dealer (AD) category-I banks in India for a maximum period of 12 months cumulatively. With a view to provide relief to ECB borrowers during the COVID-19 pandemic, it was decided to relax this stipulation as a one-time measure. Accordingly, unutilised ECB proceeds drawn down on or before March 1, 2020, could be parked in term deposits with authorised dealer category-I banks in India prospectively, for an additional period up to March 1, 2022.

Date of Announcement	Policy Initiative
Department of Regulation	
April 7, 2021	Guidelines were issued to ensure consistency of approach across lending institutions in applying the asset classification norms in respect of their borrowers and the methodology adopted for refund of the compound interest charged during March 1, 2020 to August 31, 2020.
April 22, 2021	In view of the continuing uncertainty caused by the second wave of COVID-19 in the country, it was crucial that banks remain resilient and proactively raise and conserve capital as a bulwark against unexpected losses. Therefore, it was decided to allow commercial banks to declare dividend on equity shares from the profits for the financial year ended March 31, 2021, subject to the quantum of dividend being not more than 50 per cent of the amount determined as per the dividend pay-out ratio prescribed under extant instructions. Cooperative banks were allowed to declare dividend on equity shares from the profits of the financial year ended March 31, 2021, as per the extant instructions.
May 5, 2021	• In view of the resurgence of COVID-19, the Resolution Framework 2.0 was announced, which permits lending institutions to restructure eligible loans, which had not been restructured under Resolution Framework 1.0 dated August 6, 2020, and were classified as standard as on March 31, 2021, while classifying the restructured exposures as standard subject to conditions. The framework shall have to be invoked by September 30, 2021 and will have to be implemented within 90 days from the date of invocation. Even in respect of MSME accounts as well as other eligible accounts restructured under earlier schemes, lending institutions have been permitted, as a one-time measure, to review the working capital sanctioned limits and/or drawing power based on a reassessment of the working capital cycle, reduction of margins, *etc.* without the same being treated as restructuring. • It was decided to extend the exemption available for SCBs to deduct the amount equivalent to credit disbursed to new MSME borrowers, up to ₹25 lakh per borrower, from their NDTL for calculation of the CRR for credit disbursed up to the fortnight ending October 1, 2021 to the fortnight ending December 31, 2021. • In view of the impact on banks due to COVID-19, as a measure to enable capital conservation, banks have been permitted to utilise 100 per cent of floating provisions/countercyclical provisioning buffer held by them as on December 31, 2020 for making specific provisions for NPAs with prior approval of their boards. Such utilisation is permitted with immediate effect and up to March 31, 2022. • In terms of the Master Direction on know your customer (KYC), regulated entities (REs) have been instructed to carry out periodic updation of KYC of existing customers. Keeping in view the COVID-19 related restrictions in various parts of the country, REs were advised, that in respect of the customer accounts where periodic updation of KYC is due and pending as on date, no restrictions on operations of such account shall be imposed till December 31, 2021, for this reason alone, unless warranted under instructions of any regulator/enforcement agency/court of law, *etc.* REs were also advised to continue engaging with such customers to get their KYC updated.
June 4, 2021	• In view of the difficulties faced by cooperative banks [*i.e.,* urban cooperative banks (UCBs), state cooperative banks and central cooperative banks] due to COVID-19 pandemic, the timeline for submission of returns under Section 31 of the Banking Regulation Act 1949 (As Applicable to Cooperative Societies) for the financial year ended March 31, 2021, was extended by three months, *i.e.,* till September 30, 2021.

Date of Announcement	Policy Initiative
	• Under Resolution Framework 2.0 for resolution of COVID-19 related stress, the aggregate exposure thresholds for individuals, small businesses and MSMEs was ₹25 crore. On a review, the above exposure threshold was increased to ₹50 crore.
August 6, 2021	The resolution plans implemented in terms of the resolution framework for COVID-19 related stress issued on August 6, 2020 were required to achieve certain financial parameters by March 31, 2022. In view of the resurgence of the COVID-19 pandemic in 2021 and recognising the difficulties it may pose for the borrowers in meeting the operational parameters, it was decided to defer the target date to October 1, 2022 for meeting the specified thresholds in respect of the four operational parameters, *viz.,* total debt/earnings before interest, taxes, depreciation and amortisation (TD/EBITDA), current ratio, debt service coverage ratio (DSCR) and average debt service coverage ratio (ADSCR). However, the target date for achieving the total outside liabilities/adjusted tangible net worth (TOL/ATNW) ratio, as crystallised in terms of the resolution plan, was kept unchanged as March 31, 2022.
August 9, 2021	SCBs were allowed to avail of funds under the MSF by dipping into the SLR up to three per cent of their NDTL outstanding at the end of the second preceding fortnight. This facility, which was initially available up to June 30, 2020, was later extended up to December 31, 2021, providing comfort to banks on their liquidity requirements and also to enable them to meet their liquidity coverage ratio (LCR) requirements.
December 30, 2021	Keeping in view the COVID-19 related restrictions in various parts of the country, REs were advised that in respect of the customer accounts where periodic updation of KYC is due and pending as on date, no restrictions on operations of such account shall be imposed till December 31, 2021, for this reason alone, unless warranted under instructions of any regulator/enforcement agency/court of law, *etc*. REs were also advised to continue engaging with such customers to get their KYC updated. In view of the prevalent uncertainty due to new variant of COVID-19, the relaxation has been extended till March 31, 2022.
Internal Debt Management Department	
April 23, 2021	• The existing interim ways and means advances (WMA) limit of ₹51,560 crore for all states/UTs was extended for six months, *i.e.*, up to September 30, 2021. • Relaxed overdraft (OD) regulations were continued to be in force, wherein, the number of days for which a state/UT can be in OD continuously was increased from 14 working days to 21 working days, and 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.
October 8, 2021	• The existing interim WMA limit of ₹51,560 crore for state governments/UTs were extended for another six months up to March 31, 2022. • Relaxed OD regulations for state governments/UTs were extended for six months, *i.e.*, up to March 31, 2022.
Department of Payment and Settlement Systems	
May 21, 2021	Timeline prescribed for compliance in respect of a few areas (net-worth requirement for existing non-bank prepaid payment instrument (PPI) issuers, timeline for existing non-bank payment aggregators to apply to the Reserve Bank for seeking authorisation to offer payment aggregator services, *etc.*) was extended.

APPENDIX TABLE 1: MACROECONOMIC AND FINANCIAL INDICATORS

Item	Average 2003-04 to 2007-08 (5 years)	Average 2009-10 to 2013-14 (5 years)	2019-20	2020-21	2021-22
1	2	3	4	5	6
I. Real Economy					
I.1 Real GDP at market prices (% change)*	7.9	6.7	3.7	-6.6	8.9
I.2 Real GVA at basic prices (% change)*	7.7	6.3	3.8	-4.8	8.3
I.3 Foodgrains Production (Million tonnes)**	213.6	248.8	297.5	308.7	314.5
I.4 a) Food Stocks (Million tonnes)***	18.6	50.1	74.0	78.0	74.0
b) Procurement (Million tonnes)***	39.3	61.3	80.2	97.2	107.2
c) Off-take (Million tonnes)***	41.5	57.0	62.2	93.1	102.3
I.5 Index of Industrial Production (% change)&	9.3	3.5	-0.8	-8.4	11.3
I.6 Index of Eight Core Industries (% change)&	5.9	5.8	0.4	-6.4	10.4
I.7 Gross Domestic Saving Rate (% of GNDI at current prices)*	33.6	33.9	29.4	27.8	-
I.8 Gross Domestic Investment Rate (% of GDP at current prices)*	35.2	38.0	30.7	27.3	-
II. Prices					
II.1 Consumer Price Index (CPI) Combined (average % change)	-	-	4.8	6.2	5.5
II.2 CPI-Industrial Workers (average % change)	5.0	10.3	7.5	5.0	5.1
II.3 Wholesale Price Index (average % change)	5.5	7.1	1.7	1.3	13.0
III. Money and Credit&&					
III.1 Reserve Money (% change)	20.4	12.1	9.4	18.8	12.3
III.2 Broad Money (M3) (% change)	18.6	14.7	8.9	12.2	8.7
III.3 a) Aggregate Deposits of Scheduled Commercial Banks (% change)	20.2	15.0	7.9	11.4	8.9
b) Bank Credit of Scheduled Commercial Banks (% change)	26.7	16.7	6.1	5.6	9.6
IV. Financial Markets					
IV.1 Interest rates (%)					
a) Call/Notice Money rate	5.6	7.2	5.4	3.4	3.3
b) 10 year G-sec yield	7.0	8.0	6.7	6.0	6.3
c) 91-Days T-bill yield	-	-	5.5	3.3	3.5
d) Weighted Average cost of Central Government Borrowings	-	-	6.9	5.8	6.3
e) Commercial Paper	7.7	8.4	6.6	4.2	4.3
f) Certificate of Deposits	8.9	8.2	5.9	4.3	4.1
IV.2 Liquidity (₹ lakh crore)					
a) LAF Outstanding~	-	-	2.6	4.1	5.9
b) MSS Outstanding~~	-	-	-	-	-
c) Average Daily Call Money Market Turnover	0.2	0.3	0.3	0.2	0.2
d) Average Daily G-sec Market Turnover	0.1	0.2	0.6	0.4	0.4
e) Variable Rate Repo~	-	-	0.895	0.005	0.000
f) Variable Rate Reverse Repo~	-	-	1.2	0.0	2.8
g) MSF~	-	-	0.020	0.001	0.0005
V. Government Finances#					
V.1 Central Government Finances (% of GDP)					
a) Revenue Receipts	10.0	9.2	8.4	8.3	8.8
b) Capital Outlay	1.6	1.6	1.6	1.6	2.3
c) Total Expenditure	14.9	15.0	13.4	17.7	15.9
d) Gross Fiscal Deficit	3.7	5.4	4.7	9.2	6.7
V.2 State Government Finances##					
a) Revenue Deficit (% of GDP)	0.0	-0.1	0.6	2.0	0.5
b) Gross Fiscal Deficit (% of GDP)	2.7	2.3	2.6	4.7	3.5
c) Primary Deficit (% of GDP)	0.3	0.6	0.9	2.7	1.6

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)	2019-20	2020-21	2021-22
1	2	3	4	5	6
VI. External Sector					
VI.1 Balance of Payments^					
a) Merchandise Exports (% change)	25.3	12.2	-5.0	-7.5	51.8
b) Merchandise Imports (% change)	32.3	9.7	-7.6	-16.6	68.3
c) Trade Balance/GDP (%)	-5.5	-9.1	-5.6	-3.8	-5.9
d) Invisible Balance/GDP (%)	5.2	5.8	4.7	4.7	4.7
e) Current Account Balance/GDP (%)	-0.3	-3.3	-0.9	0.9	-1.2
f) Net Capital Flows/GDP (%)	4.7	3.8	2.9	2.4	3.9
g) Reserve Changes [(BoP basis) (US$ billion) [(Increase (-)/Decrease (+)]	-40.3	-6.6	-59.5	-87.3	-63.5
VI.2 External Debt Indicators$					
a) External Debt Stock (US$ billion)	156.5	359.0	558.3	573.7	614.9
b) Debt-GDP Ratio (%)	17.8	20.9	20.9	21.2	20.0
c) Import cover of Reserves (in Months)	14.0	8.5	12.0	17.4	13.1
d) Short-term Debt to Total Debt (%)	13.6	21.3	19.1	17.6	18.6
e) Debt Service Ratio (%)	8.3	5.6	6.5	8.2	4.9
f) Reserves to Debt (%)	113.7	84.8	85.6	100.6	103.0
VI.3 Openness Indicators (%)^					
a) Export plus Imports of Goods/GDP	30.7	41.0	28.2	26.0	33.0
b) Export plus Imports of Goods & Services/GDP	41.3	53.2	40.3	38.2	45.6
c) Current Receipts plus Current Payments/GDP	47.1	59.4	46.2	44.4	51.5
d) Gross Capital Inflows plus Outflows/GDP	37.3	50.4	40.2	42.5	47.9
e) Current Receipts & Payments plus Capital Receipts & Payments/ GDP	84.4	109.8	86.4	86.9	99.4
VI.4 Exchange Rate Indicators					
a) Exchange Rate (Rupee/US Dollar)					
End of Period	43.1	51.1	75.4	73.5	75.8
Average	44.1	51.2	70.9	74.2	74.5
b) 40-Currency REER (% change)***	3.1^^	0.8	2.6	0.3	1.2
c) 40-Currency NEER (% change)***	1.7^^	-4.9	0.6	-4.2	-0.8
d) 6-Currency REER (% change)	5.7^^	2.3	3.3	-1.7	0.4
e) 6-Currency NEER (% change)	2.6^^	-5.1	0.7	-6.8	-1.6

- : Not Available.
* : Data are at 2011-12 base year series.
** : Data for 2021-22 are Third Advance Estimates for agriculture production.
*** : Data for 2021-22 are provisional.
& : Data for 2021-22 are provisional and pertain to April 2021- March 2022.
&& : Data for 2021-22 are provisional and is outstanding as on March 25, 2022.
$: Data for 2021-22 are provisional and pertain to end-December 2021.
~ : Outstanding as on March 31.
~~ : Outstanding as on last Friday of the financial year.
: Data for 2021-22 are revised estimates.
: Data for 2020-21 are provisional accounts (PA) figures of 26 States available with Comptroller and Auditor General and budget estimates (BE) for the remaining 5 States/UTs.
^ : Data for 2021-22 are provisional and pertain to April-December 2021 unless indicated otherwise.
^^ : Data in column 2 is average of period 2005-06 to 2007-08.

Note : 1. For Index of Industrial Production, data in column 2 and 3 at 2011-12 base year.
2. Base year for WPI is 2011-12=100 for annual data and 2004-05=100 for average of 5 years inflation. Base for CPI-IW is 2001=100 till August 2020 and 2016=100 from September 2020 onwards
3. For Average Daily G-sec Market Turnover, outright trading turnover is in central government dated securities (based on calendar days).
4. LAF negative value means injection.
5. Base year for 6- and 40-currency NEER/REER indices is 2015-16=100. REER figures are based on Consumer Price Index.

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 2014-15 to 2021-22	2019-20	2020-21	2021-22*	2019-20	2020-21	2021-22*
1	2	3	4	5	6	7	8
Expenditure Side GDP							
1. Private Final Consumption Expenditure	5.3	5.2	-6.0	7.6	56.9	57.3	56.6
2. Government Final Consumption Expenditure	6.4	3.4	3.6	4.8	10.2	11.3	10.9
3. Gross Fixed Capital Formation	5.3	1.6	-10.4	14.6	31.8	30.5	32.0
4. Change in Stocks	-218.5	-58.8	-110.7	-1723.9	0.7	-0.1	1.3
5. Valuables	14.0	-14.2	26.4	63.0	1.1	1.5	2.3
6. Net Exports	-37.8	-16.1	39.1	-102.7	-3.5	-2.3	-4.2
a) Exports	3.3	-3.4	-9.2	21.1	19.4	18.8	20.9
b) Less Imports	5.1	-0.8	-13.8	29.9	22.9	21.1	25.2
7. Discrepancies	-13.2	164.2	-39.8	-28.4	2.7	1.8	1.2
8. GDP	**5.4**	**3.7**	**-6.6**	**8.9**	**100.0**	**100.0**	**100.0**
GVA at Basic Prices (Supply Side)							
1. Agriculture, forestry and fishing	**3.5**	**5.5**	**3.3**	**3.3**	**15.0**	**16.3**	**15.5**
2. Industry	**5.7**	**-2.2**	**-1.8**	**10.4**	**21.8**	**22.5**	**22.9**
of which:							
a) Mining and quarrying	3.2	-1.5	-8.6	12.6	2.4	2.3	2.4
b) Manufacturing	6.1	-2.9	-0.6	10.5	17.1	17.9	18.2
c) Electricity, gas, water supply and other utility services	5.8	2.2	-3.6	7.8	2.3	2.3	2.3
3. Services	**5.7**	**5.7**	**-7.8**	**8.8**	**63.2**	**61.2**	**61.5**
of which:							
a) Construction	3.7	1.2	-7.3	10.0	7.9	7.7	7.8
b) Trade, hotels, transport, communication and services related to broadcasting	5.3	5.9	-20.2	11.6	20.3	17.1	17.6
c) Financial, real estate and professional services	6.5	6.7	2.2	4.3	21.9	23.5	22.7
d) Public Administration, defence and other services	6.6	6.3	-5.5	12.5	13.1	13.0	13.5
4. GVA at basic prices	**5.3**	**3.8**	**-4.8**	**8.3**	**100.0**	**100.0**	**100.0**

*: Second advance estimates of national income for 2021-22.
Source: National Statistical Office (NSO).

APPENDIX TABLE 3: GROSS SAVINGS

(Per cent of GNDI)

Item			2017-18	2018-19	2019-20	2020-21
1			2	3	4	5
I.	**Gross Savings**		**31.7**	**31.3**	**29.4**	**27.8**
	1.1	**Non-financial corporations**	**11.6**	**10.7**	**10.4**	**9.9**
	1.1.1	Public non-financial corporations	1.4	1.3	1.4	1.4
	1.1.2	Private non-financial corporations	10.2	9.4	9.0	8.5
	1.2	**Financial corporations**	**2.2**	**1.8**	**2.9**	**2.8**
	1.2.1	Public financial corporations	1.4	0.9	1.5	1.4
	1.2.2	Private financial corporations	0.9	0.9	1.3	1.4
	1.3	**General Government**	**-1.2**	**-1.4**	**-3.1**	**-6.7**
	1.4	**Household sector**	**19.0**	**20.0**	**19.2**	**21.9**
	1.4.1	Net financial saving	7.5	7.8	7.9	11.5
		Memo: Gross financial saving	11.9	11.8	11.7	15.5
	1.4.2	Saving in physical assets	11.2	12.0	11.1	10.2
	1.4.3	Saving in the form of valuables	0.3	0.2	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: NSO.

APPENDIX TABLE 4: INFLATION, MONEY AND CREDIT

(Per cent)

Inflation									
Consumer Price Index (All India)#	**Rural**			**Urban**			**Combined**		
	2019-20	**2020-21**	**2021-22**	**2019-20**	**2020-21**	**2021-22**	**2019-20**	**2020-21**	**2021-22**
1	2	3	4	5	6	7	8	9	10
General Index (All Groups)	**4.3**	**5.9**	**5.4**	**5.4**	**6.5**	**5.6**	**4.8**	**6.2**	**5.5**
Food and beverages	4.8	7.1	3.9	8.1	7.7	4.7	6.0	7.3	4.2
Housing	…	…	…	4.5	3.3	3.7	4.5	3.3	3.7
Fuel and light	1.1	0.3	10.0	1.7	7.1	13.4	1.3	2.7	11.3
Miscellaneous	5.1	5.7	6.6	3.7	7.5	6.8	4.4	6.6	6.7
Excluding Food and Fuel	4.1	5.5	6.7	4.0	5.6	5.4	4.0	5.5	6.0
Other Price Indices	**2013-14**	**2014-15**	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**	**2021-22**
1. Wholesale Price Index (2011-12=100)									
All Commodities	**5.2**	**1.3**	**-3.7**	**1.7**	**2.9**	**4.3**	**1.7**	**1.3**	**13.0**
Primary Articles	9.8	2.2	-0.4	3.4	1.4	2.7	6.8	1.7	10.2
of which : Food Articles	12.3	5.6	2.6	4.0	2.1	0.3	8.4	3.2	4.1
Fuel and Power	7.1	-6.1	-19.7	-0.3	8.2	11.5	-1.8	-8.0	32.8
Manufactured Products	3.0	2.6	-1.8	1.3	2.7	3.7	0.3	2.8	11.0
Non-Food Manufactured Products	2.7	2.7	-1.8	-0.1	3.0	4.2	-0.4	2.2	10.9
2. CPI- Industrial Workers (IW) (2001=100)*	**9.7**	**6.3**	**5.6**	**4.1**	**3.1**	**5.4**	**7.5**	**5.0**	**5.1**
of which : CPI- IW Food	12.3	6.5	6.1	4.4	1.5	0.6	7.4	5.8	4.7
3. CPI- Agricultural Labourers (1986-87=100)	**11.6**	**6.6**	**4.4**	**4.2**	**2.2**	**2.1**	**8.0**	**5.5**	**4.0**
4. CPI- Rural Labourers (1986-87=100)	**11.5**	**6.9**	**4.6**	**4.2**	**2.3**	**2.2**	**7.7**	**5.5**	**4.2**
Money and Credit									
	2013-14	**2014-15**	**2015-16**	**2016-17^**	**2017-18**	**2018-19**	**2019-20**	**2020-21**	**2021-22^^**
Reserve Money (RM)	**14.4**	**11.3**	**13.1**	**-12.9**	**27.3**	**14.5**	**9.4**	**18.8**	**12.3**
Currency in Circulation	9.2	11.3	14.9	-19.7	37.0	16.8	14.5	16.6	9.7
Bankers' Deposits with RBI	34.0	8.3	7.8	8.4	3.9	6.4	-9.6	28.5	25.3
Currency-GDP Ratio$	11.6	11.6	12.1	8.7	10.7	11.3	12.2	14.4	13.7
Narrow Money (M1)	**8.5**	**11.3**	**13.5**	**-3.9**	**21.8**	**13.6**	**11.2**	**16.2**	**10.5**
Broad Money (M3)	**13.4**	**10.9**	**10.1**	**6.9**	**9.2**	**10.5**	**8.9**	**12.2**	**8.7**
Currency-Deposit Ratio	15.1	15.2	16.0	11.0	14.4	15.4	16.3	17.2	17.5
Money Multiplier (Ratio)$$	5.5	5.5	5.3	6.7	5.8	5.6	5.5	5.2	5.2
GDP-M3 Ratio$	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.1	1.1
Scheduled Commercial Banks									
Aggregate Deposits	14.1	10.7	9.3	11.3	6.2	10.0	7.9	11.4	8.9
Bank Credit	13.9	9.0	10.9	4.5	10.0	13.3	6.1	5.6	9.6
Non-food Credit	14.2	9.3	10.9	5.2	10.2	13.4	6.1	5.5	9.7
Credit-Deposit Ratio	77.8	76.6	77.7	72.9	75.5	77.7	76.4	72.4	72.2
Credit-GDP Ratio$	53.4	52.4	52.6	50.9	50.5	51.7	51.7	55.3	52.1

\# : Base for Consumer Price Index (All India) is 2012=100.
… : CPI Rural for Housing is not compiled.
* : Base for CPI-IW is 2001=100 till August 2020 and 2016=100 from September 2020 onwards.
^ : March 31, 2017, over April 1, 2016, barring RM and its components.
^^ : Data pertain to March 25, 2022, for column 10.
$: GDP figures used in this table are on 2011-12 base, which are the latest available estimates. GDP refers to GDP at Current Market Prices.
$$: Not expressed in per cent.

Note: 1. Data refers to y-o-y change in per cent unless specified otherwise.
2. Ratios not expressed in per cent.

Source: RBI, NSO, Labour Bureau and Ministry of Commerce and Industry.

APPENDIX TABLE 5: CAPITAL MARKET - PRIMARY AND SECONDARY

(Amount in ₹ crore)

Item	2020-21		2021-22 (P)	
	Number	Amount	Number	Amount
1	2	3	4	5
I. PRIMARY MARKET				
A. Public and Rights Issues				
1. Private Sector (a+b)	**90**	**1,07,867.9**	**192**	**1,50,483.6**
a) Financial	26	31,395.9	36	24,477.4
b) Non-Financial	64	76,472.0	156	1,26,006.3
2. Public Sector (a+b+c)	**5**	**12,485.2**	**…**	**…**
a) Public Sector Undertakings	2	1,262.9	…	…
b) Government Companies	…	…	…	…
c) Banks/Financial Institutions	3	11,222.3	…	…
3. Total (1+2, i+ii, a+b)	**95**	**1,20,353.1**	**192**	**1,50,483.6**
Instrument Type				
(i) Equity	78	1,10,118.3	164	1,38,894.2
(ii) Debt	17	10,234.8	28	11,589.4
Issuer Type				
(a) IPOs	55	31,029.7	120	1,12,552.5
(b) Listed	40	89,323.4	72	37,931.2
B. Euro Issues (ADRs and GDRs)	**…**	**…**	**…**	**…**
C. Private Placement				
1. Private Sector (a+b)	**1,778**	**4,39,420.8**	**1,323**	**4,09,475.1**
a) Financial	1,481	2,82,705.3	1,055	3,01,948.8
b) Non-Financial	297	1,56,715.5	268	1,07,526.3
2. Public Sector (a+b)	**264**	**3,91,768.9**	**158**	**2,17,723.1**
a) Financial	174	2,61,055.9	110	1,63,336.2
b) Non-Financial	90	1,30,713.0	48	54,386.9
3. Total (1+2, i+ii)	**2,042**	**8,31,189.7**	**1,481**	**6,27,198.2**
(i) Equity	30	74,738.4	29	31,438.5
(ii) Debt	2,012	7,56,451.2	1,452	5,95,759.8
D. Qualified Institutional Placement	**31**	**82,423.6**	**29**	**31,438.5**
E. Mutual Funds Mobilisation (Net)#		**2,14,743.0**		**2,46,729.6**
1. Private Sector		1,42,377.9		1,48,286.9
2. Public Sector		72,365.1		98,442.7
II. SECONDARY MARKET				
BSE				
Sensex: End-Period	49,509.2		58,568.5	
Period Average	40,826.4		55,774.6	
Price Earnings Ratio@	34.4		25.8	
Market Capitalisation to GDP ratio (%)	103.2		111.7	
Turnover Cash Segment		10,45,089.5		13,38,225.3
Turnover Equity Derivatives Segment		3,50,60,169.0		6,60,78,327.8
NSE				
Nifty 50: End-Period	14,690.7		17,464.8	
Period Average	12,016.9		16,662.7	
Price Earnings Ratio@	33.2		22.9	
Market Capitalisation to GDP ratio (%)	102.5		110.7	
Turnover Cash Segment		1,53,97,908.2		1,65,66,257.4
Turnover Equity Derivatives Segment		64,36,18,108.1		1,69,52,33,134.5

…: Nil. P: Provisional (for 2021-22). #: Net of redemptions. @: As at end of the period.

Note: Figures in the columns might not add up to the total due to rounding of numbers.

Source: SEBI, NSE, BSE, various merchant bankers and RBI staff calculations.

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	49.5
2018-19	0.4	2.4	-0.7	3.4	48.5	49.6
2019-20	1.6	3.3	0.3	4.7	51.6	52.8
2020-21	5.7	7.3	3.9	9.2	61.7	62.8
2021-22 (RE)#	3.3	4.6	1.2	6.7	58.1	58.9
2022-23 (BE)	2.8	3.8	0.2	6.4	59.5	60.2
			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	0.8	0.1	-1.6	2.4	25.3	25.3
2019-20	0.9	0.6	-1.1	2.6	26.7	26.7
2020-21 (PA)	2.4	1.7	0.0	4.2	31.1	31.1
2021-22 (BE)	1.6	0.5	-1.4	3.5	29.4	29.4
2022-23 (BE)	…	…	…	…	…	…

... : Not Available. RE: Revised Estimates. BE: Budget Estimates. PA: Provisional Accounts.

@ : Includes external liabilities of the centre calculated at historical exchange rates.

$: Includes external liabilities of the centre calculated at current exchange rates.

: Going by the principle of using latest GDP data for any year, GDP used for 2021-22 (RE) is the latest available Second Advance 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.

* : Data for 2020-21 are provisional account (PA) figures of 26 States available with Comptroller and Auditor General; and BE for the remaining 5 states/UTs. Primary revenue deficit and outstanding liabilities of states in 2020-21 as per the revised estimates.

Note: 1. Negative sign (-) indicates surplus in deficit indicators.
2. GDP figures used in this table are on 2011-12 base, which are the latest available estimates.
3. Columns 6 and 7 are outstanding figures as at end-March of respective years.

Source: Budget documents of central and state governments, Status paper on government debt and Quarterly report on public debt management.

APPENDIX TABLE 7: COMBINED RECEIPTS AND DISBURSEMENTS OF THE CENTRAL AND STATE GOVERNMENTS

(Amount in ₹ thousand crore)

Item	2016-17	2017-18	2018-19	2019-20	2020-21 RE	2021-22 BE
1	2	3	4	5	6	7
1 Total Disbursements	4,266	4,516	5,041	5,411	6,524	7,161
1.1 Developmental	2,538	2,635	2,883	3,074	3,906	4,254
1.1.1 Revenue	1,878	2,029	2,224	2,447	3,259	3,242
1.1.2 Capital	501	519	597	588	636	923
1.1.3 Loans	158	87	62	40	11	89
1.2 Non-Developmental	1,673	1,812	2,078	2,253	2,527	2,811
1.2.1 Revenue	1,555	1,741	1,966	2,110	2,335	2,602
1.2.1.1 Interest Payments	724	815	895	956	1,082	1,244
1.2.2 Capital	116	69	111	141	189	177
1.2.3 Loans	2	2	1	2	2	31
1.3 Others	55	68	80	83	91	96
2 Total Receipts	4,288	4,528	5,023	5,734	6,490	7,039
2.1 Revenue Receipts	3,132	3,376	3,798	3,852	3,834	4,682
2.1.1 Tax Receipts	2,622	2,978	3,279	3,232	3,176	3,830
2.1.1.1 Taxes on commodities and services	1,652	1,854	2,030	2,013	2,101	2,515
2.1.1.2 Taxes on Income and Property	966	1,121	1,246	1,216	1,072	1,311
2.1.1.3 Taxes of Union Territories (Without Legislature)	4	3	3	3	3	4
2.1.2 Non-Tax Receipts	510	398	519	620	659	852
2.1.2.1 Interest Receipts	33	34	36	31	40	33
2.2 Non-debt Capital Receipts	69	142	140	110	55	201
2.2.1 Recovery of Loans & Advances	21	42	45	60	21	20
2.2.2 Disinvestment proceeds	48	100	96	51	34	182
3 Gross Fiscal Deficit [1 - (2.1 + 2.2)]	1,065	997	1,103	1,449	2,635	2,278
3A Sources of Financing: Institution-wise						
3A.1 Domestic Financing	1,047	989	1,097	1,441	2,580	2,276
3A.1.1 Net Bank Credit to Government	617	145	387	572	890	…
3A.1.1.1 Net RBI Credit to Government	196	-145	326	190	107	…
3A.1.2 Non-Bank Credit to Government	430	844	710	869	1,690	…
3A.2 External Financing	18	8	6	9	55	2
3B Sources of Financing: Instrument-wise						
3B.1 Domestic Financing	1,047	989	1,097	1,441	2,580	2,276
3B.1.1 Market Borrowings (net)	690	795	796	971	1,778	1,621
3B.1.2 Small Savings (net)	35	71	89	209	456	368
3B.1.3 State Provident Funds (net)	46	42	51	38	47	46
3B.1.4 Reserve Funds	-6	18	-18	10	-3	5
3B.1.5 Deposits and Advances	18	25	66	-14	29	29
3B.1.6 Cash Balances	-22	-12	17	-323	34	122
3B.1.7 Others	287	50	96	549	240	86
3B.2 External Financing	18	8	6	9	55	2
4 Total Disbursements as per cent of GDP	27.7	26.4	26.7	27.0	32.9	32.1
5 Total Receipts as per cent of GDP	27.9	26.5	26.6	28.6	32.8	31.6
6 Revenue Receipts as per cent of GDP	20.3	19.8	20.1	19.2	19.4	21.0
7 Tax Receipts as per cent of GDP	17.0	17.4	17.3	16.1	16.0	17.2
8 Gross Fiscal Deficit as per cent of GDP	6.9	5.8	5.8	7.2	13.3	10.2

…: Not Available. RE: Revised Estimates. BE: Budget Estimates.

Note :1. GDP data is based on 2011-12 base.

2. The revision of general government fiscal data will be undertaken in the month of October after all states present their final budget and they are tabulated, consolidated and disseminated by the RBI through its annual publication - 'State Finances: A Study of Budgets'.

Source : Budget Documents of the central and state governments.

APPENDIX TABLE 8: INDIA'S OVERALL BALANCE OF PAYMENTS

(US$ million)

	2017-18	2018-19	2019-20	2020-21	2021-22 (P)
1	2	3	4	5	6
A. CURRENT ACCOUNT					
1 Exports, f.o.b.	3,08,970	3,37,237	3,20,431	2,96,300	3,11,191
2 Imports, c.i.f.	4,69,006	5,17,519	4,77,937	3,98,452	4,46,835
3 Trade Balance	-1,60,036	-1,80,283	-1,57,506	-1,02,152	-1,35,644
4 Invisibles, Net	1,11,319	1,23,026	1,32,850	1,26,065	1,09,077
a) 'Non-Factor' Services *of which :*	77,562	81,941	84,922	88,565	79,203
Software Services	72,186	77,654	84,643	89,741	80,274
b) Income	-28,681	-28,861	-27,281	-35,960	-29,441
c) Private Transfers	62,949	70,601	76,217	74,439	59,880
5 Current Account Balance	-48,717	-57,256	-24,656	23,912	-26,567
B. CAPITAL ACCOUNT					
1 Foreign Investment, Net (a+b)	52,401	30,094	44,417	80,092	24,947
a) Direct Investment	30,286	30,712	43,013	43,955	26,509
b) Portfolio Investment	22,115	-618	1,403	36,137	-1,562
2 External Assistance, Net	2,944	3,413	3,751	11,167	2,709
3 Commercial Borrowings, Net	-183	10,416	22,960	-134	4,863
4 Short Term Credit, Net	13,900	2,021	-1,026	-4,130	13,284
5 Banking Capital *of which :*	16,190	7,433	-5,315	-21,067	12,631
NRI Deposits, Net	9,676	10,387	8,627	7,364	3,075
6 Rupee Debt Service	-75	-31	-69	-64	-59
7 Other Capital, Net[&]	6,213	1,057	18,462	-2,143	30,935
8 Total Capital Account	91,390	54,403	83,180	63,721	89,309
C. Errors & Omissions	902	-486	974	-347	782
D. Overall Balance [A(5)+B(8)+C]	43,574	-3,339	59,498	87,286	63,524
E. Monetary Movements (F+G)	-43,574	3,339	-59,498	-87,286	-63,524
F. IMF, Net	0	0	0	0	0
G. Reserves and Monetary Gold (Increase -, Decrease +)	-43,574	3,339	-59,498	-87,286	-63,524
***of which:* SDR allocation**	0	0	0	0	-17,862
Memo: As a ratio to GDP					
1 Trade Balance	-6.0	-6.7	-5.6	-3.8	-5.9
2 Net Services	2.9	3.0	3.0	3.3	3.4
3 Net Income	-1.1	-1.1	-1.0	-1.3	-1.3
4 Current Account Balance	-1.8	-2.1	-0.9	0.9	-1.2
5 Capital Account, Net	3.4	2.0	2.9	2.4	3.9
6 Foreign Investment, Net	2.0	1.1	1.6	3.0	1.1

P: Data are provisional and pertain to April-December 2021.

& : 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$ billion)

Source/Industry	2017-18	2018-19	2019-20	2020-21	2021-22 (P)
1	2	3	4	5	6
Total FDI	**44.9**	**44.4**	**50.0**	**59.6**	**58.8**
Country-wise Inflows					
Singapore	12.2	16.2	14.7	17.4	15.9
US	2.1	3.1	4.1	13.8	10.5
Mauritius	15.9	8.1	8.2	5.6	9.4
Netherlands	2.8	3.9	6.5	2.8	4.6
Switzerland	0.5	0.3	0.2	0.2	4.3
Cayman Islands	1.2	1.0	3.7	2.8	3.8
UK	0.8	1.4	1.3	2.0	1.6
Japan	1.6	3.0	3.2	1.9	1.5
UAE	1.0	0.9	0.3	4.2	1.0
Germany	1.1	0.9	0.5	0.7	0.7
Canada	0.3	0.6	0.2	0.0	0.5
Luxembourg	0.3	0.3	0.3	0.3	0.5
Thailand	0.1	0.1	0.0	0.1	0.5
France	0.5	0.4	1.9	1.3	0.3
Denmark	0.0	0.1	0.0	0.1	0.3
Others	4.2	4.2	4.7	6.3	3.1
Sector-wise Inflows					
Manufacturing	9.0	9.6	9.6	9.3	16.3
Computer Services	3.4	3.7	5.1	23.8	9.0
Communication Services	9.1	6.5	7.8	2.9	6.4
Retail & Wholesale Trade	4.6	4.9	5.1	3.9	5.1
Financial Services	4.6	7.2	5.7	3.5	4.7
Education, Research & Development	0.4	0.9	0.8	1.3	3.6
Transport	2.5	1.2	2.4	7.9	3.3
Construction	2.8	2.3	2.0	1.8	3.2
Business services	3.3	2.8	3.8	1.8	2.5
Electricity and other energy Generation, Distribution & Transmission	2.8	2.6	2.8	1.3	2.2
Miscellaneous Services	0.9	1.4	1.1	0.9	1.0
Restaurants and Hotels	0.5	0.8	2.7	0.3	0.7
Mining	0.1	0.3	0.3	0.2	0.4
Real Estate Activities	0.5	0.2	0.6	0.4	0.1
Trading	0.0	0.0	0.0	0.0	0.0
Others	0.3	0.1	0.2	0.2	0.4

P: Provisional.
Note: Includes FDI through approval, automatic and acquisition of existing shares routes.
Source: RBI.

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