Contents

		Page No.
Foreword		
List of Sel	ect Abbreviations	i-iv
Overview		1
Chapter I	: Macrofinancial Risks	3
	Global Backdrop	4
	Macrofinancial Developments and Outlook	4
	Other Global Macrofinancial Developments	9
	Capital Flows and Exchange Rate Volatility	12
	London Inter Bank Offered Rate (LIBOR) Transition	13
	Comodity Markets	14
	Private Cryptocurrency Risks	16
	Domestic Macrofinancial Risks	17
	Public Finance	18
	Government Securities and Fixed Income Derivatives Markets	20
	Corporate Sector	23
	External Sector Developments and Foreign Exchange Derivatives Markets	25
	Domestic Equity Market	27
	Mutual Funds	29
	Banking Stability Indicator	30
	Bank Credit	31
	Wholesale Bank Credit	32
	Credit flows to MSME Sector	34
	Banks' Deposit Profile	36
	Resolution Analysis	37
	Microfinance Segment	39
	Non-Banking Financial Companies (NBFCs)	40
	Consumer Credit	43
	Housing Market	46
	Systemic Risk Survey	46
Chapter II	: Financial Institutions: Soundness and Resilience	48
	Scheduled Commercial Banks (SCBs)	48
	Asset Quality	50
	Sectoral Asset Quality	51
	Credit Quality of Large Borrowers	53
	Capital Adequacy	54
	Earnings and Profitability	54
	Resilience – Macro Stress Tests	55
	Sensitivity Analysis	59
	Bottom-up Stress Tests: Derivatives Portfolio	64

	Page No.
Primary (Urban) Cooperative Banks	65
Stress Testing	67
NBFCs	67
Stress Test - Credit Risk	69
Stress Test - Liquidity Risk	70
Interconnectedness	71
Financial System Network	71
Contagion Analysis	77
Chapter III: Regulatory Initiatives in the Financial Sector	80
Global Regulatory Developments and Assessments	80
Lessons from the Pandemic	80
Systemic Resilience of Money Market Funds (MMFs)	81
Pandemic Measures: Financial Stability Implications	82
Other International Regulatory Developments	82
Domestic Regulatory Developments	84
Initiatives from Regulators/Authorities	84
Transfer of Loan Exposures	84
Securitisation of Standard Assets	84
Credit Risk Mitigation (CRM) for Derivative Transactions of Foreign Bank Branche	
Scale Based Regulation for NBFCs	85
Opening of Current Accounts by Banks	85
Retail Direct Scheme	86
Customer Protection	86
Integrated Ombudsman Scheme, 2021	86
Default Fund (DF) of CCIL Fintech	86
Enforcement	87 87
Swing Pricing Framework for Mutual Fund Schemes	88
Other Developments	89
Deposit Insurance	89
Corporate Insolvency Resolution Process	90
Mutual Funds	91
Commodity Derivatives	91
Corporate Bond Market	92
Credit Ratings	93
Insurance	94
Pension Funds	94
Annex 1: Systemic Risk Survey	96
Annex 2: Methodologies	101
Annex 3: Important Regulatory Measures	116

		Page No.
LIST	OF BOXES	
1.1	An Assessment of the Uniform Price Auction Method	20
1.2	Term Structure of Volatility	22
2.1	Systemic Risk in the Banking Sector	58
3.1	Fintech Regulation in India – The Evolving Landscape	88
LIST	OF CHARTS	
1.1	Global Purchasing Managers' Indices (PMI)	4
1.2	Goods Trade Barometer	5
1.3	Baltic Dry Index	5
1.4	Global Economic Surprise Index	6
1.5	Citi EM Asia Financial Conditions Index	8
1.6	Financial Conditions in Major Global Economies	8
1.7	Movement in AE and EME Currencies	8
1.8	2-year Yield in Major Advanced Economies	9
1.9	10-year Yield in Major Advanced Economies	9
1.10	G-7 Central Banks' share of Government Debt and Issuances	10
1.11	Smoothed 2-year and 10-year US Treasury and OIS Spread	10
1.12	Term Structure - USD Swaption 3-year Rate Volatility	10
1.13	Growth Projections for Select Liability Classes of EBA Banks	11
1.14	US & Euro Area Select Mutual Fund Assets	11
1.15	AE Domestic Non-Banks' Share of Government Debt and Issuances	11
1.16	Emerging Market Bond Flows and Portfolio Returns	12
1.17	Median Cross - Currency Basis swap: select EMEs	12
1.18	Portfolio Flows to Emerging Markets	13
1.19	Risk Perception of Investors	13
1.20	Brent Crude Spot and Futures – Price Trends	14
1.21	Daily Trading Volume for Brent Options at select Strike Prices	15
1.22	Bloomberg Commodity and Metal Indices	15
1.23	FAO Monthly Food Price Index	15
1.24	Investment in Commodity Linked Investment Funds	15
1.25	Repayment Obligations of Central Government – Dated Securities	18
1.26	Central Government Primary and Secondary Market Yields	19
1.27	Yield Curve Shifts between end-March 2021 and December 2021 (up to December 13, 2021)	19
1.28	G-Sec and OIS Turnover	20
1.29	Market Risk in Overnight G-Sec Holdings	21
1.30	Sale of Listed Non-financial Private Companies - Growth	23

		Page No.
1.31	Operating Profit Margin - Listed Non-financial Private Companies	23
1.32	Operating Profit Margin – Listed Private Manufacturing Companies by Borrower Size	24
1.33	Leverage, Fixed Assets and Cash Holdings of Listed Private Manufacturing Companies	24
1.34	India's Balance of Payments	25
1.35	Foreign Portfolio Investment	25
1.36	USD-INR and 3-month Historical and Implied Volatility	26
1.37	Currencies Against the US Dollar	26
1.38	Deliverable and Non-Deliverable Daily Forward Trade Turnover	27
1.39	Offshore Outstanding Forwards	27
1.40	MIFOR-OIS Spreads	27
1.41	INR Swaptions	27
1.42	Trend in Investments in the Equity Cash Segment	28
1.43	1-year Forward P/E Ratio over 10-year Averages	28
1.44	Retail Participation in Equity Market (Ownership by Value)	29
1.45	AUMs of Open-ended Debt and Equity Funds	29
1.46	MF's Investments in G-Sec /T-Bills/CBLO and Spread Products	29
1.47	Investor Profile of Debt Schemes	29
1.48	Investor Profile of Equity Schemes	30
1.49	Excess Return in Money Market Funds	30
1.50	Corporate Bond Holdings of Mutual Funds	30
1.51	3-Year AAA Non-Financial Non-PSU Corporate YTM	30
1.52	Banking Stability Map	31
1.53	Credit Growth - SCBs	31
1.54	Exposure Distribution of Non-PSU Non-Financial Obligors	33
1.55	Long Term Loan Ratings	33
1.56	ECLGS Guarantees	34
1.57	Bank Group-wise ECLGS Guarantee	35
1.58	Run-Off Profiles of Deposits	36
1.59	Deposit profiles of PVBs	37
1.60	SLR Maintenance by Bank Groups	37
1.61	Delay in Initiation of Insolvency for specific Creditor Cohorts	38
1.62	Growth in Microfinance Portfolio	39
1.63	Microfinance Segment - Impairment	40
1.64	Bank Credit to NBFCs / HFCs	41
1.65	CP Issuances of Private NBFCs	41
1.66	Inquiry Volumes by Product Category	43
1.67	Inquiry Volumes by Lender Category	43

		Page No.
1.68	Growth in Credit Active Consumers	43
1.69	Inquiry Volume by Risk Tier	44
1.70	Approval Rates by Lender Category (per cent)	45
1.71	Growth in Outstanding Balances Across Lender Category	45
1.72	House Sales, Launches and Unsold Inventory	46
1.73	Unsold Inventory and Inventory Overhang	46
2.1	Deposit and Credit Profile of SCBs	49
2.2	New Loans by SCBs by Sector and Loan Type	50
2.3	Select Asset Quality Indicators	51
2.4	Sectoral Asset Quality Indicators	52
2.5	Select Asset Quality Indicators of Large Borrowers	53
2.6	Capital Adequacy	54
2.7	Select Performance Indicators of SCBs	54
2.8	Macroeconomic Scenario Assumptions for H2:2021-22 and H1:2022-23	56
2.9	Projection of SCBs' GNPA Ratios	56
2.10	CRAR Projections	57
2.11	Projection of CET 1 Capital Ratio	57
2.12	Credit Risk - Shocks and Outcomes	59
2.13	Credit Concentration Risk: Individual Borrowers - Exposure	60
2.14	Credit Concentration Risk: Group Borrowers - Exposure	60
2.15	Credit Concentration Risk: individual Borrowers – Stressed Advances	61
2.16	Trading Book Portfolio: Bank-Group wise	61
2.17	Yield Curves and Shift in Yields Across Tenors since March 2021	62
2.18	HTM Portfolio - Composition	63
2.19	HTM Portfolio - Unrealised Gains as on September 30, 2021	63
2.20	Equity Price Risk	64
2.21	Liquidity - Risk Shocks and Outcomes	64
2.22	MTM of Total Derivatives Portfolio, Select Banks - September 2021	65
2.23	Impact of Shocks on Derivatives Portfolio of Select Banks	65
2.24	Credit Profile and Assets Quality Indicators of UCBs	66
2.25	Stress Test of UCBs	67
2.26	Sectoral Deployment of Credit	67
2.27	Share of Different NBFC Category in Gross Advances	68
2.28	Profile of P2P NBFCs	68
2.29	Profitability and Capital Adequacy	68
2.30	Sectoral GNPA of NBFCs	69
2 31	NRFCs' Source of Funds	60

		Page No.
2.32	Borrowings by NBFCs'	69
2.33	Credit Risk in NBFCs – System Level	70
2.34	Bilateral Exposures between Entities in the Financial System	71
2.35	Network Plot of the Financial System - September 2021	72
2.36	Net Receivable (+ve) / Payables (-ve) by Institutions	72
2.37	Inter-Bank Market	72
2.38	Different Bank Groups in the Inter-Bank Market - September 2021	73
2.39	Composition of fund Based Inter-Bank Market	73
2.40	Network Structure of the Indian Banking System (SCBs + SFBs + SUCBs) – September 2021	74
2.41	Connectivity Statistics of the Banking System (SCBs)	74
2.42	Gross Receivable of AMC-MFs from the Financial Systems	75
2.43	Gross Receivable of Insurance Companies from the Financial System	75
2.44	Gross Payables of AIFIs to the Financial System	76
2.45	Gross Payables of NBFCs to the Financial System	76
2.46	Gross Payables of HFCs to the Financial System	77
2.47	Contagion Impact of Macroeconomic Shocks (Solvency Contagion)	79
3.1	Analysis of Aggregate Liquidity Buffer Maintained by Three Global Central Counterparties	81
3.2	Category of Complaints in Banking Ombudsman Offices	86
3.3	Domestic and International Commodity Futures Indices	91
3.4	Movement in Select Sectoral Indices in Commodity Derivatives	91
3.5	Commodity Derivatives Turnover at Exchanges	92
3.6	Fund Raised through Primary Market	92
3.7	Issuance of CPs and NCDs	92
3.8	Rating-wise Issuance of CPs and Listed NCDs	93
3.9	Category- wise Issuers and Subscribers of Corporate Bonds	93
3.10	Listed Debt Issues by Rating Actions	93
3.11	Distribution of Rating Downgrades – Sector-wise	94
3.12	First Year Premium Growth – Life Insurance	94
3.13	Growth in Total Premium - Life Insurance	94
3.14	NPS and APY Subscribers – Sector-wise	94
3.15	NPS and APY AUM-Sector-wise	95

		Page No.
LIST (OF TABLES	
1.1	Growth Projection for 2021-2023	6
1.2	General Government Fiscal Balance, 2019-26: Overall Balance	9
1.3	Cross-border Banking Flows to Non-Bank Entities of EMDEs	12
1.4	Percentage DV01 Contributed by RFRs – Currency Wise	13
1.5	US Reported RFR Linked Interest Rate Derivatives	14
1.6	CPI Inflation in Select Advanced Economies	14
1.7	Fiscal Indicators – Central Government	18
1.8	Market Borrowings by the Centre and States	18
1.9	Incremental Holdings of Dated G-Secs and SDLs: H1:2021-22	19
1.10	Dated G-Secs and SDLs – Investor Profile	19
1.11	Bank Group - wise Incremental HTM Holdings, H1:2021-22	19
1.12	International Banking Flows to India	26
1.13	Valuation Matrices	28
1.14	Sectoral Share in Incremental Credit by SCBs	31
1.15	Growth in Wholesale Credit to PSUs	32
1.16	Aggregate Mobilisation of Funds	32
1.17	Growth in Wholesale Credit to Non-PSU Non-financial Companies	32
1.18	SMA Transition Matrix of Wholesale Portfolios - Non-PSU Non-financial Obligors December -19 to September-21	33
1.19	SMA Transition Matrix of Wholesale Portfolios - Non-PSU Non-financial Obligors June-21 to September-21	33
1.20	Bank Credit to MSME Sector	34
1.21	ECLGS Guarantee Disbursement	34
1.22	Bank Group-wise Restructuring of MSME portfolio	35
1.23	Bank Group-wise SMA Distribution of MSME Portfolio	35
1.24	Borrowers Transition Matrix (September2020 – September 2021)	36
1.25	Recovery Rates and Delay in Various Stages in a Select Sample of Cases Resolve between September 2019 and September 2021	38
1.26	One-Year Transition Rate in Wholesale Substandard and Doubtful Assets	38
1.27	NPA Composition of PSBs and PVBs Combined	39
1.28	Asset Growth of Select NBFCs – A Segmental View	40
1.29	Gross CP Issuances by Select NBFCs	42
1.30	Weighted Average Maturity of Issuances of Select NBFCs	42
1.31	Share of CP Outstanding in Aggregate Liability of Select NBFCs	42
1.32	Intra-month CP Related Outflows	42
1.33	Consumer Distribution by Risk Tier and Lender Category	44
1.34	PSB Origination by Risk Tier	44

Contents

		Page No.
1.35	Delinquency Levels in Aggregate Consumer Credit Across all Product Category	44
1.36	Score Migration for Risk Categories	45
2.1	Decline in System Level CRAR	61
2.2	Tenor-wise PV01 Distribution of AFS Portfolio	62
2.3	OOI - Profit/(loss) on Securities Trading	62
2.4	Tenor-wise PV01 Distribution of HFT Portfolio	63
2.5	Interest Rate Risk – Bank-groups - Shocks and Impacts	63
2.6	Liquidity Risk in NBFCs	70
2.7	Contagion Losses due to Bank Failure – September 2021	78
2.8	Contagion Losses due to NBFC Failure – September 2021	78
2.9	Contagion Losses due to HFC Failure – September 2021	78
3.1	SITG Ratios for Selected CCPs	87
3.2	Claims Settled and Recovery of Claims	89
3.3	Deposit Insurance Premium	89
3.4	Deposit Insurance Fund (DIF)	89
3.5	Corporate Insolvency Resolution Process	90
3.6	Outcome of CIRPs, Initiated Stakeholder-wise, as on September 30, 2021	90
3.7	Growth in SIPs (FY: 2021:22)	91
3.8	Segment-Wise Aggregate Turnover (Future + Options)	92