Contents

		Page No.
Foreword		
List of Select	Abbreviations	i-iii
Overview		1
Chapter I:	Macro-Financial Risks	
	Global Backdrop	3
	Domestic macro-financial developments	11
Chapter II:	Financial Institutions: Soundness and Resilience	
	Scheduled commercial banks	17
	Performance	17
	Risks	23
	Resilience – Stress tests	24
	Scheduled urban co-operative banks	34
	Performance	34
	Resilience – Stress tests	34
	Non-banking financial companies	35
	Recent developments	35
	Performance	37
	Resilience – Stress tests	37
	Consumer Credit and developments in Non-banking space -	
	A thematic exploration	38
	Network of the financial system	48
Chapter III:	Financial Sector: Regulation and Developments	
	International developments	59
	Domestic developments	65
Annex 1: Sy	stemic Risk Survey	81
Annex 2: Mo	ethodologies	85

		Page No.
LISTS	OF BOXES	
1.1	Oil prices – Future(s) gazing	10
2.1	Pledging of shares by promoters of listed companies	47
3.1	Risk society – The paradigm of risk?	60
3.2	Asset reconstruction companies - A review	71
LIST	OF CHARTS	
1.1	World economic growth rate	3
1.2	JP Morgan global PMI	4
1.3	OECD composite leading indicators	4
1.4	Bloomberg financial condition index	4
1.5	Equity forward price earnings ratio – MSCI US, EU and the Asia Pacific	5
1.6	MSCI US, EU and Asia Pacific earnings per share (EPS) estimates	5
1.7	US and EU 3-year BBB spreads	5
1.8	EURUSD and USDJPY 3-month implied volatility of ATM options	5
1.9	Monthly changes in global merchandise trade volume and value (%, y-o-y)	6
1.10	Monthly changes in emerging economies' merchandise import and export volumes (%, y-o-y)	6
1.11	Bloomberg commodity indices	6
1.12	Daily trading volume for September 2019 Brent options	7
1.13	US high yield market and CBOE VIX	7
1.14	US non-financial corporate outstanding liabilities profile	7
1.15	Speculative-grade default rate (%)	8
1.16	USD credit to non-bank non-US resident borrowers	8
1.17	Growth rate (instrument-wise) in USD denominated credit to EMs	8
1.18	Roll over profile of corporate debt securities	8
1.19	Emerging markets' local currency bond returns	9
1.20	EM currency performance <i>vis-à-vis</i> the US dollar index	9
1.21	Growth in GDP and select components	12
1.22	Stalled projects and new investments	12
1.23	Central and state governments' net market borrowings (₹ billion)	12
1.24	SLR holdings of public sector banks (₹ trillion)	13

		Page No.
1.25	Government of India's net market borrowings and OMOs (₹ billion)	13
1.26	World trade and India's exports	13
1.27	Net capital flows and current account deficit	13
1.28	FPI flows	14
1.29	FPI flows - emerging markets	14
1.30	Relative valuation of Indian equities	14
1.31	Revision in earnings estimates – MSCI Asia Pacific versus BSE Sensex	15
1.32	VIX and foreign exchange option volatility	15
1.33	Developments in the housing market	15
1.34	House sales-to-unsold inventory ratio and the launches-to-sales ratio	15
1.35	House price-to-income ratio	16
2.1	Select performance indicators	18
2.2	Select asset quality indicators	19
2.3	Sectoral asset quality indicators	21
2.4	Select asset quality indicators of large borrowers	22
2.5	Banking stability map	23
2.6	Macroeconomic scenarios' assumptions	24
2.7	Projection of SCBs' GNPA ratios	24
2.8	CRAR projections	25
2.9	Projection of CET 1 capital ratio	26
2.10	Credit risk - Shocks and impacts	27
2.11	CRAR-wise distribution of banks	27
2.12	Range of shifts in CRAR	27
2.13	Credit concentration risk: Individual borrowers – Stressed advances	28
2.14	Credit concentration risk: Individual borrowers – Exposure	28
2.15	Trading book portfolio: bank-group wise	30
2.16	HTM portfolio: bank-group wise composition	31
2.17	Equity price risk	31
2.18	Liquidity risk – Shocks and impacts on liquid stocks	32
2.19	Bottom-up stress tests – Credit and market risks – Impact on CRAR	32
2.20	Bottom-up stress tests – Liquidity risk	33

	1	Page No.
2.21	MTM of total derivatives portfolio – Select banks – March 2019	33
2.22	Stress tests – Impact of shocks on derivatives portfolio of select banks – (change in net MTM o application of a shock)	n 34
2.23	Growth rates in assets and liabilities of NBFCs	35
2.24	Major components of sources of fund of NBFCs	36
2.25	Commercial paper issuance by categories	36
2.26	Category wise 3-month CP spreads over 91-day T-Bill	36
2.27	Share by subscribers (% to total CP)	36
2.28	Asset profiles of NBFC-AFCs	41
2.29	Asset profiles of NBFC-LCs	41
2.30	NBFC funding access to various markets	42
2.31	HFCs' access to debt markets	43
2.32	HFCs' access to bank credit lines	43
2.33	Top 5 HFC/NBFCs with greatest potential to cause contagion losses to the banking system – Grouped by quarter	44
2.34	Corporate debt Investments – Relative rating profile	45
2.35	Corporate debt issue concentration (as a proportion of total corporate debt investment) – Select Open ended debt schemes	46
2.36	Corporate debt issue concentration (as a proportion of total corporate debt investment) – Fixed maturity plans	46
2.37	Bilateral exposures	48
2.38	Network plot of the financial system – March 2019	49
2.39	Net receivables (+ve) / payables (-ve) by the institutions	49
2.40	The inter-bank market	50
2.41	Share of different bank groups in the inter-bank market	50
2.42	Composition of the fund based inter-bank market	51
2.43	Network structure of the Indian banking system (SCBs +SUCBs) – March 2019	51
2.44	Connectivity statistics of the banking system (SCBs)	52
2.45	Gross receivables of asset management companies	52
2.46	Gross receivables of insurance companies	53
2.47	Gross payables of NBFCs	53
2.48	Gross payables by type of NBFCs	54

		Page No.
2.49	Gross payables of HFCs	54
2.50	CP and CD markets	55
2.51	Size of the CP and CD markets	55
2.52	A representative contagion plot – Impact of a bank's failure	56
2.53	Contagion impact after macroeconomic shocks (solvency contagion)	58
3.1	Impact on CET1 ratio without application of transitional arrangements	62
3.2	Increase in provisions (simple average) – First-time applications – Mainly IRB banks	62
3.3	Increase in provisions (simple average) – First-time applications – Mainly SA banks	62
3.4	Frauds reported in the banking sector (amount involved $>$ = \ge 0.1 million)	67
3.5	Vintage of frauds reported in 2018-19 (amount involved $>$ ₹0.1 million)	67
3.6	Relative share of PSBs in overall fraud amounts reported	68
3.7	Advance related frauds reported in 2018-19	68
3.8	Trends in resource mobilization by mutual funds and AUM	73
3.9	Holdings in mutual funds' AUM	73
3.10	Growth in the number of SIPs	73
3.11	Category wise issuers and subscribers of corporate bonds (public and private)	74
3.12	Category wise issuers and subscribers	74
3.13	Ratings migration	75
3.14	Capital mobilisation in primary markets (in ₹billion)	75
3.15	Movement of Indian and international commodity indices	75
LIST (OF TABLES	
2.1	Credit concentration risk : Group borrowers – Exposure	29
2.2	Growth in GNPAs due to sub-sector specific shocks - March 2019	29
2.3	Decline in the system level CRAR (bps) (in descending order)	29
2.4	Tenor-wise PV01 distribution of AFS portfolio (in per cent)	30
2.5	Tenor-wise PV01 distribution of HFT portfolio (in per cent)	30
2.6	Interest rate risk – Bank groups – shocks and impacts	31
2.7	Aggregated balance sheet of the NBFC sector: y-o-y growth	37
2.8	Select ratios of the NBFC sector	37
2.9	Select ratios of the NBFC sector	37

		Page No.
2.10	Relative Share in Auto-Loans	38
2.11	Relative Share in Home-Loans	38
2.12	Relative Share in Loans Against Properties	38
2.13	Relative Share in Personal Loans	38
2.14	Relative delinquency levels in Auto-Loans	39
2.15	Relative delinquency levels in Home-Loans	39
2.16	Relative delinquency levels in Loans Against Properties	39
2.17	Relative delinquency levels in Personal Loans	39
2.18	Relative asset share of firms with high delinquency levels in Auto-Loans	39
2.19	Relative asset share of firms with high delinquency levels in Home-Loans	40
2.20	Relative asset share of firms with high delinquency levels in Loans against properties	40
2.21	Relative asset share of firms with high delinquency levels in Personal Loans	40
2.22	Liability structures of major HFCs	43
2.23	Instrument distribution of select OEDs and FMPs	45
2.24	Top 5 banks with maximum contagion impact - March 2019	56
2.25	Top 5 HFCs with maximum contagion impact - March 2019	57
2.26	Top 5 NBFCs with maximum contagion impact - March 2019	57
3.1	Assets more than 30 days past due classified in stage 1	63
3.2	Assets more than 90 days past due not classified in stage 3	63
3.3	The corporate insolvency resolution process Number of corporate debtors	69
3.4	Initiation of the corporate insolvency resolution process	70
3.5	No. of CIRPs ending with orders for liquidation	70
3.6	Value of CIRPs ending with orders for resolution	70
3.7	Status of 6 large accounts initiated by the Reserve Bank	70
3.8	Segment wise turnover in commodity derivatives	76
3.9	Subscriber growth in pension funds	77
3.10	Assets under management	77
3.11	Important regulatory initiatives (November 2018 - June 2019)	78