Report on Trend and Progress of Banking in India for the year ended
June 30, 2017 submitted to the Central Government in terms of
Section 36(2) of the Banking Regulation Act, 1949

REPORT ON TREND AND PROGRESS OF BANKING IN INDIA 2016-17

RESERVE BANK OF INDIA

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गवर्नर
Governor

LETTER OF TRANSMITTAL

DEPR.BRD. 2101/13.01.01/2017-18

December 21, 2017
Agrahayana 30, 1939 (Saka)

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

Dear Sir,

In pursuance of the provisions of Section 36(2) of the Banking Regulation Act, 1949, I have pleasure in transmitting herewith two copies of the Report on Trend and Progress of Banking in India for the year ended June 30, 2017.

Sincerely,

Urjit Patel

Urjit R. Patel

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List of Select Abbreviations

AA	Account Aggregator
AACS	As Applicable to Co-operative Societies
ADR	American Depository Receipt
AE	Advanced Economy
AEPS	Aadhaar-Enabled Payment System
AFC	Asset Finance Company
AIC	Akaike Information Criteria
AIFI	All India Financial Institution
ALM	Asset Liability Management
AMC	Asset Management Company
AML / CFT	Anti-Money Laundering/ Combating the Financing of Terrorism
ANBC	Adjusted Net Bank Credit
AQR	Asset Quality Review
ARC	Asset Reconstruction Company
ATM	Automated Teller Machine
BC	Business Correspondent
BCBS	Basel Committee on Banking Supervision
BCP	Business Continuity Planning
BCSBI	Banking Codes and Standards Board of India
BFS	Board for Financial Supervision
BHIM	Bharat Interface for Money
BIRD	Bankers' Institute of Rural Development
BIS	Bank for International Settlements
BO	Banking Ombudsman
BoE-CCS	Bank of England's Credit Condition Survey
BRICS	Brazil, Russia, India, China and South Africa
BSBDA	Basic Savings Bank Deposit Account
BSE	Bombay Stock Exchange
CAMELS	Capital Adequacy, Asset Quality, Management, Earnings, Liquidity, and Systems and Control
CAP	Corrective Action Plan
CAR	Capital to Assets Ratio
CARE	Credit Analysis and Research Limited
CASA	Current Account and Savings Account
CBR	Correspondent Banking Relationship
CBS	Core Banking Solution
CCB	Capital Conservation Buffer
CCC	Certified Credit Counsellor
CCCB	Counter-Cyclical Capital Buffer
CCP	Central Counterparty
CD	Certificate of Deposit
C-D Ratio	Credit to Deposit Ratio
CDIC	Canada Deposit Insurance Corporation
CDS	Credit Default Swap
CEPC	Consumer Education and Protection Cell
CET1	Common Equity Tier-1
CIC	Core Investment Company
CMB	Cash Management Bill
CMS	Complaint Management System
CoR	Certificate of Registration
CP	Commercial Paper
CPI	Consumer Price Index
CRAR	Capital to Risk-Weighted Assets Ratio

CRILC	Central Repository of Information on Large Credits
CRISIL	Credit Rating Information Services of India Limited
CRR	Cash Reserve Ratio
DCCB	District Central Co-operative Bank
DE	Designated Entity
DICGC	Deposit Insurance and Credit Guarantee Corporation
DNFBP	Designated Non-Financial Business and Profession
DRT	Debt Recovery Tribunal
DSR	Debt Service Ratio
DSTI	Debt-Service-to-Income
DTI	Debt-to-Income
EBPT	Earning Before Provisions and Taxes
ECL	Expected Credit Loss
ECS	Electronic Clearance Service
EMDE	Emerging Market and Developing Economy
EFD	Enforcement Department
EME	Emerging Market Economy
EoL	Exchange of Letter
ESDC	European Sovereign Debt Crisis
EURIBOR	Euro Interbank Offered Rate
EXIM Bank	Export Import Bank of India
FATF	Financial Action Task Force
FB	Foreign Bank
FC	Financial Conglomerate
FCCB	Foreign Currency Convertible Bond
FCNR(B)	Foreign Currency Non-Resident (Bank)
FI	Financial Institution
FII	Foreign Institutional Investor
FINCON	Financial Conglomerate Return
FIP	Financial Inclusion Plan
FMR	Fraud Monitoring Return
FOBAPROA	Fonda Bancario de Proteccion al Ahorro
FPI	Foreign Portfolio Investor
FPO	Follow-on Public Offer
FRDI	Financial Resolution and Deposit Insurance
FSB	Financial Stability Board
FSI	Financial Stability Institute
FSLRC	Financial Sector Legislative Reforms Commission
FSWM	Financially Sound and Well Managed
GCC	General Credit Card
GDP	Gross Domestic Product
GDR	Global Depository Receipt
GFC	Global Financial Crisis
GNPA	Gross Non-Performing Asset
G-secs	Government Securities
G-SIB	Global Systemically Important Bank
G-SII	Global Systemically Important Insurer
GST	Goods and Services Tax
HFC	Housing Finance Company
HKMA	Hong Kong Monetary Authority
HP	Hodrick-Prescott
HQ	Hannan-Quinn Information Criterion
HQLA	High Quality Liquid Assets
HRM	Human Resource Management
HTM	Held To Maturity

IAC	Internal Advisory Committee
IAIS	International Association of Insurance Supervisors
IBA	Indian Banks' Association
IBBI	Insolvency and Bankruptcy Board of India
IBC	Insolvency and Bankruptcy Code
IRB	Interest Rate Benchmark
IC	Investment Company
ICAAP	Internal Capital Adequacy Assessment Process
ICRR	Incremental Cash Reserve Ratio
ICT	Information and Communications Technology
IDFC	Infrastructure Development Finance Corporation
IDF-NBFC	Infrastructure Debt Fund-Non-Banking Financial Company
IFC	Infrastructure Finance Company
IFRS	International Financial Reporting Standards
IFSC	Indian Financial System Code
IMF	International Monetary Fund
IMPS	Immediate Payment Service
Ind AS	Indian Accounting Standards
INFE	International Network on Financial Education
INFOMERICS	Integrated Financial Omnibus Metrics Research of International Corporate Systems
InvIT	Infrastructure Investment Trust
IOSCO	International Organisation of Securities Commissions
IPDI	Innovative Perpetual Debt Instruments
IRACP	Income Recognition, Asset Classification and Provisioning
IRDA	Insurance Regulatory and Development Authority
IRF	Inter Regulatory Forum
IRISc	Integrated Risk and Impact Scoring (Model)
IRRBB	Interest Rate Risk in the Banking Book
ISS	Interest Subvention Scheme
IT	Information Technology
JLF	Joint Lenders' Forum
JLG	Joint Liability Group
JStCB	Jharkhand State Co-operative Bank
KA	Key Attribute
KAMCO	Korean Asset Management Company
KCC	Kisan Credit Card
KYC	Know Your Customer
LAB	Local Area Bank
LAF	Liquidity Adjustment Facility
LBS	Locational Banking Statistics
LC	Loan Company
LCR	Liquidity Coverage Ratio
LE	Large Exposures
LIBOR	London Inter-bank Offered Rate
LIC	Life Insurance Corporation of India
LOLR	Lender-of-Last-Resort
LR	Likelihood Ratio
LTD	Long-Term (Subordinated) Deposit
LTRCF	Long Term Rural Credit Fund
LTV	Loan-to-Value
MCLR	Marginal Cost of Funds based Lending Rate
MFI	Micro-Finance Institution
MGC	Mortgage Guarantee Company

MIS	Management Information System
MMF	Money Market Fund
MOSPI	Ministry of Statistics and Programme Implementation
MoU	Memorandum of Understanding
MPC	Monetary Policy Committee
MPR	Monetary Policy Report
MSC	Multi Service Centre
MSE	Micro and Small Enterprise
MSME	Micro, Small and Medium Enterprise
MSS	Market Stabilisation Scheme
NABARD	National Bank for Agriculture and Rural Development
NACH	National Automated Clearing House
NAFSCOB	National Federation of State Co-operative Banks Ltd.
NAMCABS	National Mission for Capacity Building of Bankers for Financing the MSME Sector
NAV	Net Asset Value
NBFC	Non-Banking Financial Company
NBFC-AA	Non-Banking Financial Company – Account Aggregator
NBFC-D	Non-Banking Financial Company – Deposit-taking
NBFC-IFC	Non-Banking Financial Company – Infrastructure Finance Company
NBFC-MFI	Non-Banking Financial Company – Micro Finance Institution
NBFC-ND	Non-Banking Financial Company – Non-Deposit taking
NBFC-ND-SI	Non-Deposit taking Systemically Important Non-Banking Financial Company
NBFC-P2P	Non-Banking Financial Company – Peer to Peer Lending Platform
NBFE	Non-Banking Financial Entity
NBFI	Non-Banking Financial Institution
NBNI G-SIFI	Non-Bank Non-Insurer Global Systemically Important Financial Institution
NCLAT	National Company Law Appellate Tribunal
NCLT	National Company Law Tribunal
NDS-OM	Negotiated Dealing System – Order Matching System
NDTL	Net Demand and Time Liabilities
NEDFi	North Eastern Development Finance Corporation Ltd.
NEFT	National Electronic Funds Transfer
NHB	National Housing Bank
NII	Net Interest Income
NIM	Net Interest Margin
NNPA	Net Non-Performing Asset
NOF	Net Owned Fund
NPA	Non-Performing Asset
NPCI	National Payments Corporation of India
NPL	Non-Performing Loan
NPS	National Pension System
NRA	National Risk Assessment
NRE	Non-Resident External Rupee
NRI	Non-Resident Indian
NRLM	National Rural Livelihoods Mission
NRNR	Non-Resident Non-Repatriable
NRO	Non-Resident Ordinary
NSCB	Non-Scheduled Co-operative Bank

NSE	National Stock Exchange
NSFR	Net Stable Funding Ratio
NSUCB	Non-Scheduled Urban Co-operative Bank
NULM	National Urban Livelihoods Mission
OBE	Off-Balance Sheet Exposure
OC	Overseeing Committee
OD	Overdraft
OECD	Organisation for Economic Co-operation and Development
OSFI	Office of the Superintendent of Financial Institutions
OTC	Over-the-Counter
OTP	One-Time Password
P2P	Peer-to-Peer
PACS	Primary Agricultural Credit Societies
PAT	Profit After Tax
PB	Payments Bank
PBT	Profit Before Tax
PCA	Prompt Corrective Action
PCARDB	Primary Co-operative Agriculture and Rural Development Bank
PCE	Partial Credit Enhancement
PCFC	Pre-Shipment Credit in Foreign Currency
PCR	Provision Coverage Ratio
PD	Primary Dealer
PDI	Perpetual Debt Instruments
PFRDA	Pension Fund Regulatory and Development Authority
PIF	Pro-active Intervention Framework
PLR	Prime Lending Rate
PMJDY	Pradhan Mantri Jan Dhan Yojana
PNCPS	Perpetual Non-Cumulative Preference Shares
PoS	Point of Sale
PP	Phillips-Perron
PPI	Pre-paid Payment Instrument
PR	Principal Regulator
PRA	Prudential Regulatory Authority
PSB	Public Sector Bank
PSL	Priority Sector Lending
PSLC	Priority Sector Lending Certificate
PVA	Prudent Valuation Adjustment
PVB	Private Sector Bank
QIP	Qualified Institutional Placement
QR	Quick Response
RBI	Reserve Bank of India
RC	Resolution Corporation
RCS	Registrar of Co-operative Societies
RE	Regulated Entities
ReBIT	Reserve Bank Information Technology Private Limited
REITs	Real Estate Investment Trust
RFR	Risk-Free Reference Rate
RHS	Right Hand Scale
RNBC	Residuary Non-Banking Company
RoA	Return on Asset
RoE	Return on Equity
RRB	Regional Rural Bank
RTGS	Real Time Gross Settlement
S4A	Scheme for Sustainable Structuring of Stressed Assets

SA-CCR	Standardised Approach for Measuring Counterparty Credit Risk
SARFAESI	Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest
SBN	Specified Bank Note
SC	Sub-committee
SC / RC	Securitisation Company/ Reconstruction Company
SCA	Statutory Central Auditor
SCARDB	State Co-operative Agriculture and Rural Development Bank
SCB	Scheduled Commercial Bank
SDR	Strategic Debt Restructuring
SEBI	Securities and Exchange Board of India
SFB	Small Finance Bank
SFC	State Financial Corporation
SGSY	Swarnajayanti Gram Swarojgar Yojana
SHG	Self-Help Group
SIB	Systemically Important Bank
SIDBI	Small Industries Development Bank of India
SLR	Statutory Liquidity Ratio
SMA	Special Mention Account
SME	Small and Medium Enterprise
SMERA	Small and Medium Enterprises Ratings Agency
SMF	Small and Marginal Farmer
SoC	Statement of Co-operation
SPARC	Supervisory Program for Assessment of Risk and Capital
SPD	Standalone Primary Dealer
SPV	Special Purpose Vehicle
SR	Security Receipt
StCB	State Co-operative Bank
STCCS	Short-Term Co-operative Credit Structure
ST-SAO	Short-Term (Seasonal Agricultural Operations)
SUCB	Scheduled Urban Co-operative Bank
TAICO Bank	Tamil Nadu Industrial Co-operative Bank Ltd.
T-Bills	Treasury Bills
TBTF	Too-Big-to-Fail
TIBOR	Tokyo Interbank Offered Rate
TLAC	Total Loss-Absorbing Capacity
TR	Trade Repository
TReDS	Trade Receivables Discounting System
UCB	Urban Co-operative Bank
UPI	Unified Payment Interface
VAR	Vector Auto Regression
VCF	Venture Capital Fund
WAC	Weighted Average Cost
WACR	Weighted Average Call Money Rate
WALR	Weighted Average Lending Rate
WAM	Weighted Average Maturity
WGRR	Working Group on Resolution Regimes
WLA	White Label ATM
WLTF	Wholesale and Long-Term Finance
XBRL	eXtensible Business Reporting Language
y-o-y	Year-on-Year

Chapter I

Perspectives on the Indian Banking Sector

Several challenges will likely impinge upon the banking sector in India as it grapples with impairment in asset quality and convergence with Basel III and international accounting standards concurrently. Going forward, addressing asset quality concerns and strengthening banks' balance sheets to reinvigorate credit growth remain key priorities, within the overall objective of promoting a competitive and efficient banking sector.

I. Introduction

I.1 After several false starts, global growth and trade have been gaining traction in 2017 so far, supported by accommodative monetary policy and conducive financial conditions. Despite commodity prices firming up, inflation has remained quiescent in both advanced and emerging economies. Global financial markets have been generally buoyant and the effects of geopolitical events, including announcements, have been muted or short-lived. With accommodative policies in advanced economies (AEs) supporting asset prices and spurring a search for returns, investor appetite for emerging market economies (EMEs) as an asset class has been stoked, propelling capital flows to them, *albeit* with some discrimination against economies with relatively weaker macro-fundamentals. Nonetheless, risks to the outlook are still tilted to the downside, with political and policy uncertainties posing threats to global financial stability. In this environment, banking regulators are preparing for the full implementation of Basel III prudential regulations and the adoption of the revised global accounting standards. In parallel, developments like FinTech and the growth of crypto currencies are presenting both opportunities and challenges.

I.2 Although among the fastest growing large economies of the world, the Indian economy has been undergoing some slowdown by its own historical record during 2017-18, partly reflecting the transitory effects of the implementation of the goods and services tax (GST) from July 2017. Macroeconomic stability remains entrenched though, with inflation remaining moderate, the current account deficit contained well within sustainable limits and the fiscal deficit on the path of consolidation.

I.3 Turning to the financial sector, impairment in the asset quality of the banking sector remains unconscionably high, necessitating sizeable provisioning and deleveraging, thereby constraining banks' capacity to lend. Consequently, profitability and capital positions of banks have faced some erosion, especially in the case of public sector banks (PSBs). In the process, businesses have increasingly switched to alternate and more cost-effective sources of funds to meet their financing needs, resulting in some disintermediation for banks.

I.4 During the first-half of 2017-18, however, a modest pick-up in bank credit has occurred alongside the improvement in transmission that was observed post-demonetisation. Growth in gross advances of scheduled commercial banks (SCBs) improved to 6.2 per cent at end-September 2017 from 5.0 per cent at end-June 2017 due to improved credit delivery by both PSBs as well as private sector banks (PVBs).

Stressed assets of SCBs have begun to stabilise *albeit* at an elevated level. The total stressed assets (gross non-performing assets *plus* restructured standard advances) as per cent of gross advances were placed at 12.6 per cent and 12.2 per cent during Q1 and Q2 of 2017-18, respectively. Among bank groups, stressed assets of PSBs hovered around 16 per cent, while stressed assets of PVBs remained below 5 per cent. The slippage ratio of SCBs recorded a decline over the first half of 2017-18. Notwithstanding the elevated level of delinquency, profitability indicators as reflected in the return on assets have been stable at around 0.4 per cent. Capital positions (*i.e.*, capital to risk-weighted assets ratio) improved to 13.9 per cent in Q2 of 2017-18, being much above the regulatory minimum (see chapter V for details).

I.5 On the other hand, balance sheets of non-banking financial companies (NBFCs) grew on the back of credit expansion mainly by loan companies, asset finance companies and investment companies. NBFCs' consolidated balance sheet expanded by 6.5 per cent on a y-o-y basis, in the first half of 2017-18 with strong credit growth financed through higher borrowings. As against bank credit growth of 6.2 per cent during the first half of 2017-18, NBFCs' credit growth was 14.9 per cent, about seven percentage points higher than in the previous year. This was driven by strong growth in credit to retail and services sectors. Asset quality of NBFCs (non-deposit taking systemically important), which had recorded deterioration in Q1:2017-18, witnessed some improvement in Q2, partly reflecting higher write-offs (see chapter VII for details).

I.6 Against this backdrop, the rest of this chapter lays out a perspective on some issues that are likely to shape the banking ecosystem in the period ahead and inform the policy agenda.

II. Emerging Issues and Policy Responses

I.7 Addressing asset quality concerns and strengthening banks' balance sheets to reinvigorate credit growth are clearly the highest priority. Improving accounting standards and nurturing competitive efficiency alongside niche competencies in the banking space are other elements of this drive. Strengthening and harmonising regulations across financial intermediaries and in adherence to global standards have been other focus areas. Concomitantly, promoting digitisation, managing technology-enabled financial innovations and dealing with cyber-security risks will entail strategic policy responses.

Resolution of Stressed Assets and Strengthening of Banks' Balance Sheets

I.8 The enactment of the Insolvency and Bankruptcy Code (IBC), 2016 and promulgation of the Banking Regulation (Amendment) Act, 2017 has significantly altered the financial landscape and imbued with optimism and resolve the concerted efforts that are underway for resolution of stress in balance sheets of banks and corporations in a time-bound and effective manner. The Reserve Bank's pre-emptive approach to recognition and resolution of incipient financial distress and the revised system of prompt corrective action (PCA) triggered in April 2017 are intended to instill confidence in the system that accumulation of excessive financial imbalances in the future will be prevented. The Government's in-principle approval in August 2017 for the consolidation of PSBs through an 'Alternative Mechanism' and the massive recapitalisation plan for PSBs announced in October 2017 as part of a comprehensive strategy to address banking sector challenges should make them strong and competitive as they gear up to meet the credit needs of a growing economy (see chapter IV for details).

I.9 The Reserve Bank has constituted a High-level Task Force on Public Credit Registry (PCR) (Chairman : Shri Yeshwant M. Deosthalee) for India to address information asymmetries that create opacity in credit markets, hindering efficient credit decisions, impeding effective risk-based supervision and excluding the financially disadvantaged. It will review the current availability of information on credit, the adequacy of existing information utilities and international best practices with the goal of developing a transparent, comprehensive and near real-time PCR for India. Besides improving the functioning of the credit market, the PCR is expected to foster financial inclusion, improve the ease of doing business and help control delinquencies in the banking system[1].

Developing Robust Accounting Standards (IFRS-converged Ind AS)

I.10 International Financial Reporting Standards (IFRS) draw upon the lessons gleaned from the global financial crisis and attempt to close gaps in accounting practices. In India, the need for uniformity in identification of non-performing assets (NPAs) at the system level has imparted urgency to the institution of the IFRS-converged Indian accounting standards (Ind AS). Banks are required to make provisions for expected credit loss (ECL) from the time a loan is originated, rather than waiting for 'trigger events' to signal imminent losses. Recognising and providing for actual and potential loan losses at an early stage in the credit cycle could potentially reduce procyclicality and foster financial stability[2]. As overall provisions are expected to increase significantly on initial application of Ind AS effective April 1, 2018, the Reserve Bank has introduced a transitional arrangement, consistent with the Basel Committee provisions, to give banks time to build their capital.

Promoting Differentiated Banking

I.11 With differentiated banks such as small finance banks (SFBs) and payments banks (PBs) commencing operations in 2016-17, the Reserve Bank has started exploring the scope of setting up wholesale and long-term finance (WLTF) banks focused primarily on lending to infrastructure sector and small, medium and corporate businesses. The Discussion Paper of April 2017 envisions the role for WLTF banks to include mobilising liquidity for banks and financial institutions through securitisation, acting as market makers, providing refinance to lending institutions, and operating in capital markets as aggregators. The envisioned heterogeneous banking structure will complement and compete with universal banking institutions and enhance financial inclusion while meeting the diverse credit needs of a growing economy.

Strengthening and Harmonising Banking Sector Regulation

I.12 The Reserve Bank has adopted Basel III norms for implementation in a phased manner. Apart from an improved capital framework and liquidity ratios like the liquidity coverage ratio (LCR) and the upcoming net stable funding ratio (NSFR), the Reserve Bank has also been aligning the regulatory and supervisory frameworks for NBFCs, all India financial institutions (AIFIs) and co-operative banks with that of commercial banks

[1] Acharya, Viral V. (2017), "A Case for Public Credit Registry in India", Theme Talk delivered at the 11th Statistics Day Conference held at the Reserve Bank of India, Central Office, Mumbai on July 4.

[2] Patel, Urjit R. (2017), "Financial Regulation and Economic Policies for Avoiding the Next Crisis", 32nd Annual G30 International Banking Seminar, Inter-American Development Bank, Washington, D.C., October 15.

with the objective of eschewing regulatory arbitrage.[3] Moreover, the Ind AS standards prescribed for commercial banks, have been made mandatory for both AIFIs and NBFCs from April 2018. A formal PCA framework has been introduced for NBFCs from March 30, 2017 and a comprehensive Information Technology (IT) framework from June 8, 2017. Multiple categories of NBFCs are being rationalised into fewer categories. Along with strengthening co-operative banks through consolidation, the tiers in the co-operative structure are also being reduced.

I.13 The medium-term goal is to move towards activity-based regulation rather than entity-based regulation. In this context, the evolution of regulatory practices in other jurisdictions *vis-à-vis* the Basel III guidelines in the post-global financial crisis period offers interesting insights that could inform the approaches being envisaged in India (Box I.1).

Box I.1: Proportionality in Banking Regulation – A Global Perspective

It is argued that the post-crisis global regulatory response has resulted in a robust but complex regulatory framework focused significantly on addressing systemic risks posed by financial institutions while being onerous on non-systemic entities. In turn, this has triggered an intense debate on the principle of 'proportionality' in banking regulation, *i.e.*, how best to tailor regulatory requirements to non-internationally active banks, especially smaller and less complex ones (Carvalho, *et. al.*, 2017).

The proportional regulation approach is not new. Under Basel II, the characterisation of market risk marked the beginning by offering both a standardised approach and an internal model-based approach. Pillar 2 under Basel II contains elements of proportionality as supervisors are allowed to take into account size, complexity, business model and risk profiles of individual banks in exercising their judgement. In this context, the Basel framework suggests that national jurisdictions can adopt domestic regulations that exceed the minimum.

Some countries have decided to apply the Basel standards on capital, liquidity and disclosure requirements to a wider set of banks, while some others have opted for the proportional use of regulations depending on the risks they pose to financial stability. Several jurisdictions have implemented specific regulatory standards for smaller and less complex banks. With the introduction of risk-based supervision, the principle of proportionality has played an important role in day-to-day bank supervision. A comparison of the proportionality approaches (beyond what is offered by the Basel framework) that have already been applied or are planned in six jurisdictions, namely, Brazil, the European Union (EU), Hong Kong SAR, Japan, Switzerland and the United States (US) brings out interesting facets (Table 1).

The US and Brazil apply Basel-based standards to large international banks, although the alternative prudential requirements applied to other banks are not necessarily less stringent. Banks are divided into specific categories based on size/international activity in Brazil, Japan and Switzerland and banks in the same category are subjected to the same set of regulations, while in the EU, the US and Hong Kong, rules corresponding to specific Basel standards are adjusted for banks meeting the set criteria. Exemptions from the Basel standards have often been applied to the liquidity framework, disclosure requirements, counter-party credit risks, large exposure framework and measurement of market risk. The principle-based regulations like Pillar 2 and interest rate risk in the banking book offer scope to further reduce the regulatory burden.

(Contd....)

3 In view of the inherent risk, there is higher minimum capital requirements of 15 per cent for the newly licensed SFBs, along with subjecting them to all prudential norms and regulations as applicable to universal commercial banks. PBs are also subjected to 15 per cent minimum capital requirements along with a minimum leverage ratio of 3 per cent as against 4.5 per cent for commercial banks at present. The prescribed minimum capital requirements for NBFCs also stands at 15.0 per cent. Further, all co-operative banks are also required to achieve and maintain a minimum CRAR of 9 per cent from March 31, 2017 as part of harmonisation of capital regulations. As part of the revised regulatory framework for the AIFIs, the Reserve Bank proposes to extend various elements of Basel III standards, after due consultations with stakeholders.

Table 1: Targeted Areas for Proportional Regulations – Select Jurisdictions

Basel Pillars/ Issues	Brazil	European Union	Hong Kong SAR	Japan	Switzer-land	United States
Pillar 1						
Liquidity regulation (LCR and NSFR)	Yes	Yes	Yes	Yes	Yes	Yes
Counterparty credit risk	Yes*	Yes*	Yes	No	Yes	Yes
Large exposures framework	Yes*	Yes	Yes*	No	Yes	Yes*
Credit risk	Yes*	No	Yes	No	Yes	Yes
Market risk	Yes*	Yes	Yes	Yes	Yes	Yes
Minimum capital ratios	No	No	No	Yes	No	No
Pillar 2						
Interest rate risk in the banking book	Yes*	Yes	No	No	Yes*	Yes
Capital planning and supervisory review**	Yes	Yes	No	Yes	Yes	Yes
Pillar 3						
Disclosure requirements	Yes*	Yes*	Yes	No	Yes	Yes

*: Expected; **: Including stress testing.

Source: Carvalho, Ana Paula Castro, S. Hohl, R. Raskopf and S. Ruhnau (2017), "Proportionality in Bank Regulation: A Cross-country Comparison", *FSI Insights* No.1, August, Financial Stability Institute, Bank for International Settlements (BIS).

The advocacy for proportionality in regulation, *inter alia*, includes (i) the costs imposed by regulation on regulatory agencies, regulated entities and customers; (ii) unintended consequences such as changes in business models of banks; (iii) the potential for disproportionate regulation to induce arbitrage within the financial system, with the danger of migration of activities towards less-regulated institutions and the capital market; (iv) the possibility of disproportionate regulation undermining competition by increasing barriers to entry for new entrants, especially small players; and (v) the potential for generating wider costs to the economy when regulations distort some of the basic functions of the financial system. Thus, proportionality is about balancing costs and benefits of regulation (European Banking Authority's Banking Stakeholder Group, 2015). Proportionality should entail rules which are simpler but not necessarily less stringent (Carvalho, *et. al.*, 2017).

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Promoting Digitisation and Managing Technology Enabled Financial Services

I.14 Recent initiatives[4] have opened up vast opportunities for both the incumbent financial institutions as well as for FinTech[5] to introduce large scale innovations in financial services that permeate to 'last mile' touchpoints and boost financial inclusion. The Government's Start-Up India programme, which aims to nurture innovations, and the India Stack platform, which offers a state-of-the-art technological framework to businesses, startups and developers aimed at presence-less, paperless and cashless service

[4] Pradhan Mantri Jan Dhan Yojana (PMJDY) for promoting financial inclusion, Aadhaar-enabled eKYC verification and linking with bank accounts to facilitate seamless financial transactions and development of robust payment infrastructure such as unified payments interface (UPI) for instant real-time digital payments.

[5] FinTech is defined as technology-enabled innovation in financial services that could result in new business models, applications, processes or products with an associated material effect on the provision of financial services (FSB, 2017).

delivery, provide a conducive environment for accelerated growth of FinTech[6], which would pave way for leveraging new technology in the provision of financial services.

I.15 From a global perspective, FinTech innovations are bringing in alternatives to fiat currency, challenging various forms of traditional financial intermediation and even the conventional monetary system. International standard setting bodies are increasingly focusing attention on understanding the opportunities and risks associated with the FinTech revolution (Box I.2).

Box I.2: The FinTech Revolution: Impetus, Opportunities and Risks

Globally, technology-enabled innovations in financial services (popularly known as FinTech) have been growing rapidly in the past few years, at both retail and wholesale levels. From an analytical perspective, FinTech activities are classified into five categories of financial services: (i) payments, clearing and settlement; (ii) deposits, lending and capital raising; (iii) insurance; (iv) investment management; and (v) market support.

The FinTech landscape has been evolving. Global investment in FinTech increased rapidly till 2015. Subsequently, despite moderation, it remains robust, registering US $8.2 billion in aggregate in Q3 2017 across 274 deals (*The Pulse of FinTech Q3 2017*, KPMG). Simultaneously, there is significant adoption of FinTech across major markets (Chart 1). FinTech activities are also growing rapidly, as reflected in the sharp increase in the market size of FinTech credit in certain jurisdictions, although they remain small relative to overall credit (Table 1).

Driving the FinTech revolution are forces, such as (i) consumer preference for convenience, speed, cost effectiveness and user-friendliness in financial interactions; (ii) technological advancement related to internet, big data, mobile telephony, and computing power; and (iii) changing financial regulations and supervisory requirements. The emergence of FinTech is also attributed to the high cost of financial intermediation by incumbents, despite significant improvements in information technology (IT), pointing towards inefficiency of the existing system. Estimates suggest that the unit cost of financial intermediation in the US has remained around 2 per cent for the past 130 years, with only a marginal decline since the crisis (Philippon, 2017). It is similarly high in other major countries like Germany, the UK and France (Bazot, 2013). This implies that the benefits of improvements in IT have not percolated to the end-users of financial services.

Although the size of FinTech is small relative to the global financial services sector at present (BCBS Consultative Document, BIS, August 2017), it has the potential to transform the way that financial services are delivered and designed as well as fundamentally alter the underlying

Chart 1: FinTech Adoption Rate*

*: FinTech users as a percentage of the digitally active population.
Source: EY FinTech Adoption Index, 2017, Ernst & Young.

Table 1: Size of FinTech Credit Market by Jurisdiction

(US$ Million)

	2013	2015
China	5,547	99,723
USA	3,757	34,324
UK	906	4,126
Japan	79	326
Australia	12	276
Germany	48	205
France	59	201
Canada	8	71
South Korea	1	38
Singapore	0	21
India	4	20

Source: Financial Stability Board (2017), Report on 'FinTech Credit: Market Structure, Business Models and Financial Stability Implications', May 22.

(Contd....)

[6] The PwC's FinTech Trends Report, 2017 notes that over 95 per cent of financial services incumbents in India seek to explore FinTech partnership.

processes of payments, clearing, and settlement (Brainard, 2016). Today, it has permeated across the entire financial services value chain and in the process has demonstrated the potential to directly compete with/challenge the traditional financial intermediation by banks. The true promise of FinTech springs from its adeptness at unbundling banking into its core functions of settling payments, performing maturity transformation, sharing risk and allocating capital (Carney, 2017). This potential is being driven by new entrants – payment service providers, aggregators and robo advisers, peer-to-peer lenders and innovative trading platforms.

As many FinTech innovations have not yet been tested through a full financial cycle, it is important to analyse both the potential benefits and risks from the perspective of financial stability. The potential benefits include (i) decentralisation and increased intermediation by non-financial entities; (ii) greater efficiency, transparency, competition and resilience of the financial system; and (iii) greater financial inclusion and economic growth, particularly in emerging market and developing economies (FSB, 2017). Potential risks include (i) micro-financial risks such as credit risk, leverage, liquidity risk, maturity mismatches and operational risks, especially cyber and legal risks; and (ii) macro-financial risks such as unsustainable credit growth, increased interconnectedness or correlation, procyclicality and contagion incentives for greater risk-taking by incumbent institutions.

The FSB (2017) has identified ten issues, three of which are considered as priorities for international cooperation, *viz*., managing operational risks from third-party service providers; mitigating cyber risks; and monitoring macro-financial risks. Moreover, it recommends that national authorities should pay attention to cross-border legal issues and regulatory arrangements, develop governance and disclosure frameworks for big data analytics, assess the regulatory perimeter and update it on a timely basis. Regulators should also encourage shared learning with a diverse set of private sector parties. Open lines of communication need to be developed across relevant authorities, build staff capacity in new areas of required expertise and study alternative configurations of digital currencies.

Although many of these issues are not new, they are important for promoting financial stability, fostering responsible innovation and developing a more inclusive financial system. As regards regulation, a consensus is emerging that it should aim at creating a conducive environment for FinTech to grow without compromising investor trust and confidence, efficiency and integrity of the market and the stability of the financial system.

A stocktake of regulatory approaches to FinTech by the FSB reveals that the most common model is the "regulatory sandbox", where new products or services can be tested in a (controlled) environment. This is used by Australia, Canada, Hong Kong, Korea, Netherlands, Singapore and the UK, while Mexico, Turkey and Saudi Arabia are considering this model, and Indonesia is in the process of establishing a regulatory sandbox. Other approaches include "innovation accelerators" and "innovation hubs" as well as other forms of interaction, in order to promote innovation and improve interactions with new FinTech firms.

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Carney, Mark (2017), "The Promise of FinTech – Something New Under the Sun?", Speech delivered at the Deutsche Bundesbank G20 Conference on "Digitising Finance, Financial Inclusion and Financial Literacy", Wiesbaden, Germany, January 25.

Financial Stability Board (2017), "Financial Stability Implications from FinTech: Supervisory and Regulatory Issues that Merit Authorities' Attention", June.

Philippon, Thomas (2017), "The FinTech Opportunity", *BIS Working Papers,* No. 655, August.

Bringing FinTech under the regulatory ambit should provide a level-playing field and encourage financial innovations. In this context, the Reserve Bank is working on framing an appropriate response to the regulatory challenges posed by developments in FinTech in India.

Managing Cyber Security Risks

I.16 The policy push towards digitisation of the financial system to realise the goal of a less-cash economy hinges crucially on the safety and security of financial transactions enabled by a robust cyber-security framework. In recognition, the Reserve Bank has been advising banks to improve their security preparedness on a continuous basis. As proposed in the Sixth Bi-monthly Monetary Policy Statement, 2016-17 on February 8, 2017, an inter-disciplinary Standing Committee has been constituted to, *inter alia,* review the threats inherent in the existing/emerging technology on an ongoing basis and suggest appropriate policy interventions to strengthen cyber security and resilience.

III. The Way Forward

I.17 In the fast changing financial landscape, banks will need to rework their business strategies, innovate on products tailored to customers' needs, and improve efficiency in the delivery of customer-centric financial services to regain their role as principal financial intermediaries. Given India's relatively low credit penetration[7], this may even be a desirable outcome so as to enhance credit flow and revive the investment cycle.

I.18 As regards stress in the banking system, banks can take advantage of the IBC to clean up their balance sheets and improve performance on a sustained basis to remain competitive. Instead of waiting for regulatory directions, banks can file for insolvency proceedings on their own[8] to realise promptly the best value for their assets. In conjunction, banks need to strengthen their due diligence, credit appraisal and post-sanction loan monitoring to minimise the risks of such occurrence in future. In this regard, the setting up of a transparent and comprehensive PCR will help address information asymmetry and enhance efficiency of the credit market[9]. Embedded in the jump in India's ranking in the World Bank's 'Doing Business Report 2018' (to 100 from 130 in the previous year) was an improvement in the 'ease of getting credit' (increase in score from 65 to 75).

I.19 With a comprehensive time-bound resolution mechanism in place under the IBC efforts are underway to broaden reforms. The Financial Resolution and Deposit Insurance Bill, 2017 introduced in the Lok Sabha on August 10, 2017 seeks to provide speedy and efficient resolution of distress for certain categories of financial service providers and recommends establishment of a Resolution Corporation (RC) for protection of consumers of specified service providers and of public funds. This is also expected to address the moral hazard problem associated with various forms of government guarantees.

I.20 In an increasingly interconnected financial system, banks and financial institutions can benefit each other by improving corporate governance. This is more in the nature of self-regulation with safeguards to ensure that principles and rules laid down by the regulators are followed conscientiously[10].

I.21 Banks have been preparing to fully comply with the new IFRS-converged Indian accounting standards beginning April 1, 2018 by building adequate capital to meet the increase in provisioning

[7] Bank credit to non-financial corporations in India stood at around 48 per cent of GDP in Q1 2017 as against over 93 per cent for the G-20 (Bank for International Settlements (BIS)).

[8] Acharya, Viral V. (2017), "The Unfinished Agenda: Restoring Public Sector Bank Health in India", Speech delivered at the 8th R. K. Talwar Memorial Lecture, September.

[9] Acharya, Viral V. (2017), *op. cit*.

[10] Patel, Urjit R. (2017), *op. cit*.

requirements on account of shift to the ECL reporting system.

I.22 Bank customers/borrowers are likely to demand more transparency in fees levied and interest rates charged on various financial services/products. In this context, the recommendations of the Reserve Bank's "Internal Study Group to Review the Working of the Marginal Cost of Funds Based Lending Rate (MCLR) System" to shift from internal benchmarks like the base rate or MCLR-based loan rate setting to an external benchmark warrant consideration. The Group also recommends that the spread over the external benchmark should remain fixed all through the term of the loan, the reset period on all floating rate loans should be reduced from once in a year to once in a quarter, and banks should be encouraged to accept bulk deposits at floating rates directly linked to the external benchmark.

I.23 Banks face sustained competitive pressure to increase efficiency and productivity by leveraging on technological developments and product innovations. In this regard, banking with the unbanked may probably give banks an edge over other financial intermediaries by leveraging on their branch networks. Customers at the bottom of the pyramid may hold the key to big business opportunities. FinTech developments globally are targeting *hitherto* excluded sections of the population and/or small businesses[11].

I.24 Given the potential of the micro, small and medium enterprises (MSMEs) sector in India (around 51 million units contribute 8 per cent of GDP, 45 per cent of manufacturing output, 40 per cent of exports, and employment for 120 million persons), FinTech lending companies and market-based lending could provide an alternative source of finance and fill the large funding gap faced by small businesses[12], a phenomenon observed across EMEs[13]. The availability of large digital databases on potential borrowers, mobile density, e-commerce and usage of smart-phone based services is likely to reduce the cost of assessing creditworthiness of SMEs. Banks may also adopt financial technologies for making credit decisions and/or even enter into strategic collaborations with agile FinTech firms.

1.25 A Trade Receivables Discounting System (TReDS) has been introduced as an institutional mechanism for facilitating the financing of trade receivables of MSMEs. All the three entities that had received in-principle approval were issued final Certificates of Authorisation and have commenced operations during the year.

I.26 In a digital environment, it becomes incumbent on banks to have an effective cyber-security policy as part of their overall risk management framework. Cyber-attacks entail a reputational risk for banks, as they undermine customer confidence. The Reserve Bank has been issuing guidelines from time to time to enhance cyber-security awareness and to collaborate with the industry in upgrading cyber-security resilience on an ongoing basis.

I.27 To sum up, the Indian economy is undergoing structural transformation. At this

[11] According to PwC's FinTech Trends Report, 2017, there are roughly 1500 FinTech startups, big and small, operating in India, and almost half were set up in the past two years.

[12] A Report by Deloitte "FinTech in India: Ready for Breakout" released in July 2017 estimates the credit gap in India's MSE segment (with annual revenue up to ₹30 million) at ₹8.33 trillion.

[13] According to the World Bank (SME Finance Brief, September 1, 2015), the total credit gap for both formal and informal SMEs in EMEs is as high as US$ 2.6 trillion.

juncture, reaping the full benefits of demographic, technological and financial developments appear critical for sustaining high and inclusive growth. This requires strategic coordination between conventional banks and new players like small finance banks, payments banks and also FinTech entities for providing financial services/products in an efficient and cost-effective manner. Supportive prudential regulations aimed at promoting financial innovations without compromising safety of financial transactions, integrity of financial markets and stability of the financial system are imperative to facilitate this silent revolution.

Chapter II

Global Banking Developments

Global reforms have improved resilience of banking systems around the world even as concerns pertaining to bank profitability and asset quality remain. Bank balance sheet clean-up is still underway in some jurisdictions, while in others, banks are moving towards supporting growth. Performance of the 100 largest global banks was broadly the same in 2016 relative to the previous year. Considerable progress has been made on the global regulatory reform agenda, though it is still far from complete.

I. Introduction

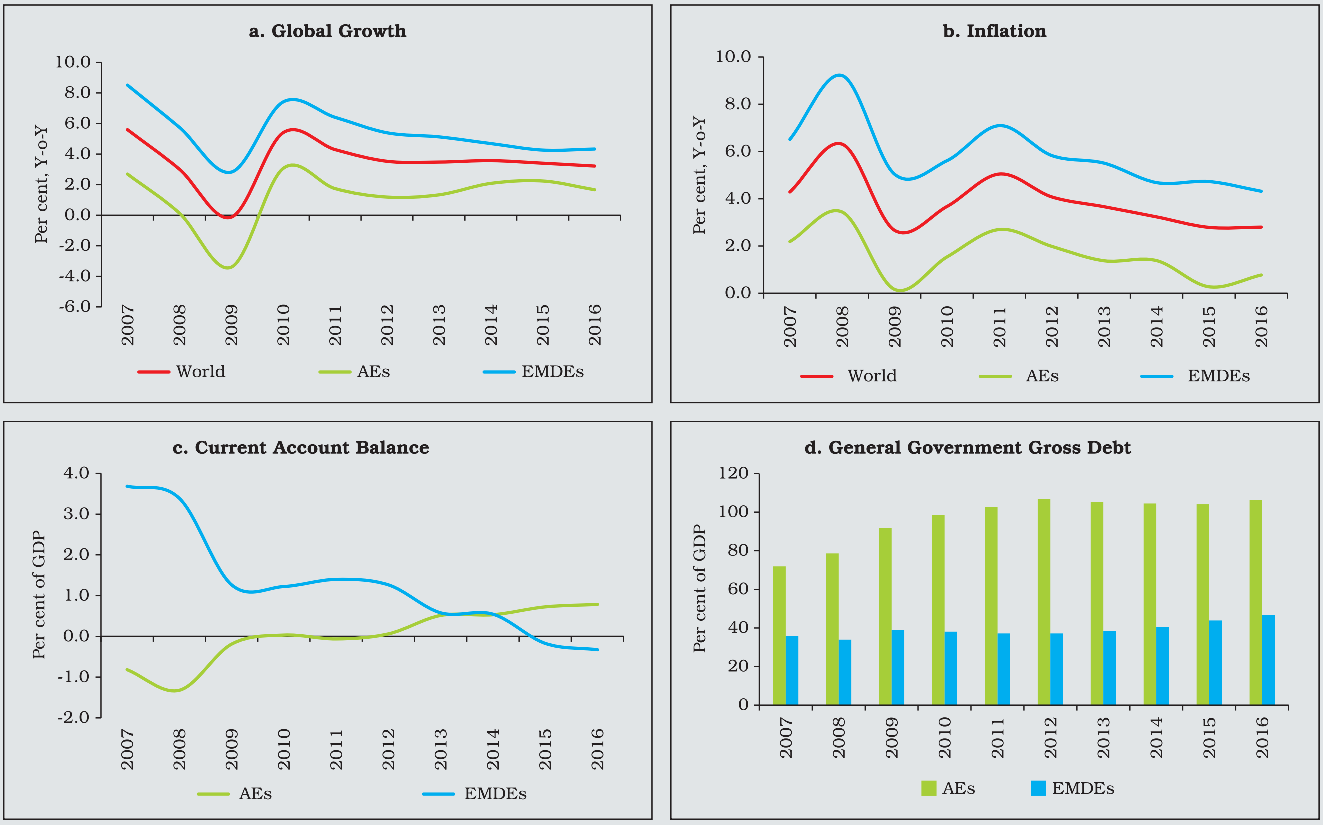
II.1 In the wake of the global financial crisis (GFC), the European Sovereign Debt Crisis (ESDC) and right up to 2016, the persisting fragility of the banking system has engaged intense attention at national and multinational levels, remaining as it does a major downside risk to global growth. The massive retrenchment of bank lending, as these entities deleverage and buffer up is a major factor underlying the shrinking of global capital flows from the pre-crisis peak. In 2016, cross-border claims of Bank for International Settlements (BIS) reporting banks declined to 41.5 per cent of GDP from 42.3 per cent in 2015. Global credit conditions eased in early 2017 and international bank credit continued to grow in late 2016 and early 2017 but grew negatively in Q2: 2017. Credit to non-banks was the key driver of the growth in international bank claims. Currently, the global banking system is repairing and conforming to a new set of global rules. Though progress has been made in making banks safer, sounder and resilient, the global reform agenda is far from complete.

II.2 Against this backdrop, Section II sets out the macroeconomic backdrop against which it analyses the performance of the global banking system in terms of key financial soundness indicators. Developments in the banking systems of some advanced economies (AEs) and emerging market economies (EMEs) are presented in Section III. The performance of the 100 largest global banks is examined in Section IV. Section V reviews the progress on the global reform agenda. Section VI gives the concluding observations and provides an outlook.

II. The Macro-Financial Environment

II.3 Global growth shed its sluggishness in the first half of 2016 and led by AEs it gradually gathered momentum in the second half. In the first three quarters of 2017, it gained traction and became broad-based healing commodity exporting large EMEs and lifting them out of recessionary conditions. Even as AEs and EMEs are recoupling their growth profiles, inflation conditions are converging below targets in AEs and softening in EMEs in conjunction with their unemployment rates. World trade has also picked up in line with the upturn in global activity. This has implications for EMEs seeking to harness the engine of world trade to integrate into the global economy and achieve their growth aspirations. General government debt levels in AEs remain elevated exceeding GDP while in EMEs they are less than half of GDP on average (Chart II.1). External imbalances have narrowed at the global level abstracting from noteworthy imbalances at the country level. Geo-political dynamics are likely to shape the emerging outlook alongside the spill overs from the normalisation of the monetary policy and the downsizing of balance sheets by systemic central banks.

Chart II.1: The Macro Backdrop



Source: The World Economic Outlook Database.

II.4 Bank credit, a key leading indicator of real activity[1] in view of the close movement between real and financial cycles remains divergent across jurisdictions. In the Euro area, declining or low credit growth is exhibiting hysteresis. Even constituent countries, which engineered quick balance sheet clean-ups are experiencing some recent moderations after a brief credit rebound (Chart II.2). Country specific issues in EMEs have had a moderating impact on credit growth. While asset quality concerns restrained credit growth in Russia and India, low growth and dwindling demand from corporates pushed overall credit growth into the negative in Brazil. By contrast, China is still experiencing rapid growth in credit relative to its peers even with its economic activity moderating relative to the recent past.

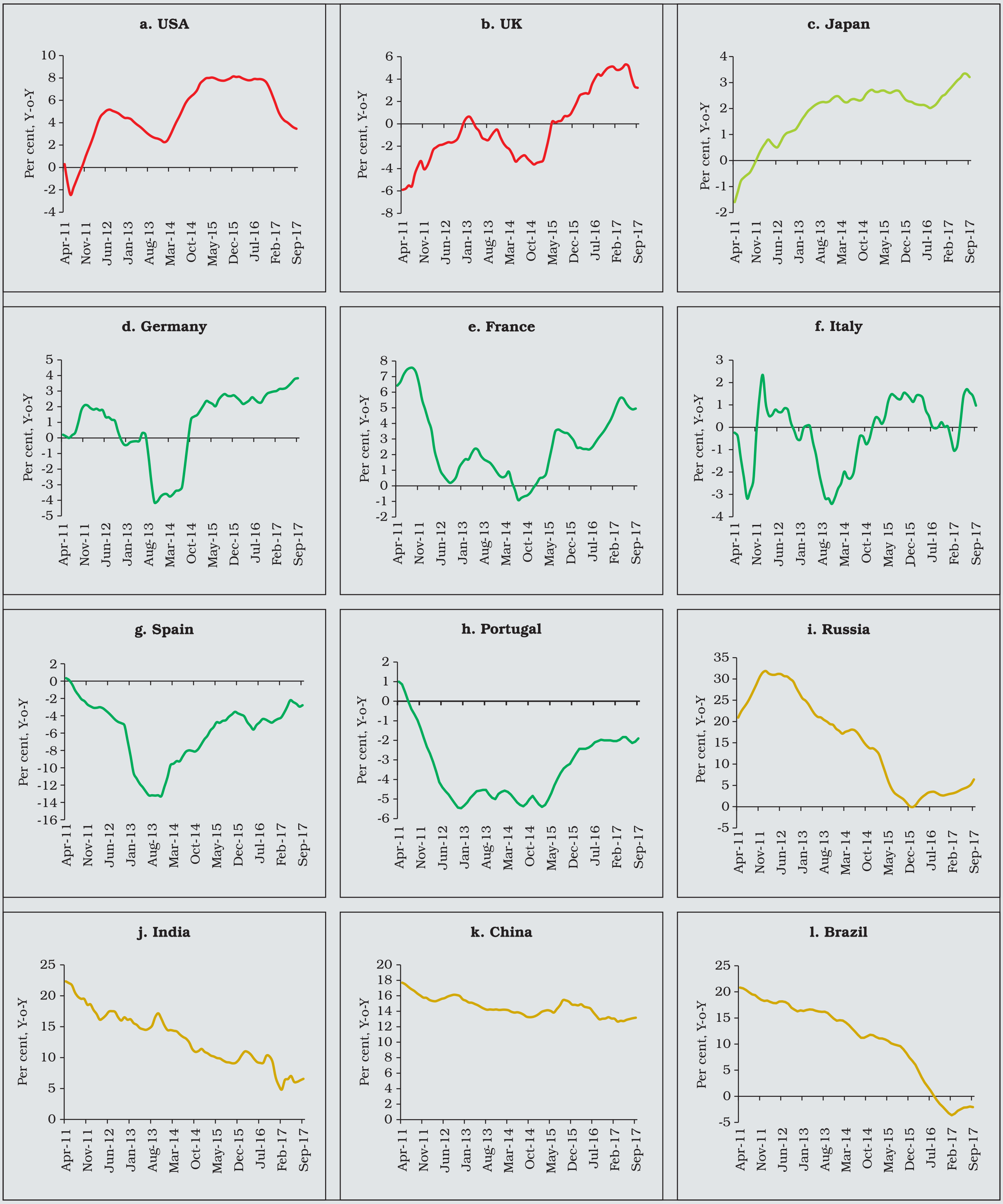
II.5 These dynamics in credit growth have influenced household debt, which continues to grow in some AEs and EMEs and ebb in others with China, UK, USA, India and Russia experiencing an increase in 2016 over 2015 (Chart II.3).

Key Financial Soundness Indicators

II.6 The banking systems in some jurisdictions are still in repair while in other jurisdictions banks are moving towards supporting growth even as they seek to increase capital and become profitable. A core set of indicators measuring profitability,

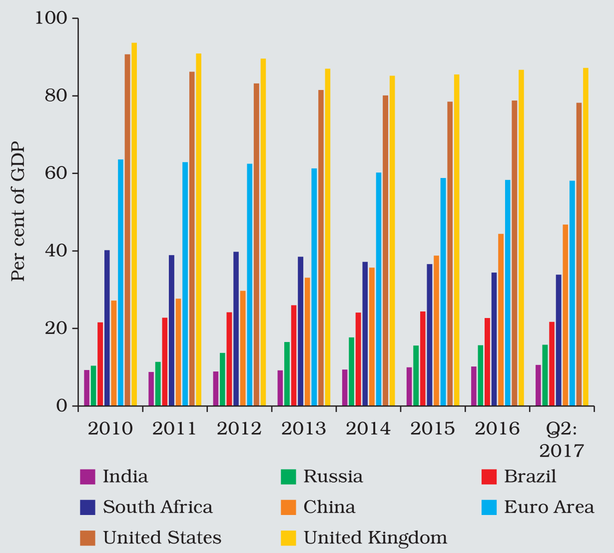
[1] See M. Garcia-Escribano and Fei Han (2015), 'Credit Expansion in Emerging Markets: Propeller of Growth?', *IMF Working Paper*, WP/15/212, September.

Chart II.2: Credit Growth in Select Economies



Note: Data are three-month moving averages.
Source: Datastream, CEIC and Central Bank Websites.

Chart II.3: Credit to Households



Source: BIS.

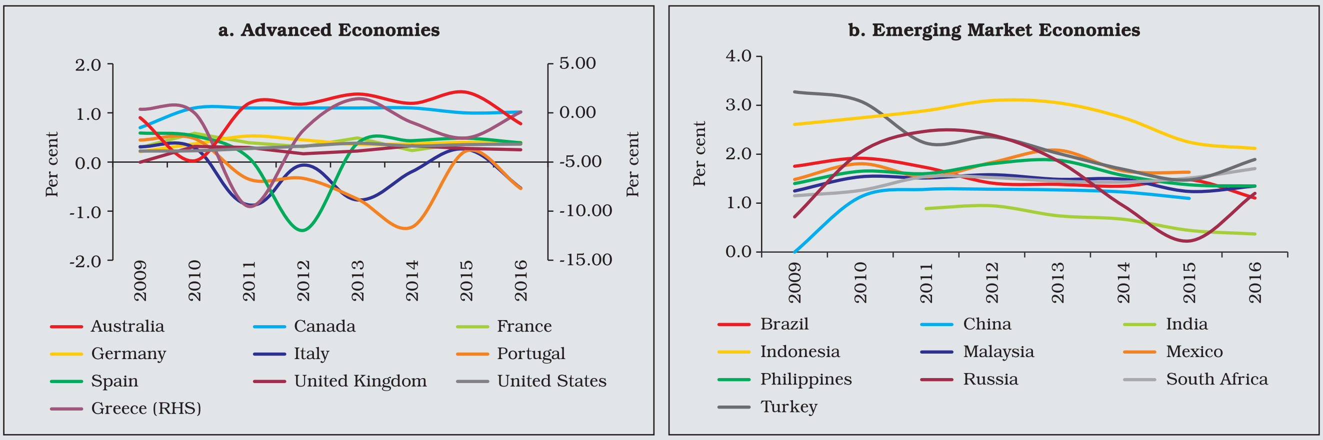
asset quality and capital adequacy indicate the progress made over time and also summarise the current health of the banking systems.

Return on Assets

II.7 With banking activity facing significant headwinds, banks' return on assets (RoAs)[2] remained subdued inhibiting their ability to expedite balance sheet repairs and augment capital buffers to insulate from stress in assets and in meeting the Basel III standards' requirements. RoAs across banks in AEs have been improving since 2009 but they declined during 2016 reflecting country-level dynamics. Most strikingly, Greek banks registered positive RoAs after being in the red for two years largely due to a decrease in loan-loss provisions and an increase in net interest and non-interest incomes. RoAs of banks in Italy and Portugal turned negative in 2016 as revenues declined and asset impairments increased. RoAs of banks in the UK and USA remained stable but low largely due to moderation in operating income growth (Chart II.4).

II.8 In EMEs, banks' RoAs reflected a combination of elevated loan delinquencies, high credit costs and general lack of demand. These factors weighed on banks' profitability in Brazil,China, India and Mexico. Banks in Russia, South Africa and Turkey improved their performance in 2016 over the previous year with banks in Russia exhibiting a sharp turnaround. Banks in Indonesia continued to be the most profitable largely due to relatively high net interest margins.

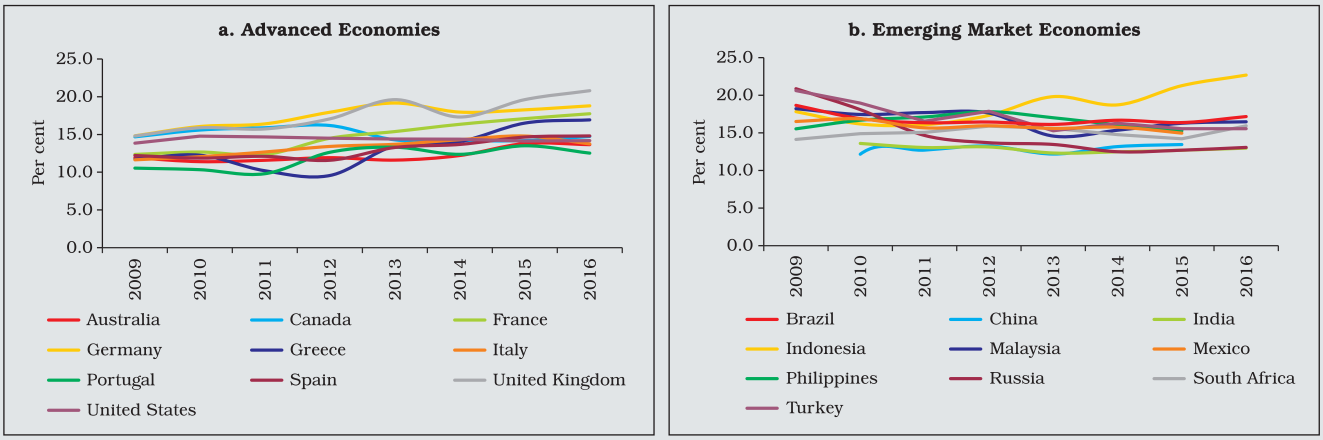
Chart II.4: Return on Assets: Select Economies



Source: IMF's Financial Soundness Indicators.

[2] Ratio of net income to average total assets.

Chart II.5: Capital to Risk-Weighted Assets Ratio (CRAR): Select Economies



Source: IMF's Financial Soundness Indicators.

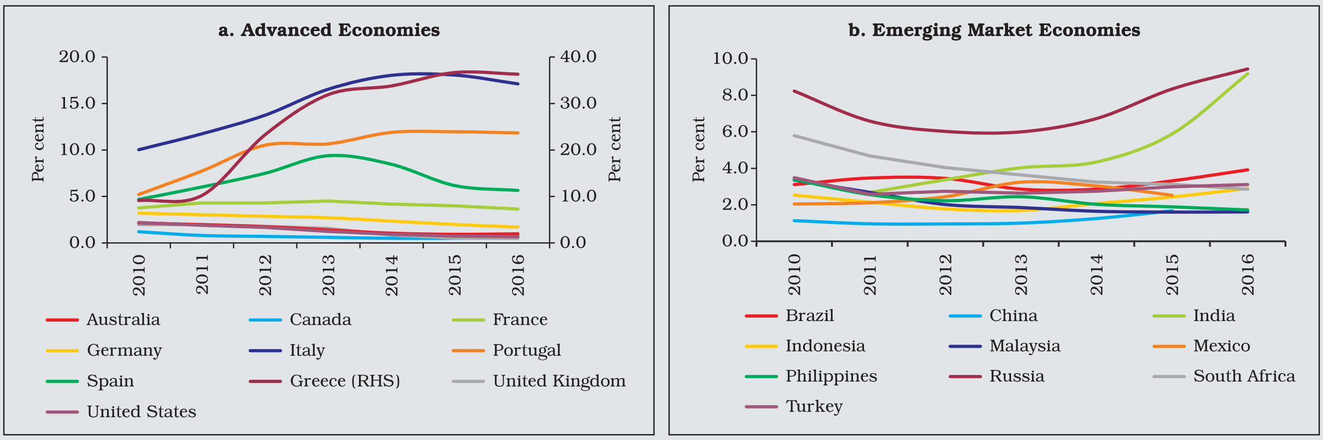
Capital Adequacy

II.9 Capital adequacy proxied by the ratio of regulatory capital to risk-weighted assets (CRAR) generally improved across banks in AEs during 2016 though country-specific issues led to reduction in bank capital in Italy and Portugal. Similarly, CRAR positions of EME banks improved and they continued to maintain capital above the regulatory minimum (Chart II.5). Banks in the UK continued to maintain the highest capital ratio among AEs. Banks in Indonesia remained the most capitalised banks among EMEs. The capital position of Indian banks improved in 2016 over the previous year.

Asset Quality

II.10 The non-performing loans (NPL) ratio[3] – a measure of asset quality – declined across banks in most AEs, barring Greece, Italy and Portugal, facing the overhang of the crisis-induced duress. Among other countries there was a considerable improvement in asset quality in Germany, the UK and USA (Chart II.6). In most EMEs, the NPL ratio generally increased relative to 2010. Sector-

Chart II.6: Non-performing Loans Ratio: Select Economies



Source: IMF's Financial Soundness Indicators.

[3] Ratio of non-performing loans to total loans.

specific issues encumbered banks' asset quality in India, while banks in Russia and Brazil were constrained by general economic weaknesses. Stress induced by heightened corporate leverage impacted asset quality in China. Asset quality concerns prompted policy action in many jurisdictions in the form of 'Prompt Corrective Action' (Box II.1).

Box II.1: Prompt Corrective Action across Jurisdictions

Prompt Corrective Action (PCA) refers to the imposition of appropriate regulatory sanctions on troubled financial institutions as and when they begin to exhibit symptoms of stress. The fundamental premise behind the PCA framework is based on the 'to act before it's too late' principle. A set of criteria is used to determine the severity of a bank's stress and restrictions are placed on its management and activities accordingly. PCA's core lies in a sequence of increasingly harsh restrictions as the problem worsens so that banks have little incentive to delay corrective actions. It reduces the moral hazard associated with the Lender-of-Last-Resort (LOLR) and makes banks liable to improve their overall financial health.

PCAs across the Globe

USA: PCA of supervisory actions was introduced for insured depository institutions, which were not adequately capitalised. Banks were placed in one of the five zones (well capitalised; adequately capitalised; undercapitalised; significantly undercapitalised; and critically undercapitalised) based on three capital ratios (common equity Tier 1 (CET1); Tier I and total risk-based capital ratios) (IMF, 2015). Every zone other than the well capitalised zone, has a set of mandatory and discretionary provisions with increasing severity (Table 1).

Table 1: The PCA Framework in Various Jurisdictions

	USA	UK	Canada	India
Number of Stages	5	5	4	3
Names of Stages	Stage 1: Well Capitalised Stage 2: Adequately Capitalised Stage 3: Undercapitalised Stage 4: Significantly Undercapitalised Stage 5: Critically Undercapitalised	Stage 1: Low risk to viability Stage 2: Moderate risk to viability Stage 3: Risk to viability absent action by the firm Stage 4: Imminent risk to viability of firm Stage 5: Firm in resolution or being actively wound up	Stage 1: Early warning Stage 2: Risk to financial viability or solvency Stage 3: Future financial viability in serious doubt Stage 4: Non-viability/ insolvency imminent	Three thresholds defined for each indicator
Key Parameters	Capital and leverage	Risk to viability	Financial viability or solvency	Capital, asset quality, profitability
Indicators Used	Total Capital, Tier 1 capital, CET 1 ratio, leverage, supplementary leverage.	Elements of the supervisory assessment framework that reflect the risks faced by a firm and its ability to manage them — external context, business risks, management and governance, risk management and controls, capital and liquidity.	Combination of an institution's overall net risk, capital and earnings, risk management or control deficiencies, which present a serious threat to its financial viability or solvency.	CRAR/CET 1 ratio, net NPA ratio and return on assets. Leverage ratio is tracked additionally as a part of the framework.
Method of Categorisation	Thresholds are defined for each indicator.	Quantitative and qualitative analysis is carried out for Proactive Intervention Framework (PIF) scores.	Quantitative and qualitative assessment of banks is carried out.	Thresholds are defined for each indicator.
Rule-based	Every stage, other than the well capitalised zone, has a set of mandatory and discretionary provisions with increasing severity.	UK's PIF gives guidance to banks on possible supervisory actions for the PIF stage they are in.	Every phase has an indicative set of actions. Authorities may choose to implement their powers on a case-to-case basis.	Rule-based regime with specified mandatory actions for each phase and a common menu of discretionary actions.

(Contd....)

UK: The PCA framework in the UK [labelled the proactive intervention framework (PIF)] has five stages each denoting a different proximity to failure and every firm sits in a particular stage at each point in time. A firm's PIF stage is reviewed at least annually and, if need be, at higher frequency depending on material developments (BOE, 2016). As a firm moves to a higher PIF stage – as the Prudential Regulatory Authority (PRA) determines that the firm's viability has deteriorated – supervisory actions become more stringent. PRA assesses the risk to viability using qualitative and quantitative indicators.

Canada: The PCA framework in Canada is a flexible intervention regime, which has no predetermined set of mandatory actions for every phase. The Guide to Intervention for Federally Regulated Deposit-Taking Institutions indicates what action / intervention will typically occur at what stage. The office of the Superintendent of Financial Institutions (OSFI) and / or the Canada Deposit Insurance Corporation (CDIC) have the freedom to deal with specific problems or institutions on a case-to-case basis, thus making the framework flexible.

India: In contrast to these frameworks, the PCA framework in India is more broad-based and rule-based. It emphasises the importance of capital ratios, asset quality and profitability. *A priori*, information about discretionary and mandated actions makes banks aware of the sanctions that they might have to face once they breach risk thresholds. The Banking Regulations Act, 1949 empowers the Reserve Bank to take action when early warning signals of distress are visible. To adhere to international best practices, the Reserve Bank started the PCA scheme in December 2002. It worked out a schedule of corrective actions based on three indicators – capital ratios, the net NPA ratio and RoA.

On the directions of the Financial Stability and Development Council (FSDC) sub-committee, the framework was reviewed recently and a revised PCA framework was implemented with effect from April 2017. The indicators to be tracked for capital, asset quality and profitability are capital to risk-weighted assets ratio (CRAR); the common equity Tier 1 ratio; net NPA ratio; and RoA. New risk thresholds have also been defined and a breach of these will lead to the invocation of PCA and mandatory and discretionary action. Further, a common menu of discretionary actions has been laid out for each PCA bracket (RBI, 2017).

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IMF (2015), *United States – Financial Sector Assessment Programme.* Country Report No. 15/89, Washington DC, April.

Reserve Bank of India (2017), *Revised Prompt Corrective Action (PCA) Framework for Banks*, April.

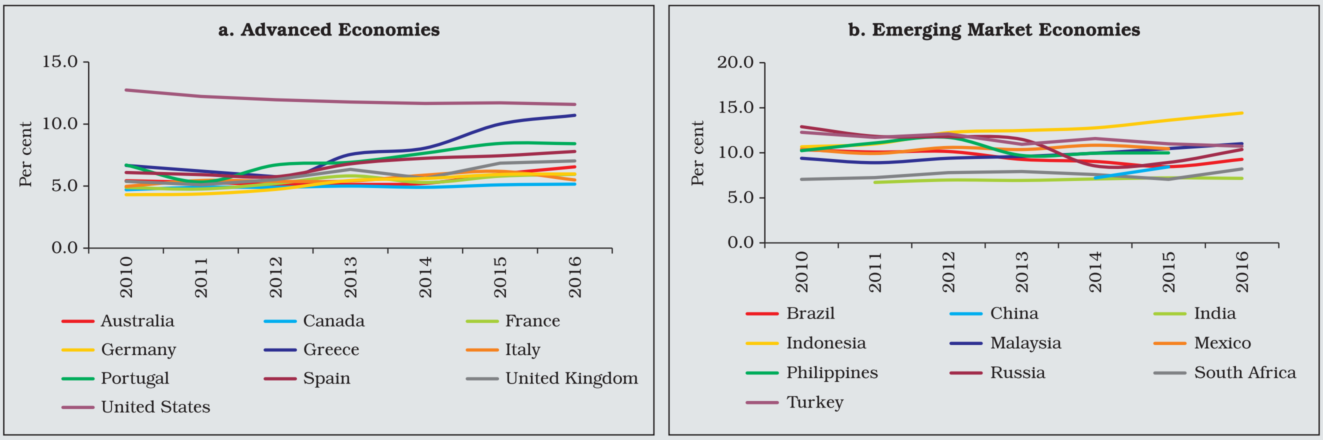
Leverage Ratio

II.11 The ratio of capital to unweighted total assets, also called the leverage ratio, works as an adjunct to risk-weighted capital ratios in tracking the banks' capital adequacy. The GFC proved that risk weights were not perfect and that a firm's assets must be backed by at least some minimum amount of capital. The leverage ratio has generally improved across banks in AEs and EMEs largely due to a regulatory push under Basel III which sets a threshold of 3 per cent. Among AEs, banks in the US and Greece maintained the most capital relative to unweighted assets while banks in Indonesia and Malaysia had high leverage ratios among the EMEs (Chart II.7).

Financial Market Indicators

II.12 Market-based indicators of bank health and profitability have shown steady improvement reflecting progress in banks' balance sheet repairs, improved prospects of bank profitability and sanguine market sentiments. Banks' equity prices generally maintained an upward momentum through 2016 with banks in Europe and the US experiencing the largest gains relative to banks in EMEs, especially since mid-2016 (Chart II.8). Similarly, bank credit default swap (CDS) spreads narrowed, reflecting investors' increasing comfort about their health. Banks in the UK and North America had the lowest CDS spreads. European banks' declining CDS spreads underscore the

Chart II.7: Leverage Ratio: Select Economies



Source: IMF's Financial Soundness Indicators.

progress made in bank balance sheet clean-ups, especially in Italy, Spain and Portugal.

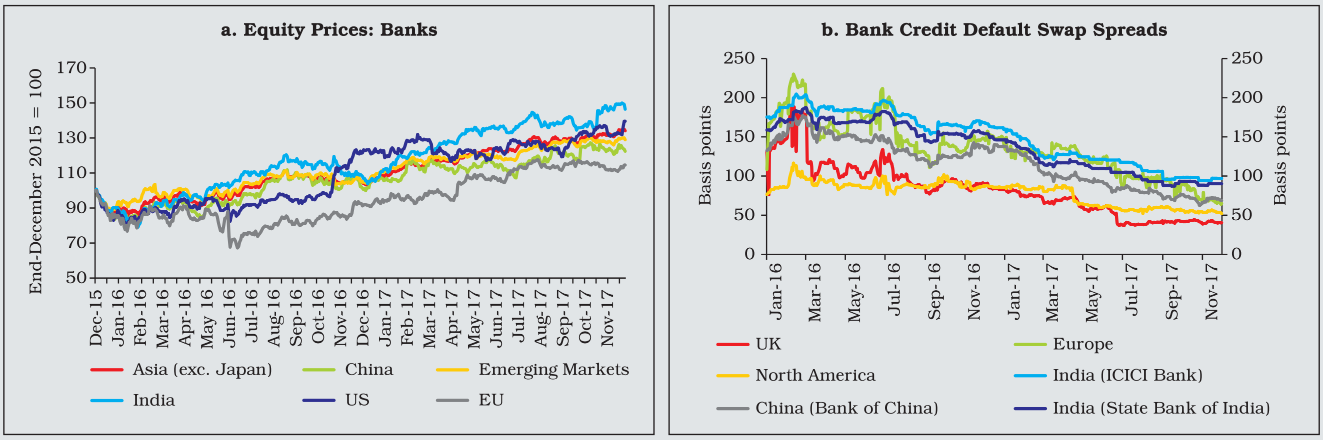
III. Banking Developments: Select Advanced and Emerging Market Economies

II.13 Developments in the systemic banking systems in the US, UK and Euro area have a bearing on the global economy and are constantly evolving. On the other hand, the state of banking systems in China, Brazil and Russia depicts the condition of banks in peer EMEs, which are at various stages of the economic cycle and are grappling with their own issues.

The US Banking System

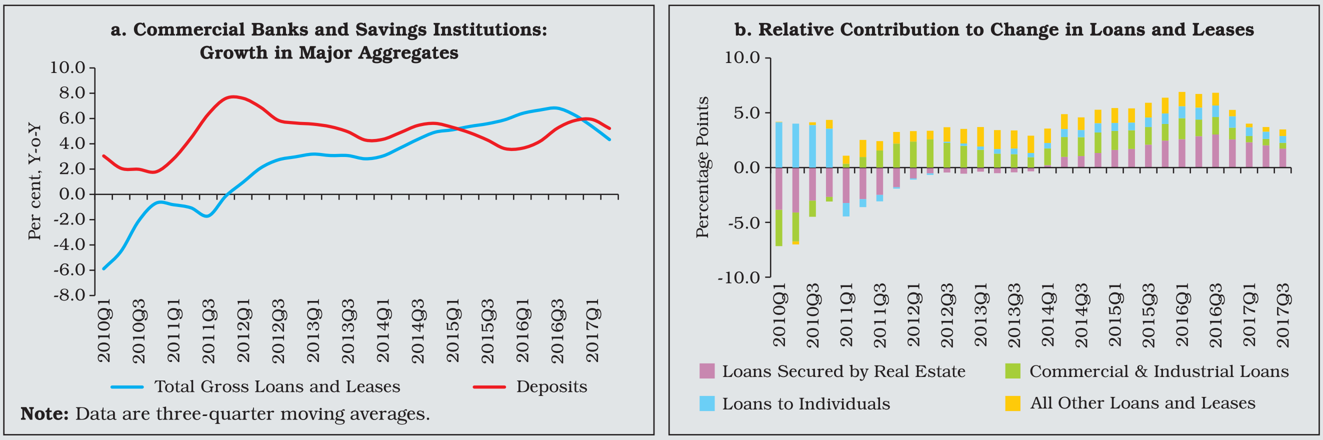
II.14 Credit growth in the US banking system was positive from Q1:2012 and broad-based favouring sectors like real estate and commercial and industrial loans. However, in 2017 credit growth in the US moderated as tightening credit standards took a toll on commercial real estate, credit cards and auto loans, coupled with muted demand for commercial and industrial loans. Deposit growth, on the other hand, has grown at a slightly higher pace relative to credit in 2017, so far (Chart II.9).

Chart II.8: Market-based Indicators of Bank Health



Source: Datastream.

Chart II.9: Credit and Deposit Growth: USA



Note: Data are three-quarter moving averages.

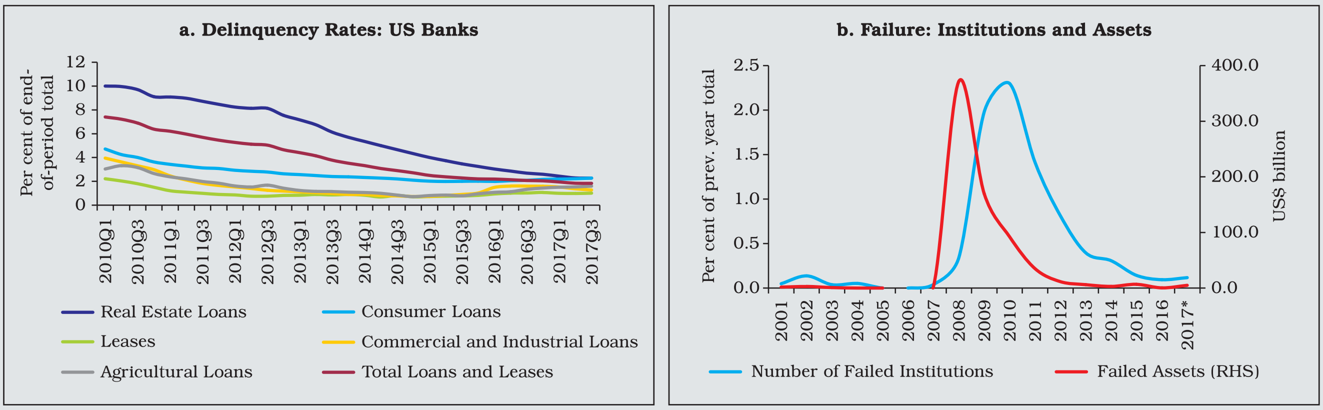
Source: Federal Deposit Insurance Corporation.

II.15 Asset quality, represented by delinquency rates,[4] improved as the US economy recovered and a policy-led bank balance sheet clean-up was initiated. Delinquency rates on real estate loans contributed the most to the overall delinquency rates. With these declining sharply from the post-GFC peaks, improvements in asset quality are reflected in a lesser number of institutions and lower amounts of assets failing (Chart II.10). Nonetheless, there was an uptick in delinquency rates for sub-prime credit card and auto loans from Q2:2016.

The UK Banking System

II.16 Amidst uncertain conditions surrounding Brexit, banks in the UK remained resilient with improving capital and leverage ratios and falling funding costs. Bank lending picked up and deposit growth remained robust (Chart II.11). The recovery in credit growth was largely led by growth

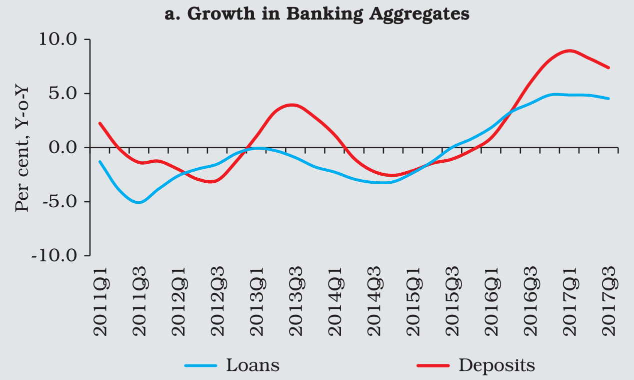
Chart II.10: Improving Asset Quality: US Banks



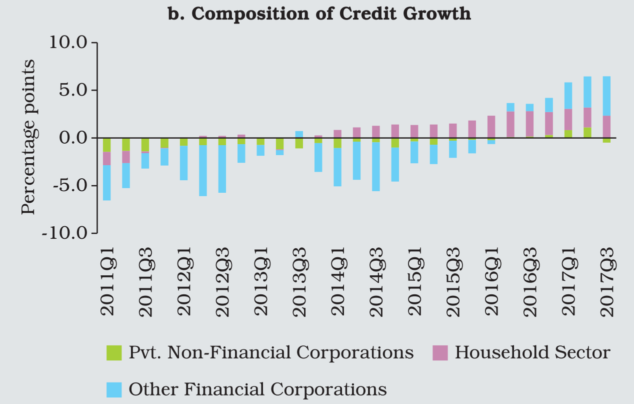
Note: 2017 position in Chart II.10b is at end-September.
Source: Federal Deposit Insurance Corporation and Federal Reserve.

[4] Delinquent loans are those that are past due 30 days or more and still accruing interest as well as those with a non-accrual status. They are measured as a percentage of loans outstanding at the end of the period.

Chart II.11: Bank Credit and Deposits: UK



Note: Data are three-quarter moving averages.



Source: Bank of England and CEIC.

in loans to households, with pick-up in loans to other financial corporations in recent quarters. Within household credit, rapid growth in consumer credit amidst easier mortgage market lending standards raised concerns about loan serviceability in view of the relatively slower growth in nominal household incomes.

II.17 Similarly, growth in loans to businesses improved in 2017 so far, due to the recent recovery led by the growth in loans to large businesses (Chart II.12a). The Bank of England's Credit Condition Survey (BOE-CCS) suggests that going forward growth in loan availability to SMEs is likely to be small but positive while credit availability for medium-sized enterprises is expected to be inert (Chart II.12c). There are also concerns relating to defaults on unsecured individual credit (Chart II.12d). Uncertainties about Brexit and low profitability will continue to condition the interplay between banks and financial stability.

The Euro Area Banking System

II.18 As the much-expected cyclical recovery takes hold in Europe, banks in the Euro area are poised to support growth. Increasing demand for loans, easing credit standards and lower rejection rates on loans for enterprises continued to support credit growth. Commensurately, assets of Euro area banks increased for four quarters ending Q1:2017, even as they took lesser recourse to wholesale funding (Chart II.13a). Lending surveys suggest a general easing of credit conditions in the Euro area (Chart II.13b). However, despite these developments, credit to the non-financial sector in major Euro area economies, barring France, remained below the levels seen before the Euro area sovereign debt crisis (Chart II.13c).

II.19 Nonetheless, asset quality remained impaired in the Euro area by country-specific issues and structural challenges such as 'over-banking', which have implications for bank profitability (Table II.1). Marking considerable progress in bank balance sheet repairs in the Euro area, banks in Italy and Portugal were recapitalised in 2016, followed by a few banks in Spain and Italy in June and July 2017. Weak bank profitability, however, remains a challenge. On average, the cost of equity is more than the return on equity for the EU banking system.

Chart II.12: Bank Credit in the UK: Availability and Quality

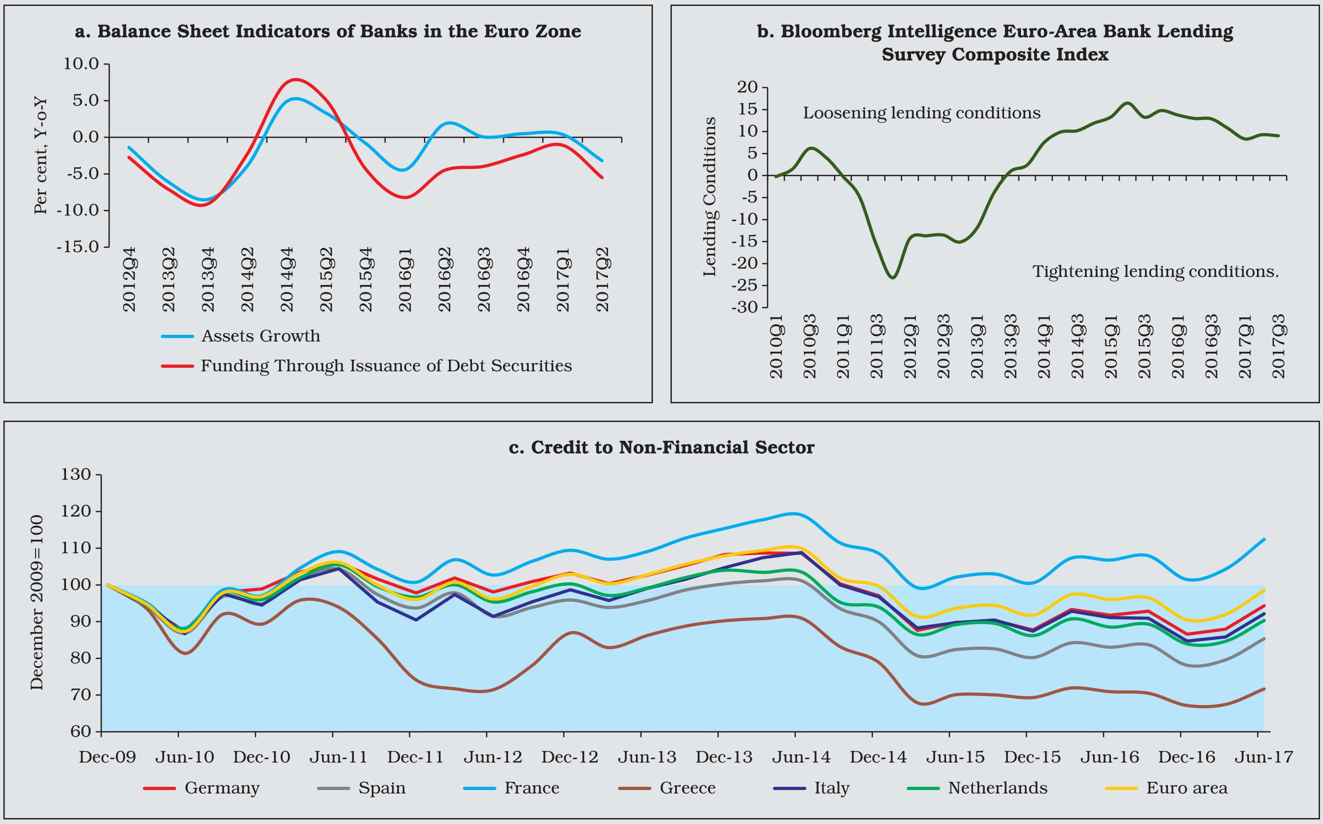
Note: In Charts II.12b, c and d, net percentage balances are calculated by weighting together the responses of those lenders who answered the question by their market share. Positive balances indicate that lenders, on balance, reported / expected credit availability / defaults to be higher than over the previous / current three-month period, or that the terms and conditions on which credit was provided became cheaper or looser, respectively.
Source: Bank of England.

II.20 In a scenario of low-for-long interest rates, growth in bank deposits in the Euro area has been declining from mid-2015 across all components barring household deposits (Chart II.14). Consequently, banks' net income margins may remain under pressure.

The Chinese Banking System

II.21 As the Chinese economy reorients towards a more balanced and sustainable growth model, the pace of its credit expansion has come off the post-GFC highs though it remains higher than its

Chart II.13: Bank Assets and Lending in the Euro Area



Source: European Central Bank, Bloomberg and Bank for International Settlements.

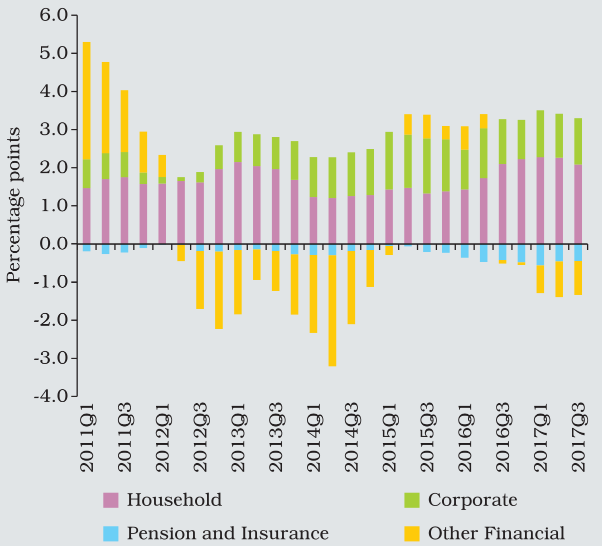
peer economies (Chart II.15a, also see Chart II.2). China's credit-to-GDP gap is one of the highest in the world, while it remains negative in other peer economies. Sustained high credit growth pushed

Table II.1: Ratio of Non-performing Loans and Advances (NPL Ratio, Per cent)

Country	Sep-14	Dec-14	Mar-15	Jun-15	Sep-15	Dec-15	Mar-16	Jun-16	Sep-16	Dec-16	Mar-17	Jun-17
Austria	8.1	8.0	8.0	7.7	7.4	6.9	6.5	6.0	5.8	5.1	4.6	4.3
Belgium	4.2	4.3	4.0	4.0	3.9	3.9	3.7	3.6	3.4	3.2	2.9	2.8
Cyprus	55.3	50.8	49.5	49.6	50.0	48.9	48.5	47.4	46.7	45.0	43.8	42.7
Estonia*	-	-	-	-	-	-	1.6	1.5	1.4	1.3	1.3	1.3
Finland	2.2	1.6	1.6	1.5	1.4	1.6	1.5	1.5	1.5	1.6	1.6	1.7
France	4.6	4.2	4.3	4.2	4.2	4.0	4.0	3.9	3.9	3.7	3.5	3.4
Germany	3.9	3.9	3.7	3.5	3.6	3.6	3.6	3.4	3.2	3.1	2.9	2.7
Greece	37.4	39.7	40.0	42.0	43.5	46.2	46.6	46.9	47.1	45.9	46.2	46.5
Ireland	23.3	21.6	21.0	20.4	19.6	17.8	15.1	14.6	14.4	12.2	11.5	11.7
Italy	16.3	17.0	16.7	16.8	16.9	16.8	16.6	16.4	16.4	15.3	14.8	12.0
Latvia	6.0	5.7	5.6	5.5	4.9	4.0	3.9	3.7	3.6	3.2	2.9	2.7
Lithuania	7.2	6.3	6.4	6.0	5.5	5.1	4.9	4.5	4.1	3.8	3.7	3.3
Luxembourg	1.3	1.4	1.3	1.5	1.4	1.1	1.2	1.0	1.2	1.1	1.1	1.1
Malta*	-	-	7.3	7.2	7.5	6.2	6.8	5.4	4.6	4.4	4.2	3.9
Netherlands	3.1	3.3	3.2	2.9	2.8	2.8	2.7	2.7	2.6	2.5	2.4	2.5
Portugal	17.0	18.0	18.2	18.1	18.8	19.6	19.8	20.1	19.8	19.5	18.5	17.6
Slovakia	5.7	5.4	5.5	5.4	5.2	5.2	5.0	4.8	4.6	4.2	4.1	3.8
Slovenia*	-	-	-	-	24.6	21.5	19.7	19.2	16.3	14.4	13.5	13.3
Spain	8.8	8.1	7.7	7.1	6.8	6.3	6.3	6.0	5.9	5.7	5.5	5.4

* Data is not disclosed for a few quarters because it was reported for less than three institutions.
Note: Deep red signifies the highest NPL ratio across time for a country while deep green represents the lowest NPL ratio.
Source: European Banking Authority.

Chart II.14: Drivers of Deposit Growth: Euro Area

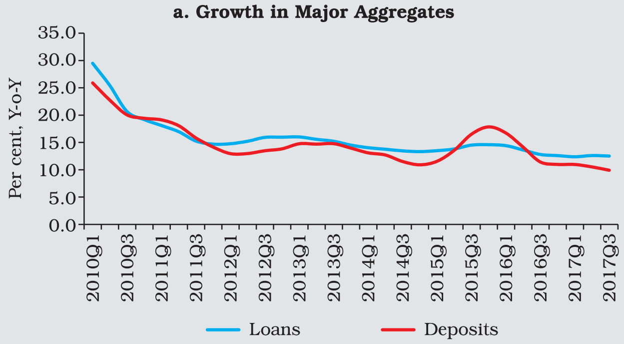


Source: EU Open Data Portal.

the outstanding credit to about twice the Chinese GDP, which was about 25 per cent higher than trend at end-2016 (Chart II.15b). Combined with an elevated debt service ratio, this may be an early indication of the building up of stress in the Chinese banking system (Chart II.15c). In line with declining asset quality, the profitability of the Chinese banking system is also under pressure although Chinese banks have comfortable capital positions (Chart II.15d). Nonetheless, many financial institutions continued to depend heavily on wholesale funding and 'shadow credit,'[5] with sizeable asset-liability mismatches and burgeoning liquidity and credit risks. The recent turbulence in money markets in China highlighted the vulnerabilities in the interconnected system as

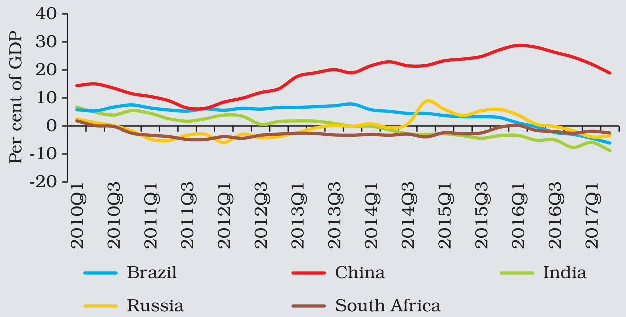
Chart II.15: The Chinese Banking System – A Snapshot

a. Growth in Major Aggregates



Note: Data are three-quarter moving averages.

b. Credit-to-GDP Gaps: Credit from All Sectors to Private Non-financial Sector

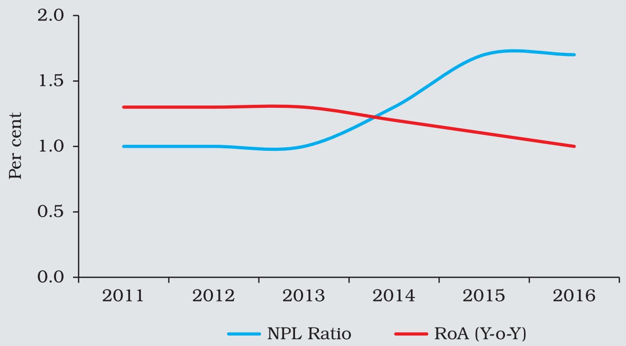


c. Early Warning Indicators of Stress in Domestic Banking Systems

	Credit-to-GDP Gap	Debt Service Ratio (DSR)	DSR if Interest Rates Rise by 250 bps
Brazil	-3	2.9	4.5
Russia	-2.8	2.3	3.6
India	-7.8	0.8	1.9
China	24.6	5.4	8.8
South Africa	-2.5	-0.2	1.1

Credit/GDP gap>10	DSR>6	DSR>6
2≤Credit/GDP gap≤10	4≤DSR≤6	4≤DSR≤6

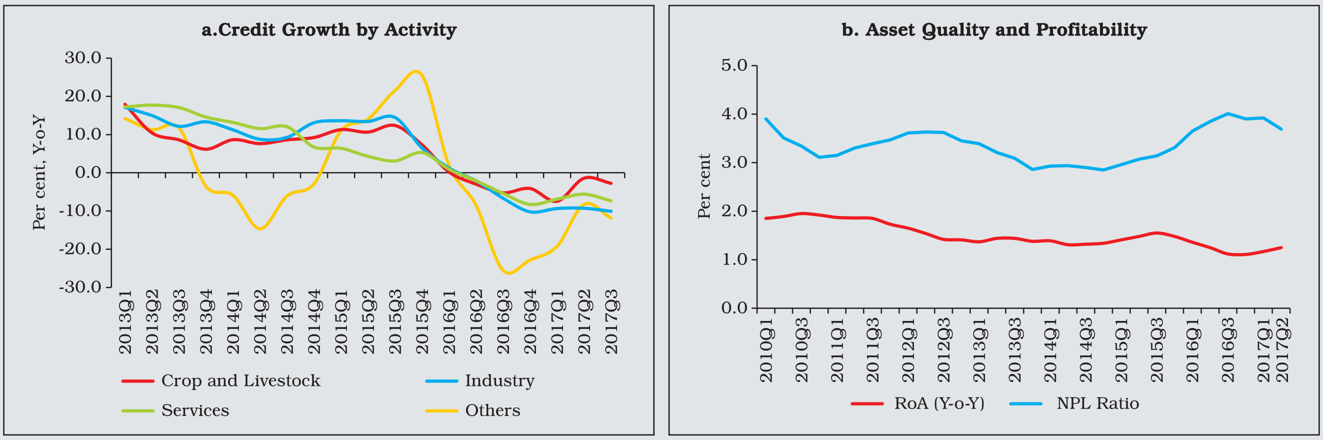
d. Asset Quality and Profitability



Source: CEIC, BIS Credit-to-GDP Gap Statistics and BIS 87th Annual Report.

5 The International Monetary Fund (2017), *Global Financial Stability Report: Is Growth at Risk ?* Washington, DC, October.

Chart II.16: The Brazilian Banking Sector – A Snapshot



Source: Bank of Brazil and CEIC.

stress in one sector translated into strains in related sectors.

II.22 Policies addressing high credit growth and excess capacity in state-owned enterprises are in place in China, which are likely to shore up macroeconomic and financial stability. On the other hand, large and complex exposures of intra-financial institutions warrant policy attention. Achieving a fine balance between the objectives of maintaining high growth and the need for deleveraging is engaging policy authorities in China.

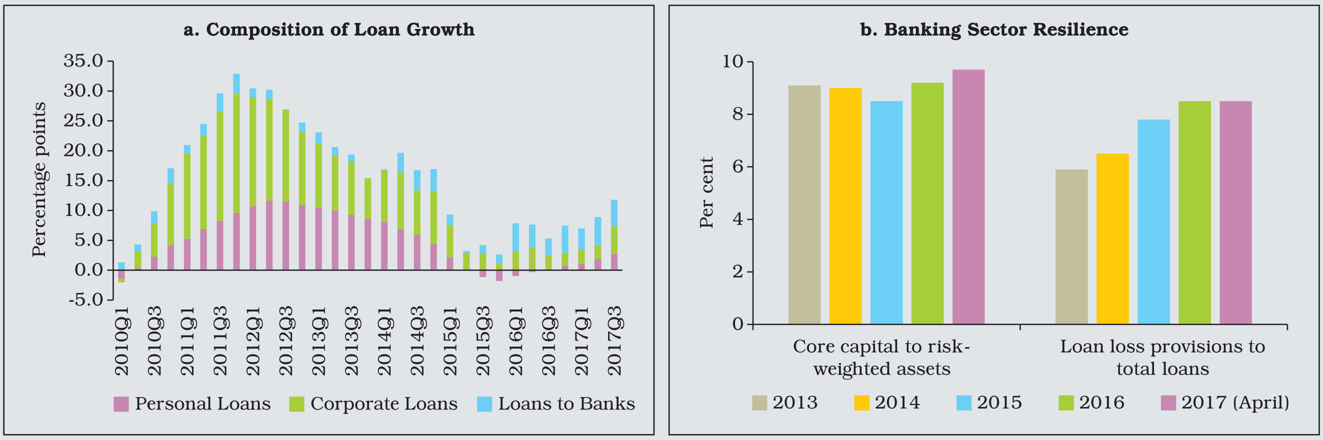
The Brazilian Banking System

II.23 The 2016 recession in Brazil brought about a challenging operating environment for banks which was reflected in declining credit and bank profitability and increasing NPL ratios (Chart II.16 a and b). Outstanding credit started declining in Q2: 2016 with the magnitude of decline increasing for loans to industry in 2017 so far, pushing the credit-to-GDP gap further into the negative. Corporate credit risks materialised in 2016, mainly among large corporates. However, commensurate increase in provisions is likely to cushion the impact of adverse asset quality on financial stability in Brazil. During 2017 so far, the banking sector's performance has improved as the economy emerges from the recession. NPLs have declined, RoAs have improved and banks' capital position has strengthened further.

The Russian Banking System

II.24 The Russian economy is emerging from a recession largely induced by external factors. Increase in oil prices will aid its recovery with commensurate improvements in the performance of the banking sector. All components of credit have increased in 2017 so far with personal loans returning to positive growth (Chart II.17a). The resilience of Russia's banking sector has improved as limits have been set on related-party transactions, policies have been put in place to reduce dollarisation and a tiered supervisory framework has been set up (Chart II.17b). Banks' profitability has improved largely on increase in net interest margins and lower provisioning in stabilising non-performing loans.

Chart II.17: The Russian Banking Sector – A Snapshot



Source: CEIC and IMF.

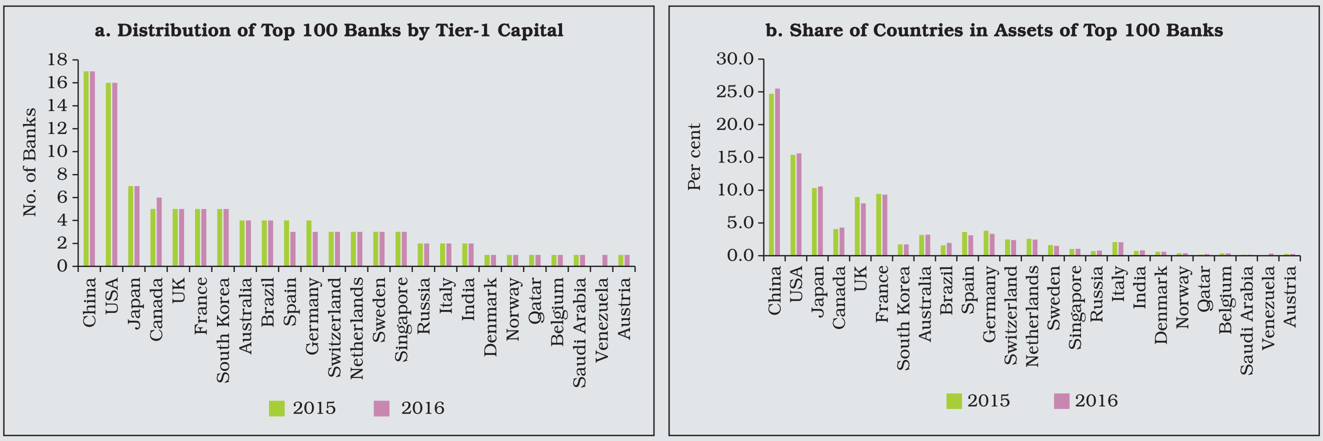
IV. World's Biggest Banks: Profitability, Health and Soundness[6]

II.25 The sample of the world's top 100 banks when ranked by Tier 1 capital remained largely the same in 2016 as in the preceding year. Commensurate with the increasing role of EME banks in the global economy, their number among the top 100 banks (when ranked by Tier 1 capital) has been rising, which was also mirrored in their shares in total banking assets (Chart II.18). Interestingly, nearly all EME banks in the top 100 increased their share in total assets led by Chinese banks while banks in the UK suffered the largest loss of share between 2015 and 2016.

Profitability and Asset Quality

II.26 Profitability of the largest 100 banks as measured by return on assets, was more or less unchanged between 2015 and 2016; 95 banks recorded positive RoAs in 2016 as compared to 96 banks in 2015 (Chart II.19a), although a larger number of banks had RoAs between 2-3 per cent

Chart II.18: Distribution of the World's Largest Banks: Capital and Assets



Source: The *Financial Times*' Banker Database.

[6] Data drawn from the Banker Database of the *Financial Times*. The analysis pertains to the largest 100 banks when ranked by Tier 1 capital.

Chart II.19: Return and Asset Quality

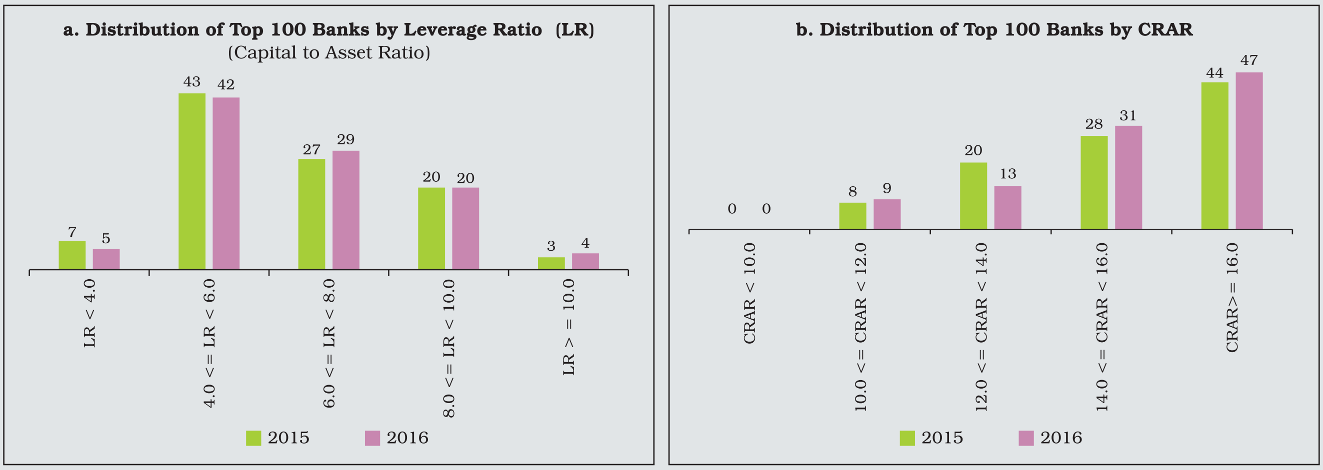
Note: In Chart II.19b, 93 banks form the sample.
Source: The *Financial Times*' Banker Database.

in 2016 relative to 2015. Improving asset quality, with fewer banks having NPLs of more than 5 per cent in 2016 as compared to 2015, is driving the gradual return to profitability (Chart II.19b).

II.27 Alongside the improvements in asset quality, banks' stronger capital positions enabled a concomitant reduction in financial leverage. In 2016 more banks in the top 100 maintained higher capital relative to assets than in the previous year; 53 banks had capital assets ratios (CARs) of at least 6 per cent in 2016 as compared to 50 banks in 2015 (Chart II.20a). Moreover, all the top 100 banks maintained a CAR of more than 3 per cent, the regulatory minimum prescribed under Basel III.

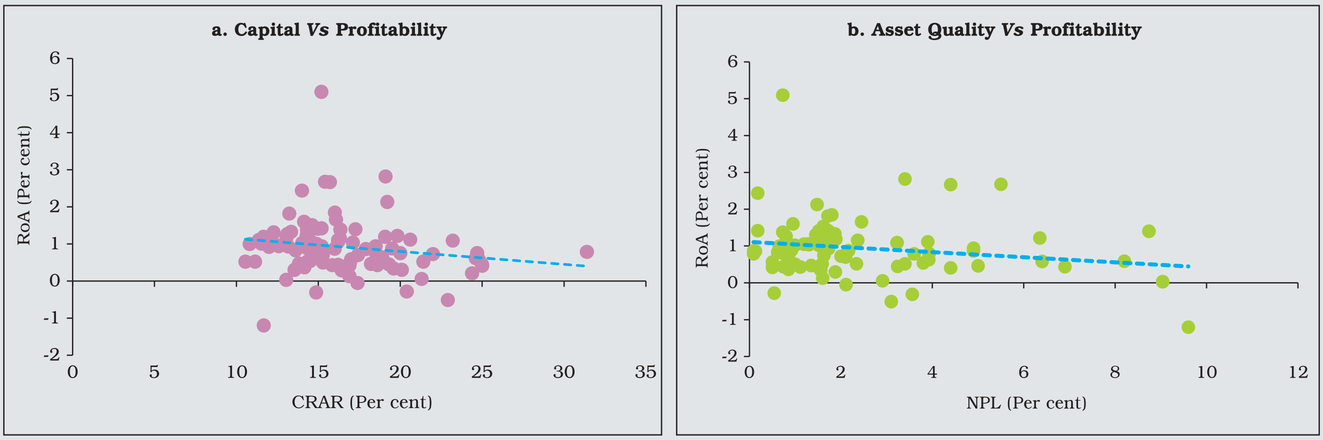
II.28 In addition to the improvements in CAR, banks' capital position relative to assets adjusted for risk also improved in 2016. Banks with capital to risk-weighted assets ratios (CRAR)[7] of more than 16 per cent, that is, double the level prescribed under Basel III, increased in 2016 over the previous year (Chart II.20b). Nonetheless,

Chart II.20: Bank Soundness



7 CRAR is measured as the sum of Tier 1 and Tier 2 capital, both net of deductions, divided by total risk-weighted assets, expressed as a per cent.

Chart II.21: Capital Adequacy *versus* Profitability *versus* Asset Quality



Source: The *Financial Times*' Banker Database.

banks with higher capital were not the most profitable as declining asset quality has been taking its toll through income losses and provisions (Chart II.21a and b).

V. Global Policy Reforms

II.29 Drawing lessons from the GFC, a number of reforms are underway to reduce the likelihood and severity of future cataclysms while nurturing an open and integrated global financial framework in supporting the G20 objectives of strong, sustainable and balanced growth.

Regulatory Reforms

II.30 The reform programme has four core elements: (i) making financial institutions more resilient; (ii) ending the too-big-to-fail (TBTF); (iii) making derivatives markets safer; and (iv) transforming shadow banking into resilient market-based finance. The main elements of reforms have been agreed to and the reforms are at various stages of implementation. Apart from these reforms, work is also underway to strengthen governance frameworks to reduce misconduct risks, assess and address the decline in correspondent banking and analysing FinTech's potential financial stability implications.

Making Financial Institutions More Resilient

II.31 Considerable progress has been made in implementing the Basel III norms (Table II.2). As a result, banks now have a larger capital base and more liquid assets than before thereby building resilience without impeding credit supply. All major internationally active banks have met risk-based capital and leverage ratio requirements well in advance of the deadline and global liquidity standards are catalysing the change in bank funding models. Further, jurisdictions in which global systemically important banks (G-SIBs) are headquartered have implemented higher loss absorbency requirements.

Ending-Too-Big-To-Fail

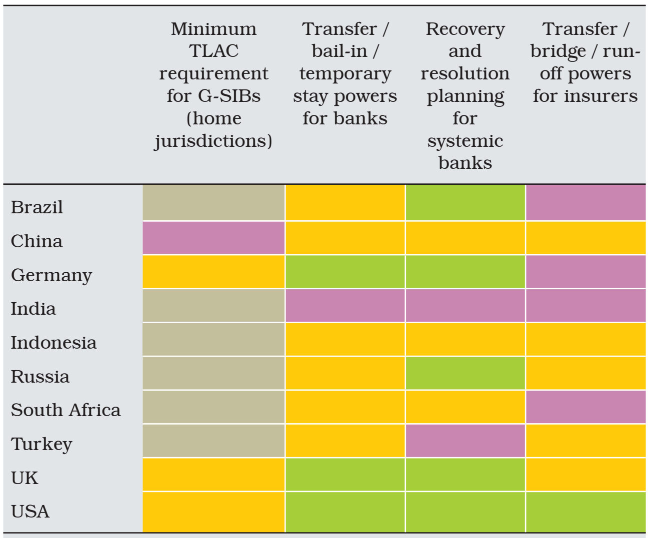
II.32 The identification processes for G-SIBs and global systemically important insurers (G-SIIs) are in place and the annual review of the list of G-SIBs and G-SIIs enables continuous assessment of these institutions (Table II.3). G-SIBs are subject to higher capital buffer requirements and have to meet total-loss absorbing capacity (TLAC) requirements in addition to Basel III's regulatory capital standards. G-SIBs have increased capital by about US$ 1 trillion since 2009 while reducing assets thereby fortifying

Table II.2: Adoption Status of Basel III - Number of Basel Committee Member Jurisdictions (End-March 2017)

Basel standard	BCBS agreed date of implemen-tation	Status as of end-March 2017		
		Draft rules issued	Final rules issued (not in force)	Final rules in force
Risk-based capital standards				
Definition of capital	Jan 2013	--	--	27
Capital conservation buffer	Jan 2016	--	--	27
Counter-cyclical buffer	Jan 2016	1	--	26
Capital requirements for equity investments in funds	Jan 2017	11	--	8
Standardised approach for measuring counterparty credit risk (SA-CCR)	Jan 2017	13	1	5
Securitisation framework	Jan 2018	11	3	--
Margin requirements for non-centrally cleared derivatives	Sep 2016	2	--	18
Capital requirements for CCPs	Jan 2017	11	1	5
Liquidity standards				
Liquidity coverage ratio (LCR)	Jan 2015	--	--	27
LCR disclosure requirements	Jan 2015	1	--	16
Net stable funding ratio (NSFR)	Jan 2018	16	1	1
NSFR disclosure requirements	Jan 2018	12	--	1
Other Basel III standards				
Leverage ratio	Jan 2018	2	1	19
Leverage ratio disclosure requirements	Jan 2015	1	--	26
G-SIB requirements	Jan 2016	--	--	19
D-SIB requirements	Jan 2016	1	--	26
Pillar 3 disclosure requirements	Dec 2016	3	9	8
Large exposures	Jan 2018	11	--	2

Source: Basel Committee on Banking Supervision (2017), *Implementation of Basel Standards,* July.

Table II.3: Implementation of Reforms – Resolution (As of end-June 2017)



Legend:

Final rule for external Total Loss Absorbing Capacity (TLAC) requirement for G-SIBs published and implemented. Element of resolution regime in the FSB Key Attributes of Effective Resolution Regimes for Financial Institutions (Key Attributes) that is implemented / in place. For the powers columns, all three of the resolution powers for banks (transfer, bail-in and temporary stay) and insurers (transfer, bridge and run-off) are available. Both recovery and resolution planning processes are in place for systemic banks.

Final rule for external TLAC requirement for G-SIBs published but not yet implemented, or draft rule published. Element of resolution regime in the Key Attributes that is partially implemented / in place. For the powers columns, one or two of the resolution powers for banks (transfer, bail-in and temporary stay) and insurers (transfer, bridge and run-off) are available. Recovery planning is in place for systemic banks, but resolution planning processes are not.

Draft rule for external TLAC requirement for G-SIBs not published. Element of resolution regime in the Key Attributes that is not implemented / in place. For the powers columns, none of the three resolution powers for banks (transfer, bail-in and temporary stay) and insurers (transfer, bridge and run-off) are available. Neither recovery nor resolution planning processes are in place for systemic banks.

Requirements reported as non-applicable.

Source: Financial Stability Board (2017), *Implementation and Effects of the G20 Financial Regulatory Reforms*, 3rd Annual Report, July.

balance sheets. In addition, liquidity and loan-to-deposit ratios have improved. Thus, reliance on wholesale funding has fallen, even as about two-third of G-SIBs' non-core assets have been disposed-off.[8] A new assessment framework for G-SIBs was put forth by the Basel Committee on Banking Supervision (BCBS) in March 2017 and the International Association of Insurance Supervisors (IAIS) is developing an activities-based approach to systemic risk assessment for the insurance sector. Work is also underway to identify non-bank non-insurer global systemically important financial institutions (NBNI G-SIFIs).

[8] International Monetary Fund (2017), *Global Financial Stability Report: Is Growth at Risk ?* Washington, DC, October.

Making Derivatives Markets Safer

II.33 Meaningful progress has been made in implementing reforms in over-the-counter (OTC) derivatives market, particularly for trade reporting and interim higher capital requirements for non-centrally cleared derivatives (Table II.4). About three-fourth of the jurisdictions have implemented comprehensive central clearing frameworks while about half of the jurisdictions have implemented comprehensive margin requirements and trading platform frameworks. Progress has also been made in improving transparency *via* the use of trade repositories, while central counterparties (CCPs) have been rendered more resilient through prescription of higher capital. Further to the progress made, work is underway to improve CCPs' resilience, recovery planning and resolvability. Efforts are also being made to improve data quality and remove legal barriers to reporting and accessing trade repositories' data.

Table II.4: Implementation of Reforms – Over-the-Counter Derivatives (As of end-June 2017)

	Trade reporting	Central clearing	Platform trading	Margin
Brazil	F			
China	R, D, F			
Germany				
India	D, F			
Indonesia	R			
Russia				
South Africa	D, F			
Turkey	D, F			
UK				
USA				

Legend:

Legislative framework in force and standards/criteria/requirements (as applicable) in force for over 90 per cent of relevant transactions.

Regulatory framework being implemented.

No regulatory framework in place.

R: Legal barriers to domestic participants' reporting to trade repositories (TRs) for which cure / mitigant is not available.

D: Access to domestic TR data by domestic authorities other than primary authority not permitted, or permitted with material conditions.

F: Direct or indirect access to domestic TR data by foreign authorities not permitted, or permitted only with material conditions.

Source: Financial Stability Board (2017), *Implementation and Effects of the G20 Financial Regulatory Reforms*, 3rd Annual Report, July.

Transforming Shadow Banking into Resilient Market-based Finance

II.34 The risk elements of shadow banks, which precipitated the GFC have abated and currently do not pose financial stability risks. Vulnerabilities in the repo market and money market funds (MMFs) have also been addressed (Table II.5). Implementation of the policy measures recommended by the International Organisation of Securities Commissions (IOSCO) is reducing the risk of runs in money market funds. These recommendations have been implemented in the US and China in addition to five other FSB

Table II.5: Implementation of Reforms – Shadow Banking (As of end-June 2017)

	Money market funds (MMFs)	Securitisation
Brazil		**
China		
Germany	**	
India		
Indonesia	**	
Russia	**	
South Africa	**	
Turkey	**	
UK	**	*
USA		

Legend:

MMFs – Final implementation measures in force for valuation, liquidity management and (where applicable) stable net asset value (NAV). Securitisation – Final adoption measures taken (and where relevant in force) for implementing an incentive alignment regime and disclosing requirements.

Draft/final implementation measures published or partly in force for valuation, liquidity management and (where applicable) stable NAV. Securitisation – Draft/final adoption measures published or partly in force for implementing an incentive alignment regime and disclosing requirements.

MMFs – Draft implementation measures not published for valuation, liquidity management and (where applicable) stable NAV. Securitisation – Draft adoption measures not published for implementing an incentive alignment regime and disclosing requirements.

* / ** : Implementation is more advanced than the overall rating in one or more / all elements of at least one reform area (MMFs), or in one or more / all sectors of the market (securitisation). The 2017 update was undertaken by IOSCO using the assessment methodology in its 2015 peer reviews in these areas.

Source: Financial Stability Board (2017), *Implementation and Effects of the G20 Financial Regulatory Reforms*, 3rd Annual Report, July.

jurisdictions. Advancements have been made in implementing fair valuation of MMF portfolios though progress in liquidity management has been limited. There has also been increased participation in efforts to track trends and risks in non-banks' activities.

Addressing Misconduct Risks

II.35 FSB is implementing an action plan to address misconduct risks through a range of preventive measures, focusing on: (i) improvements in financial institutions' governance and compensation structures; (ii) improvements in global standards of conduct in the fixed income, commodities and currency markets; and (iii) reforms in major financial benchmark arrangements to reduce the risk of their manipulation.

Correspondent Banking

II.36 FSB is implementing a four-point action plan to assess and address the decline in correspondent banking, comprising of: (i) examining the dimensions and implications of the issue; (ii) clarifying regulatory expectations as a matter of priority including guidance by the Financial Action Task Force (FATF) and the Basel Committee on Banking Supervision; (iii) domestic capacity-building in jurisdictions that are home to affected respondent banks; and (iv) strengthening tools for due diligence by correspondent banks. FSB's Correspondent Banking Data Report highlights a decline in the number of correspondent banking relationships (CBRs), especially for the US dollar and the euro. Reasons for the termination of CBRs include industry consolidation; lack of profitability; overall risk appetite; and various causes related to anti-money laundering and countering the financing of terrorism (AML / CFT) or sanctions regimes.

FinTech's Implications

II.37 In its report to the G20 on Financial Stability Implications from FinTech in June 2017, FSB highlighted 10 areas that merit authorities' attention of which three are seen as priorities for international collaboration to safeguard financial stability while fostering more inclusive and sustainable finance: (i) managing operational risks from third-party service providers; (ii) mitigating cyber risks; and (iii) monitoring macro-financial risks that could emerge as FinTech's activities increase.

Macroprudential Policies

II.38 In a renewed focus on re-regulation the macroprudential policies have been refined (Box II.2). The first two Basel frameworks were largely microprudential in nature. Under Basel III, a comprehensive macroprudential framework

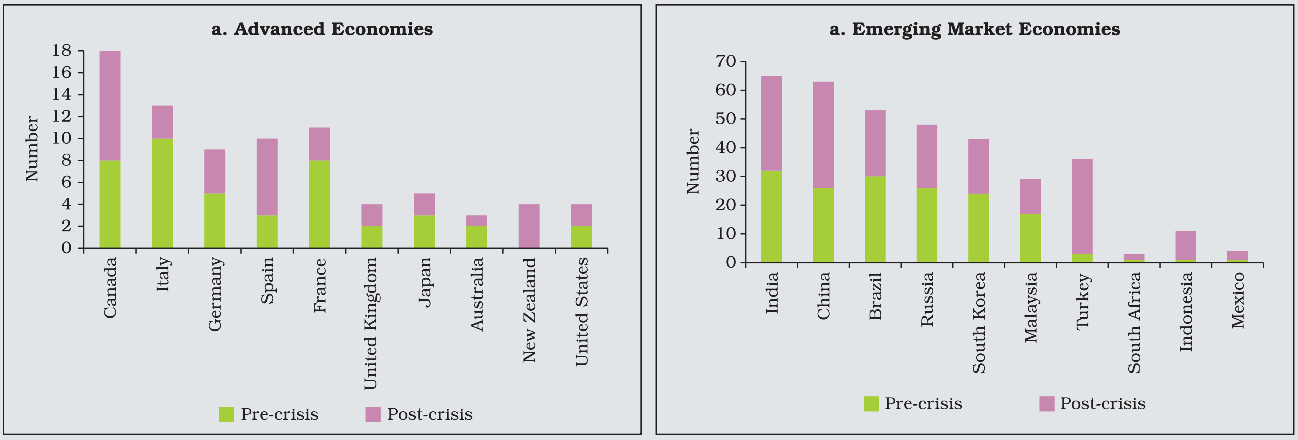
Box II.2: Role of Macroprudential Policies in the post-Global Financial Crisis Period

Macroprudential policies have three interlocking intermediate objectives: (a) increasing the resilience of the financial system to aggregate shocks; (b) containing the build-up of systemic vulnerabilities over time; and (c) controlling structural vulnerabilities within the financial system. In an overarching sense, a macroprudential policy involves the use of primarily prudential tools to limit systemic risks (IMF-FSB-BIS 2011).

In the post GFC period, macroprudential policies have been used in both advanced and emerging market economies to reduce the 'agency problems' of moral hazard and adverse selection (Chart 1). Broad-based capital tool buffers like the dynamic loan loss provisioning requirement (DPR) have been used to cover 'expected losses' over a cycle whereas the counter-cyclical capital buffer (CCCB) has been primarily used to dampen the pro-cyclicality of bank lending and to cover 'unexpected losses'. This improves the financial system's resilience and shields the real economy from the adverse effects of constricted liquidity conditions during crises. Complementing these tools is the leverage ratio, which seeks to augment the banking system's resilience by capturing leverage over and above normal prudential metrics to ensure that the banks are not leveraged excessively beyond their capacity to absorb losses.

(Contd....)

Chart 1: Cross-country Use of Macroprudential Measures



Source: BIS Quarterly Review, September 2017.

Sectoral capital requirements nudge banks towards internalising the cost of lending to particularly vulnerable sectors. On the other hand, loan-to-value (LTV) caps address elements of adverse selection and moral hazard and break the feedback loop between bank lending and asset prices. Debt-service-to-income (DSTI) ratios and the debt-to-income (DTI) ratios increase households' resilience to income and interest rate shocks. They can be augmented by increasing risk weights on unsecured household borrowings to check leakages.

Information content in the credit-to-GDP gap, that is, positive deviations of the credit-to-GDP ratio from its long-term trend, is used as an early warning signal. In addition, positive deviations of asset prices from their long-term trends also signal impending banking distress. Increase in property prices relative to rents and income point to a potential build-up of vulnerabilities. The debt service ratio has been found to be a better performing early warning indicator for shorter horizons. Funding large amount of credit from non-core sources signals the degree of risk being taken by banks.

Though the evidence on the effectiveness of a macroprudential policy is still emerging, a number of studies suggest a favourable outcome. Resilience and credit growth are found to be supported by capital-based tools while sectoral capital requirements have been found to increase buffers (IMF, 2014). Tools such as LTV, loan-to-income (LTI) and DSTI ratios have been successful in breaking the feedback loop between credit and asset prices in Singapore (Darbar *et al.*, 2015) and Hong Kong (HKMA, 2011)

The loss-absorbing capacity of many global banks has increased, risks related to maturity transformation have been addressed and liquidity risks have reduced (Yellen, 2017). Macroprudential policies could also potentially involve output costs and may inhibit growth by affecting credit supply and investments. There is also recognition that there could be newer risks outside the current pedagogy of policy prescriptions which could destabilise the world economy. One such risk is the latent run-like behaviour in bond markets (Francia *et al.*, 2016). At best, macroprudential policies reduce the likelihood of a crisis without eliminating it completely. Other policies need to work in conjunction to safeguard financial stability.

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has been put in place and it continues to evolve taking into account countries' experiences and knowledge gained in the implementation of these policies.

Pillar 3 Disclosure Requirements

II.39 The BCBS issued a new standard for disclosures under Pillar 3 in March 2017. This standard consolidates all existing BCBS disclosure requirements into the Pillar 3 framework and makes two enhancements to the existing framework – it introduces a dashboard of a bank's key prudential metrics, which will provide users of Pillar 3 data with an overview of a bank's prudential position. It also has a new disclosure requirement for those banks, which record prudent valuation adjustments (PVAs) to provide users with a granular breakdown of how a bank's PVAs are calculated. Further revisions to the Pillar 3 standards include revised disclosure requirements for market risk arising from the revised market risk framework published by BCBS in January 2016.

Reforming Major Interest Rate Benchmarks

II.40 In 2014 a combination of attempted manipulation of interest rate benchmarks (IRBs) and a decline in liquidity in key unsecured interbank markets led FSB to make recommendations aimed at enhancing IRBs and promoting the development of nearly risk-free reference rates (RFRs). A number of measures are being taken to test and improve the robustness of methodologies of the Euro Interbank Offered Rate (EURIBOR), the London Interbank Offered Rate (LIBOR) and the Tokyo Interbank Offered Rate (TIBOR). The European Money Market Institute has been developing a hybrid model for EURIBOR, which will combine transactions and related market data with expert judgment. Similarly, administrators of LIBOR and TIBOR have adjusted the methodologies of these benchmarks to account for a lack of substantial data. Work is also underway to identify new or existing RFRs, which could be used in place of IRBs in a range of contracts, particularly derivatives. However, limited progress has been made in transitioning from IRBs to RFRs even when RFRs are available.

VI. Summing up

II.41 Considerable progress has been made in improving banks' health in AEs since the global financial crisis. By contrast, country-specific factors have led to a spike in non-performing loans in some EMEs. Banks' capital positions have improved and financial leverage is now contained. Credit growth is picking up in AEs with banks' balance sheets repairs whereas supply and demand-side factors have led to a slowdown in credit growth in a number of EMEs. Against the backdrop of global growth regaining strength and spread, bank profitability remains low and in some cases below the cost of capital for banks, hindering their ability to organically augment capital bases and expand credit more strongly. The emergence of FinTech also poses a danger to bank profitability in some cases while providing an avenue for cutting costs through efficiency gains and hence boosting profitability in others. While reforms have made the global banking system safer and more resilient and macroprudential policies have reduced vulnerabilities and supported traditional policies, risks remain. In particular, greater acceptance of crypto-currencies is becoming a formidable risk to the traditional banking system.

Chapter III

Policy Environment

The prudential and supervisory policies of the Reserve Bank aimed at fostering improvements in the overall health of the banking system and promoting financial stability. The Reserve Bank continued with initiatives to improve financial intermediation in the economy. Various developmental and regulatory policy measures are being taken for further strengthening the banking structure and enhancing the efficacy of the payment and settlement systems. Various structural reforms were introduced during the year to improve the business environment and increase formalisation of the economy. These are expected to be growth augmenting over the medium to long-term.

I. Introduction

III.1 Amidst visitations of turbulence in global financial markets and an environment rife with geo-political tensions, the relative calm engendered macroeconomic stability in India in the year 2016-17 enabled financial sector policies to focus on repair, consolidation and intensification of the agenda of reforms. Even as aligning the regulatory framework with the work of the Basel Committee on Banking Supervision (BCBS) under the Basel III framework remained a priority, including through the G20 processes, the Reserve Bank fine-tuned its regulatory and supervisory policies to ensure a sound, resilient and inclusive banking system. Effective financial sector oversight on the basis of three pillars – regulation, surveillance and enforcement, improving cyber security with greater digitisation and provision of better customer services to the vulnerable sections of the population – were concomitantly pursued.

III.2 Against this backdrop, the chapter enumerates policy initiatives undertaken in the banking sector during 2016-17 and 2017-18 so far. Policy initiatives in the area of monetary policy, liquidity management, credit delivery and financial inclusion are outlined from section II to section IV. Section V and VI discuss prudential regulatory and supervisory policies. Section VII to IX cover policy measures for non-banking financial companies, customer services and payments and settlements. Section X provides details of banking sector legislations and the last section gives concluding observations.

II. Monetary Policy and Liquidity Management

III.3 Monetary policy in India underwent a regime change during 2016-17. The amendments to the Reserve Bank of India (RBI) Act, which came into force on June 27, 2016, provided it the legislative mandate to operate the monetary policy framework with its objective explicitly defined as 'to maintain price stability while keeping in mind the objective of growth.' On August 5, 2016, the Government notified the inflation target as 4 per cent year-on-year growth in CPI-combined inflation with upper and lower tolerance levels of 6 and 2 per cent, respectively. The amended RBI Act also provides for the formation of a six-member Monetary Policy Committee (MPC) entrusted with the decision on setting the policy rate. In turn, the Reserve Bank was enjoined to set out the operating framework in the public domain explaining implementation of the MPC's decision. The Reserve Bank's monetary policy statement laid out the operating framework of the monetary policy and the adjustments thereto have been reported in subsequent policy statements/ monetary policy reports (MPRs). The operating framework aims at modulating liquidity conditions so as to ensure that the operating target – the weighted average call money rate (WACR) – evolves in close alignment with the policy rate.

III.4 Liquidity operations were recalibrated under a revised framework announced in April 2016 which, *inter alia*, included smoothening liquidity supply through timely use of open market purchase / sale auctions in conjunction with normal liquidity facilities and fine-tuning operations. The objective was to progressively balance liquidity in the system to a position closer to neutrality. As a result, the net position under the liquidity adjustment facility (LAF) switched from an average daily liquidity injection (or system level deficit) of ₹813 billion during Q1: 2016-17 to an average daily absorption (or system level surplus) of ₹63 billion in October 2016. In the process, scheduled redemptions of FCNR (B) deposits during September-November 2016 were managed without any perturbations in market liquidity.

III.5 Beginning November 9, 2016 the demonetisation of high value specified bank notes (SBNs) resulted in currency in circulation declining by 50 per cent by January 6, 2017.[1] As low-cost current account and savings account (CASA) deposits surged into the banking system, a wall of system level liquidity moved through domestic financial markets threatening financial stability. To manage surplus liquidity, the Reserve Bank used a mix of both conventional and unconventional instruments: (i) temporary application of an incremental cash reserve ratio (ICRR) of 100 per cent on an increase in banks' net demand and time liabilities (NDTL) between September 16 and November 11, 2016; (ii) open market sales under the market stabilisation scheme (MSS); and (iii) variable rate reverse repos of various tenors ranging from overnight to 91-day. The peak level of liquidity absorbed reached ₹7,956 billion on January 4, 2017.

III.6 The incremental cash reserve ratio (ICRR) absorbed surplus liquidity of ₹4,000 billion. With the Central Government enhancing the limit on issuance of securities under MSS from ₹300 billion to ₹6,000 billion on December 2, 2016 by the Central Government, the Reserve Bank withdrew the ICRR. Anticipating liquidity surplus declining due to remonetisation, the Reserve Bank increasingly resorted to reverse repo operations to absorb the surplus liquidity released through maturing MSS securities, especially from January 14, 2017 onwards. In Q4: 2016-17 (since January 7), remonetisation progressed at an accelerated pace, with currency in circulation increasing cumulatively by about ₹4,373 billion. This reduced the liquidity surplus in the system to ₹3,141 billion as on March 31, 2017.

III.7 Anticipating that the surplus liquidity conditions may persist throughout 2017-18, the Reserve Bank provided guidance on liquidity in April 2017, which contained the following elements: (i) use of Treasury Bills (T-bills) and dated securities under the MSS up to ₹1 trillion; (ii) issuances of cash management bills (CMBs) of appropriate tenors up to ₹1 trillion in accordance with the memorandum of understanding (MoU) with the Government of India; (iii) open market operations; and (iv) fine tuning reverse repo / repo operations to modulate day-to-day liquidity.

III.8 For 2017-18, the limit on issuances of securities under the MSS was reduced by the Government to ₹1 trillion from ₹6 trillion. As the Government front-loaded spending ahead of the

[1] The estimated value of SBNs received as on June 30, 2017 was ₹15.28 trillion out of the total value of ₹15.44 trillion of demonetised bank notes.

monsoon, CMBs of different tenors were issued to manage temporary mismatch in government cash balance position. The Reserve Bank withdrew liquidity to the tune of ₹1 trillion from the system through the issuance of T-bills of tenors ranging from 312 days to 329 days under the MSS. The remaining liquidity surplus was absorbed primarily through the variable rate reverse repo auctions. During 2017-18 (up to November 10), currency in circulation increased by ₹3.2 trillion. However, its impact on reducing the surplus liquidity in the system was more than offset by higher expenditure by the government and large redemption of government securities, beside RBI's foreign exchange market operations. The average daily absorption of liquidity increased to ₹4,562 billion (including LAF, MSS and CMBs) during Q1: 2017-18 from ₹3,141 billion as at end-March 2017, but declined to ₹4,290 billion during Q2: 2017-18. As surplus liquidity conditions persisted, open market sales of ₹900 billion were conducted during 2017-18, so far. The festival related currency demand and gradual build-up in Government cash balances reduced the net average absorption of liquidity to ₹2,280 billion during Q3: 2017-18 (up to November 14). Meanwhile, the LAF corridor was reduced to ensure a firm alignment of the weighted average call rate (WACR) with the policy rate. The WACR traded closer to the repo rate, but with a softening bias from the second week of May 2017, reflecting persistent surplus liquidity conditions.

III. Credit Delivery

III.9 During 2016-17, policy measures regarding credit delivery focused on ensuring smooth flow of credit to the productive and vulnerable sectors of the economy. They also aimed at addressing information asymmetry through greater transparency and availability of information.

Interest Subvention Scheme on Short-term Crop Loans

III.10 With a view to ensuring availability of agricultural credit (including loans taken against Kisan Credit Card (KCC)) at a reasonable cost / at a reduced rate of 7 per cent per annum to farmers, the Government of India, through its budget announcement for the year 2006-07, had introduced an interest subvention scheme (2 per cent) for short term crop loans up to ₹0.3 million. This scheme is being implemented through public sector banks and private sector banks (reimbursement through the Reserve Bank), regional rural banks and co-operatives (reimbursement through NABARD). Currently, besides 2 per cent interest subvention, 3 per cent incentive is given for prompt repayment of loan reducing the cost to 4 per cent. This scheme is continuing for the year 2017-18 with the aim of delinking farmers from non-institutional sources of credit.

III.11 Besides, while earlier this interest subvention was available for a maximum period of one year, in order to discourage distress sale of crops by farmers, the benefit of interest subvention has been made available to small and marginal farmers having KCC for a further period of up to six months (post-harvest) on the same rate as available to crop loans against negotiable warehouse receipts. 2 per cent interest subvention is also available for the first year on restructured loans to provide relief to farmers affected by natural calamities.

Kisan Credit Card (KCC) Scheme

III.12 Kisan Credit Card Scheme aimed at providing adequate and timely credit support from the banking system under a single window to the farmers for their cultivation and other needs had been in operation since August 1998. Based on the recommendations of Working Group (Chairman: Shri T.M.Bhasin), and as accepted by the Government of India, the Reserve Bank has revised the guidelines for Kisan Credit Card dated May 11, 2012, and August 7, 2012 (the latest master circular guidelines being dated July 03, 2017). Tenant farmers, oral lessees and share croppers are also covered under the scheme. The scheme provides for sanction of the limit for 5 years with simplified renewal every year. All the banks have been advised to implement the scheme. The issue of smart-cum debit card, mandated under the revised guidelines, will enable the farmers to access multiple delivery channels

Credit Flow to the MSME Sector

III.13 In April 2016, the first Bi-Monthly Monetary Policy Statement for 2016-17 announced that the Reserve Bank will lay out a framework for accreditation of credit counsellors who could act as facilitators to improve the access of entrepreneurs to the formal financial system. Accordingly, on July 11, 2017, the Small Industries Development Bank of India (SIDBI) launched the Certified Credit Counsellors (CCCs) scheme for micro, small and medium enterprises (MSMEs). This scheme aims to mitigate information asymmetry and the perception of high credit risks associated with the MSME sector.

III.14 The National Mission for Capacity Building of Bankers for financing the MSME Sector (NAMCABS) is being strengthened with a view to scaling up capacity building of commercial bank officials engaged in MSME lending. An impact assessment survey conducted during August-September, 2016 to assess the impact of NAMCABS workshops revealed that branches manned by trained personnel generally outperformed other branches, especially in lending to micro enterprises. It was, therefore, decided to continue with an enhanced and comprehensive capacity building programme christened as NAMCABS Version 2. The programme has been made more comprehensive by incorporating latest developments in terms of policy initiatives undertaken by the Government and the Reserve Bank. Equipping the officials with technological skills for efficacious discharge of their duties is also part of the programme. As on September 30, 2017, 7,497 bank officials had undergone training under this initiative.

III.15 With effect from August 11, 2016, factoring transactions on 'with recourse' basis became eligible for priority sector classification by banks carrying out the business of factoring departmentally to increase liquidity support for the MSME sector. Factoring transactions taking place through the Trade Receivable Discounting System (TReDS) platform are also eligible for classification under the priority sector.

III.16 In August 2015, banks were advised to incorporate in their lending policy to Micro and Small Enterprises (MSEs) with their boards' approval a clause for fixing a separate additional limit specifically for meeting the unforeseen / seasonal increase in working capital requirements, at the time of sanctioning / renewing working capital limits. In view of possible cash flow mismatches faced by MSE borrowers due to the withdrawal of the legal tender status of SBNs of ₹500 and ₹1,000 denominations, banks were advised to use the facility of providing above-additional limit (approved by their boards) 'working capital' to their MSE borrowers. This was a one-time measure up to March 31, 2017 which was normalised from the fresh working capital assessment cycle.

Priority Sector Lending Certificates

III.17 An important development during 2016-17 was the operationalisation of the Priority Sector Lending Certificates (PSLCs) scheme in April 2016. This scheme is a mechanism to incentivise banks to lend to different categories of the priority sector and thereby boost overall priority sector lending. PSLCs allow the market mechanism to drive priority sector lending by leveraging the comparative strength of different banks. This scheme allows a bank, to sell the over-achievement of its target in a particular sector through PSLCs to another bank, which can buy it to meet its target in that sector, while selling its own over-achievement of the target in another sector to another bank and so on. The Reserve Bank has provided a platform to enable trading in PSLCs through its core banking solution (CBS) portal (e-Kuber).

High-level Task Force on Public Credit Registry

III.18 A public credit registry brings about transparency in credit markets and helps both creditors and borrowers. As announced by the Reserve Bank in August 2017 under the Statement on Developmental and Regulatory Policies, a High-level Task Force on Public Credit Registry (PCR) for India (Chairman: Shri Yeshwant M. Deosthalee) has been constituted. It has representatives from various stakeholders, including the Reserve Bank, banks, non-banking financial companies (NBFCs), industry bodies, and experts in information technology. The Task Force will review the current availability of information on credit, the adequacy of existing information utilities, and identify gaps that could be filled by a PCR. It will study best international practices to determine the scope of the PCR and the type of information and credit markets that the PCR should cover. The Task Force will also propose a state-of-the-art information system, allowing for existing systems to be strengthened and integrated, and suggest a modular, prioritised roadmap for developing a transparent, comprehensive and near-real-time PCR for India. The Task Force will submit its report within six months from the date of its constitution, *i.e.*, by April 4, 2018.

IV. Financial Inclusion

III.19 The Reserve Bank of India in co-ordination with the Government of India and other stakeholders has come up with various policy interventions to enhance financial inclusion and increase financial literacy in the country from time to time. This policy received further fillip during 2010 with the adoption of financial inclusion plans, which are self-set targets in blocks of three years which are developed by the Boards of the banks to expand the outreach in terms of outlets and access to a bouquet of products which, *inter alia,* includes KCCs and General Credit Cards (GCCs). In August 2014, the Government of India launched an ambitious financial inclusion mission; the Pradhan Mantri Jan Dhan Yojana (PMJDY) to ensure access to basic financial services of banking / savings and deposit accounts, remittances, credit, insurance and pension in an affordable manner. Up to December 6, 2017, 307 million accounts have been opened with a balance of ₹698 billion.

III.20 Against this backdrop, several policy measures were initiated during the year to ensure last mile access to financially excluded sections. To strengthen the business correspondent (BC) model, the Reserve Bank developed a framework for the BC registry. This registry shall capture information on both existing and potential business correspondents and will help in the effective monitoring and oversight of BC operations. This should help to further strengthen the BC eco-system through appropriate policy initiatives.

III.21 BCs also play a crucial role in initiating first-time customers into the domain of mainstream banking. Proper guidance and handholding is key to their continuing and deepening relationship with banking. Accordingly, the Reserve Bank has developed a framework for BC certification with basic and advanced level courses to enhance their functional and behavioural competencies.

III.22 The Indian Banks' Association (IBA) is in the process of putting in place a BC Registry and is taking forward the process of BC certification.

V. Prudential Regulatory Policy

III.23 The regulatory policies of the Reserve Bank are aimed at orderly development and conduct of banking operations, fostering overall financial stability and protecting depositors' interests. Given the bank-dominated financial system in India, the Reserve Bank is also striving to develop a more competitive, efficient and heterogeneous banking structure that can meet varied customer needs in an efficient manner.

Revitalising Stressed Assets

III.24 Early recognition, and time-bound resolution or liquidation of stressed assets is critical for de-clogging bank balance sheets and for efficient reallocation of capital[2]. The Reserve Bank and the Government of India have been working together to comprehensively address the challenge through a multi-pronged approach. Specific measures are aimed at strengthening the legal, regulatory, supervisory and institutional framework with the ultimate objective of facilitating quick resolution of stressed assets in a time-bound manner.

III.25 Several measures have been put in place for resolution of stressed assets through optimal structuring of credit facilities, the ability to change ownership / management, and greater transparency in the sale of stressed assets. The system of Prompt Corrective Action (PCA) under which specific regulatory actions are taken by the Reserve Bank if banks breach certain trigger points was revised recently. The endeavour is to ensure timely supervisory action by following a rule-based approach. In order to ensure effective supervisory action on serious violations / breaches, a separate Enforcement Department has been established.

III.26 In November 2016, the Reserve Bank revised its guidelines on resolution of stressed assets to further strengthen the regulatory framework for dealing with stressed assets. Some of the significant measures include harmonisation of the stand-still clause applicable in the case of the Strategic Debt Restructuring (SDR) Scheme with other guidelines; a scheme for sustainable structuring of stressed assets (S4A); flexible restructuring of existing long-term project loans to infrastructure and core industries; guidelines for projects under implementation; and clarification on the deemed date of commencement of commercial operations.

III.27 Banks were advised on April 18, 2017 to make suitable disclosures in the prescribed format, wherever either (a) the additional provisioning requirements assessed by the Reserve Bank exceeded 15 per cent of the published net profits after tax for the reference period or (b) the additional gross non-performing assets (NPAs) identified by the Reserve Bank exceeded 15 per cent of the published incremental gross NPAs for the reference period. It is expected that this will ensure greater transparency and promote better discipline in compliance with the Reserve Bank's prudential norms on income recognition, asset classification and provisioning (IRACP).

The Financial Resolution and Deposit Insurance Bill, 2017

III.28 The Bill aims to establish a framework to carry out the resolution of specified categories of financial service providers in distress, to provide deposit insurance to consumers of banking institutions and for designation of Systemically Important Financial Institutions by the Central Government. The draft Bill on Financial Resolution and Deposit Insurance consolidates the resolution

[2] Patel, Urjit R. (2017), "Resolution of Stressed Assets: Towards the Endgame", Inaugural Session of the "National Conference on Insolvency and Bankruptcy: Changing Paradigm", Mumbai, August 19.

provisions presently scattered in different statutes and introduces new requirements as classification of financial service providers into various categories of risk to viability, submission of resolution / restoration plans, *etc*. and new methods for resolution, in accordance with prevalent international practices. It proposes creation of a new specialised authority – Resolution Corporation, tasked with the responsibility of carrying out speedy and efficient resolution of financial service providers. The authority will take over the deposit insurance functions presently exercised by the Deposit Insurance and Credit Guarantee Corporation (DICGC).

Adoption of the Basel III Capital Framework for Banks

III.29 There has been significant progress towards implementation of Basel III risk-based capital standards, the liquidity standards, the standards for global and domestic systemically important banks (SIBs), the leverage ratio, the large exposure framework and the interest rate risk in the banking book (IRRBB). Basel III Capital Regulations will be fully phased in for Indian banks by March 31, 2019, *i.e.*, close to the internationally agreed date of January 1, 2019.

III.30 In the context of the transition to a Liquidity Coverage Ratio (LCR) of 100 per cent by January 1, 2019 the Statutory Liquidity Ratio (SLR) was reduced by 50 basis points from 20.0 per cent to 19.5 per cent of banks' net demand and time liabilities (NDTL) from the fortnight commencing October 14, 2017.

III.31 To align exposure norms for Indian banks with the BCBS standards, the Reserve Bank issued guidelines on the Large Exposures (LE) Framework on December 1, 2016, in terms of which banks' exposure to a single and group counterparty should normally not be more than 20 and 25 per cent of Tier 1 capital, respectively. The LE Framework will be effective from April 1, 2019.

III.32 In line with the revised BCBS framework on interest rate risk in the banking book, the Reserve Bank issued draft guidelines on governance, measurement and management of interest rate risks in banking books on February 2, 2017 for feedback / comments.

Prudential Regulatory Measures

III.33 With effect from October 20, 2016 it was advised that exposure to housing finance companies (HFCs) be risk-weighted as per the rating assigned by the rating agencies registered with Securities and Exchange Board of India (SEBI) and accredited by the Reserve Bank of India.

III.34 As a counter-cyclical measure, the loan to value (LTV) ratio, risk weights and standard asset provisioning rate for individual housing loans sanctioned on or after June 7, 2017 were also rationalised.

III.35 With effect from June 13, 2017, banks are permitted to use the ratings of INFOMERICS Valuation and Rating Private Limited for risk weighting their claims for capital adequacy purposes in addition to the existing six domestic credit rating agencies (CARE, CRISIL, FITCH India, ICRA, Brickwork Ratings and SMERA).

III.36 Guidelines for computing exposure for counterparty credit risk arising from derivative transactions and on capital requirements for bank exposures to central counterparties were issued on November 10, 2016 with a view to comprehensively capture the credit risk from all avenues. This will come into force from April 1, 2018.

III.37 As part of effective risk management, banks are required, *inter alia,* to have separate credit risk management from the credit sanction process. Given this, guidelines on role of the Chief Risk Officer, Chief Financial Officer and Chief

Technical Officer were issued on April 27, 2017 to bring uniformity and alignment with best practices.

Developmental Regulatory Measures

III.38 With effect from April 18, 2017 banks have been allowed to invest in Real Estate Investment Trusts (REITs) and Infrastructure Investment Trusts (InvITs) within the overall ceiling of 20 per cent of their net worth permitted for direct investments in shares, convertible bonds/ debentures, units of equity-oriented mutual funds and exposure to venture capital funds. Banks should put in place a board approved policy on exposures to REITs/ InvITs, which lays down an internal limit on such investments within the overall exposure limits with respect to the real estate and infrastructure sectors. In addition, banks will not invest more than 10 per cent in the unit capital of an REIT/ InvIT.

III.39 Following policy changes on "Financial Services provided by Banks" have been implemented with effect from September 25, 2017:

- In order to align prudential norms for investments in Category I and II Alternative Investment Funds(AIFs), banks were allowed to invest up to 10 per cent of the unit capital of an AIF-II (on similar line to AIF-I) beyond which they will require prior approval from RBI. However, investments by banks in Category III AIFs have been specifically prohibited. Further, with a view to restrict indirect exposure of the bank, a ceiling on the investments by banks' subsidiaries in AIF-III up to the regulatory minima prescribed by SEBI on Sponsor / Manager commitment has been prescribed.
- The minimum CRAR required for allowing general permission to banks' investments in financial services companies was 10 per cent (including 1 per cent buffer over the erstwhile minimum CRAR of 9 per cent). As the total capital requirements have increased due to the Capital Conservation Buffer (CCB) prescriptions, the minimum CRAR requirement has been aligned with the revised capital stipulations.
- Banks have been allowed to become Professional Clearing Members (PCMs) of commodity derivatives segment of SEBI registered exchanges subject to certain conditions. Further, banks' subsidiaries have been allowed to offer broking services in the commodity derivatives segment of the exchange subject to adhering to certain conditions.

III.40 Banks were allowed to provide partial credit enhancement (PCE) to bonds issued by corporates / special purpose vehicles (SPVs) for funding all types of projects with a view to encouraging corporates to avail of bond financing, subject to the Reserve Bank's guidelines. After a review, on May 18, 2017, banks were advised that capital requirements in the books of PCE provider may be re-calculated without reference to the constraints of capital floor and difference in notches if the reassessed standalone credit rating at any time during the life of the bond showed an improvement over the corresponding rating at the time of the bond issuance. To facilitate this, it was also advised that corporate bonds shall be rated by a minimum of two external credit rating agencies at all times and rating reports, both initial and subsequent, shall disclose both standalone credit rating and the enhanced credit rating. The aggregate exposure limit towards the PCE for a given bond issue from the banking system was increased to 50 per cent from 20 per cent of the bond issue size, with a limit of up to 20 per cent of the bond issue size for an individual bank.

III.41 Banks were permitted to raise funds through issuance of rupee denominated bonds overseas for the purposes of Perpetual Debt Instruments (PDI) qualifying for inclusion as Additional Tier 1 capital and debt capital instruments qualifying for inclusion as Tier 2 capital to provide a fillip to the market for the rupee denominated bonds overseas and for providing an additional avenue for Indian banks to raise capital / long-term funds. Banks were also permitted to issue rupee denominated bonds overseas for financing infrastructure and affordable housing.

Customer Protection – Limiting Liability of Customers in Unauthorised Electronic Banking Transaction

III.42 With the widespread use of electronic banking and rise in complaints relating to unauthorised / fraudulent transactions, a need was felt to have a comprehensive policy to limit the liability of customers, particularly those who are not at fault. In this regard, a set of guidelines have been issued to the banks in July 2017 for limiting the customer liability in unauthorised/ fraudulent electronic transactions.

Implementation of Indian Accounting Standards (Ind AS)

III.43 Directions were issued to SCBs (excluding RRBs) to comply with Indian Accounting Standards (Ind AS) for financial statements beginning April 01, 2018 with comparatives for the periods ending March 31, 2018 or thereafter. All-India Financial Institutions (AIFIs) (Exim Bank, NABARD, NHB and SIDBI) were also advised to follow the Ind AS for financial statements beginning April 01, 2018 (with previous year comparatives).

Building a Diversified Banking System

III.44 A discussion paper on wholesale and long-term finance banks was released in April 2017. It explores the scope of setting up more such differentiated banks alongside payments banks (PBs) and small finance banks (SFBs).

III.45 The on-tap licensing policy for universal banks and guidelines for small finance and payments banks are a further step in building a heterogeneous banking system. As different banks operate differently, they will be able to offer services to a wider range of customers, enhancing consumer welfare based on their reach, liquidity, capitalisation and market power. As part of the efforts to promote financial inclusion through a greater focus on small credit and payment / remittance facilities, the Reserve Bank issued licenses to eight small finance banks and six payments banks during 2016-17 taking the number of licensees to 10 SFBs and seven PBs. Nine SFBs and four PBs have commenced operations. PBs were also permitted to act as BCs for other banks. Separate operating guidelines were issued in October 2016 for PBs and SFBs considering the differentiated nature of their businesses and focus on financial inclusion.

Anti-Money Laundering and Combating Financing of Terrorism and Know Your Customer

III.46 Financial Action Task Force[3] (FATF) has made a series of recommendations for combating money laundering and financing of terrorism. FATF conducts Mutual Evaluation of its Members and other countries from time to time. India is a member of FATF. India's Mutual Evaluation was last conducted in the year 2010. The next Mutual Evaluation is expected to be conducted in the year 2020-21[4].

[3] FATF is an inter-government body that sets the standards for measures to counter terror financing, money laundering and other threats to international financial system.

[4] http://www.fatf-gafi.org/media/fatf/documents/assessments/Global-assessment-calendar.pdf

III.47 An important part of preparation for FATF mutual evaluation is conduct of National Risk Assessment (NRA) where risk of various sectors of the economy such as Banking, Insurance, Capital Markets, Designated Non-Financial Business and Profession (DNFBP) sectors are assessed. In this regard, the Government has set up a Working Group (WG) of its leading agencies for a NRA of various sectors, based on a methodology formed by the World Bank. The WG is assisted by various teams such as teams for banking sector, insurance sector, capital market sector, other financial institutions, DNFBPs, financial inclusion, *etc*. The exercise begins with the collection of data on sectors that are prone to money laundering. The country then has to prepare an action plan based on the level of risks identified.

III.48 The sectoral 'Working Group for Threat and Vulnerability Assessment of Banking Sector' was constituted in August 2015. The Group is chaired by the Reserve Bank and has members from various Government agencies as well as banks. Data for the exercise is being obtained from Government agencies, Regulated Entities and various Departments of the Reserve Bank in order to have a comprehensive coverage of the entire banking sector. Based on the exercise, the NRA report of the banking sector shall be finalised.

Capacity Building in Banks and AIFIs

III.49 The Committee on Capacity Building (Chairman: Shri G. Gopalakrishna) has made extensive recommendations pertaining to the overall human resource management (HRM) functions. The Committee has also made a number of recommendations for certification of staff. Banks were advised to prepare a comprehensive policy on the implementation of the Committee's recommendations for certification of staff by end-December 2016, incorporating an implementation path and monitoring plan under the supervision and monitoring of their boards.

Specialisation on Banks' Boards

III.50 In order to further align expertise in banks' boards with the changing contours of the banks' business, the fields of specialisation of directors on the boards of commercial banks (excluding RRBs) were broadened to include: (i) information technology; (ii) payment and settlement systems; (iii) human resources; (iv) risk management; and (v) business management to help bring in persons with professional knowledge and experience in these fields to the boards.

III.51 Considering the rapid innovation in banking and technology and also the crucial role of key managerial personnel such as the Chief Risk Officer (CRO), Chief Financial Officer (CFO) and the Chief Technology Officer (CTO) in the bank's risk governance structure, minimum qualifications were stipulated so that adequately qualified persons are chosen by the banks for these critical functions.

Branch Authorisation Policy

III.52 The branch authorisation policy has been extensively liberalised over the years consistent with public interest and the financial inclusion objective. During the year, in a major step towards financial inclusion, the term "Branch" has been replaced by "Banking Outlet", which includes both physical (brick and mortar) branches and Business Correspondent (BC) outlets. These 'Banking Outlets' can be manned either by the bank's staff or its BCs. Thus, the 'fixed point BC outlets' have been brought on par with the physical (brick and mortar) branches under the revised framework. This revised definition will enable banks to expand their network in remote rural areas in a cost-effective manner. Further, specific incentive has also been provided to banks for opening 'Banking Outlets' in Tier 3 to Tier 6 centres of north-eastern states, Sikkim and in left-wing extremism (LWE) affected districts by treating them as equivalent to opening banking outlets in unbanked rural centres (URC)[5]. This helps the banks in meeting the stipulation of opening 'at least 25 per cent of the total number of 'banking outlets' opened during a financial year in URCs.

VI. Supervisory Policy

Board for Financial Supervision (BFS)

III.53 The Board for Financial Supervision (BFS) constituted in November 1994 continues to exercise the role of an integrated supervisor over the financial system covering banks (both commercial and co-operative), local area banks (LABs), AIFIs, NBFCs and primary dealers (PDs). During July 2016 to June 2017, 11 meetings of the BFS were held to *inter alia* review the results of supervisory assessments of 96 banks and four AIFIs. Besides prescribing the course of action to be pursued for institution-specific supervisory concerns, BFS also provided guidance on several regulatory and supervisory policy issues.

III.54 Keeping in view the directions of the BFS, various initiatives were undertaken to strengthen the existing risk-based supervisory framework for banks. Thematic studies were conducted on areas like levy of commissions and charges by banks for various facilities availed by customers and trends in superannuation at senior level in PSBs. Best practices relating to IT infrastructure, CRILC reporting and core banking solutions were shared with commercial banks. Some of the major issues deliberated upon by the BFS include the turnaround of banks with weak financial positions, compliance culture, the need for enhanced disclosures, norms for appointing of statutory auditors, review of the prompt corrective action (PCA) and enforcement frameworks.

Developments in Risk-based Supervision

III.55 Introduced in 2012-13, the risk-based supervision under the Supervisory Programme for Assessment of Risk and Capital (SPARC) for banks operating in India has been successfully implemented over four supervisory cycles. The framework is inspired by international supervisory practices but has been conceptualised internally and developed by the Reserve Bank. It is a risk-centric forward-looking approach, which provides a comprehensive, consistent and objective basis for supervisory assessment of risk and capital using the integrated risk and impact scoring (IRISc), a proprietary risk scoring and aggregation model. By 2016-17, all SCBs operating in India (excluding RRBs and LABs) had been brought under SPARC framework.

III.56 Over the years, the Reserve Bank has been working for enhancing the efficacy and robustness of supervisory processes and improving supervisory communication. It has also undertaken a number of capacity building initiatives to sensitise banks on the importance of the risk-based approach and the SPARC framework. A variant model for small foreign banks having one/two branch operations in India was developed and implemented successfully over two years driven by the proportionality principle. The development of a suitable framework for supervising newly licensed SFBs and PBs is underway.

Revised Prompt Corrective Action (PCA) Framework for Banks

III.57 The Reserve Bank introduced the PCA framework for banks in December 2002. In

[5] An 'unbanked rural centre' (URC) is a rural (Tier 5 and 6) centre that does not have a CBS-enabled 'banking outlet' of a scheduled commercial bank, a small finance bank, a payments bank or a regional rural bank nor a branch of local area bank or licensed co-operative bank for carrying out customer-based banking transactions.

December 2014, the Sub-Committee of the Financial Stability and Development Council (FSDC-SC) directed that an early intervention mechanism in the form of a PCA framework be put in place for all regulated entities. Accordingly, an Internal Working Group was constituted by the Reserve Bank to undertake a comprehensive review of the existing PCA framework for banks, keeping in view the recommendations of the Working Group on Resolution Regimes (WGRR) for Financial Institutions in India (January 2014), the Financial Sector Legislative Reforms Commission (FSLRC) (March 2013) as well as international best practices. Capital, asset quality and profitability remain as key areas for monitoring under the revised framework. Further, leverage would be monitored in addition. The triggers for various indicators include Common Equity Tier-1 (CET1) ratio along with CRAR, the net NPA ratio, and return on assets (RoA). Certain risk thresholds have been defined – the breach of which will lead to the invocation of PCA and result in mandatory and discretionary actions as applicable. The PCA framework will apply without exception to all banks operating in India, including small banks and foreign banks operating through branches or subsidiaries. The PCA framework does not preclude the Reserve Bank of India from taking any other action it deems fit in addition to the corrective actions prescribed in the framework. The provisions of the revised PCA framework were implemented with effect from April 1, 2017, based on the financials of the banks for the year-ended March 31, 2017.

Developments in Cross-border Supervision

III.58 The Reserve Bank has made significant progress on supervisory information sharing and cooperation with banking supervisory authorities of overseas jurisdictions, entering into bilateral agreements (MoUs / Exchange of Letters on Supervisory Co-operation (EoLs) / Statement of Co-operation (SoC)) with overseas supervisors to strengthen supervisory cooperation. So far, the Reserve Bank has executed MoUs / EoLs / SoCs with 43 overseas supervisors. In addition, proposals for establishing supervisory co-operation arrangements with respect to 10 other overseas supervisors are in various stages of consideration. A framework for periodical sharing of supervisory information with respect to foreign banks operating in India with home supervisory authorities was also put in place during 2016-17.

III.59 The Reserve Bank has established supervisory colleges for State Bank of India, ICICI Bank Ltd., Bank of India, Bank of Baroda, Axis Bank Ltd., and Punjab National Bank, given their significant international presence. The main objectives of supervisory colleges are enhancing information exchange and cooperation among home and host supervisors and improving an understanding of the risk profile of the banking group thereby facilitating more effective supervision of internationally active banks. The meetings of the supervisory colleges are held once in two years.

Appointment of Statutory Central Auditors (SCAs) – Modification of Rest Period

III.60 The Rest and Rotation Policy for appointing SCAs for banks has been mandated to ensure that the audit functions are examined by a new team with a fresh perspective. The policy also aims to deter auditors and auditees from compromising adherence to audit principles. All private and foreign banks were advised on July 27, 2017 that an audit firm after completing four-year tenure in a particular private / foreign bank will not be eligible for appointment as SCA of the same bank for a period of six years.

Framework for Dealing with Loan Frauds

III.61 The process of migration of the batch processed fraud database to a web-based reporting architecture through XBRL is largely complete with banks and select financial institutions (FIs) starting the live reporting of Fraud Monitoring Returns (FMR) from April 1, 2017. Banks will submit fraud reports within the specified period in straight through processing mode, which will facilitate faster dissemination of fraud data. Banks will also update developments in fraud cases on 'as and when required' basis instead of doing it on a quarterly basis.

Inter Regulatory Forum (IRF) of Domestic Regulators

III.62 An Inter Regulatory Forum (IRF) of domestic regulators was set up with the approval of the Sub Committee of Financial Stability and Development Council (FSDC-SC) for monitoring of financial conglomerates (FCs). IRF has representation from other financial sector regulators / supervisors. A MoU was signed between regulatory authorities to facilitate the process of cooperation and exchange of information among peer regulators for strengthening the supervision of FCs and assessing risks to systemic stability.

III.63 For each FC group that has a significant presence in at least two financial market segments, a designated entity (DE) is identified by the IRF as the nodal entity to act on behalf of FC for facilitating communication and compliance with the principal regulator (PR), under whose jurisdiction the designated entity falls. The PR is solely responsible for consolidated supervision under the FC monitoring framework. The IRF coordinated oversight comprises of: i) periodic discussion meeting of all regulators with the designated entity of the FC and key group entities; and ii) submission of quarterly off-site returns (FINCON returns) to the principal regulator of the FC.

III.64 Currently, the IRF has identified a set of 11 FCs in the Indian financial sector based on their significant presence in two or more segments of the financial sector. They include five bank-led FCs, four insurance company-led FCs and two securities company-led FCs.

Supervisory Enforcement Framework

III.65 In view of the need for a unified and well-articulated supervisory enforcement policy and process, the Supervisory Enforcement Framework for action against non-compliant banks was approved by the Board for Financial Supervision. The framework should help make enforcement actions in the Reserve Bank transparent, predictable, standardised, consistent and timely and also improve overall compliance with the regulatory framework in the banking system.

III.66 As announced in the February 2017 Sixth Bi-monthly Monetary Policy Statement 2016-17, it was decided to establish a separate Enforcement Department in the Reserve Bank for developing a sound framework and processes for enforcement action. The Enforcement Department (EFD) commenced functioning on April 03, 2017.

VII. Non-Banking Financial Companies (NBFCs)

III.67 NBFCs play an important role in the Indian financial system by complementing and competing with banks and by bringing in efficiency and diversity into financial intermediation. The Reserve Bank's regulatory perimeter is applicable to companies conducting non-banking financial activity, such as lending, investment or deposit acceptance as their principal business. The regulatory and supervisory architecture is, however, focused more on systemically important non-deposit taking NBFCs (with asset size ₹5 billion and above) and deposit accepting NBFCs with light touch regulation for other non-deposit taking NBFCs. Certain categories of entities carrying out NBFI activities are exempt from the Reserve Bank's regulation as they are being regulated by other regulators. They include housing finance companies (HFCs), mutual funds, insurance companies, stock broking companies, merchant banking companies and venture capital funds (VCFs), which are often referred to as the 'shadow banking system' (Box III.1).

Box III.1: Narrow Measure of Shadow Banking

The term 'shadow bank' was coined by Paul McCulley in 2007 in the context of the US non-bank financial institutions engaged in maturity transformation. A formal definition of shadow banking was given by the Financial Stability Board (FSB) as credit intermediation involving entities and activities outside the regular banking system.

Since 2011, the FSB has been conducting an annual monitoring exercise to track developments in the shadow banking system under a two-step approach – first, to cast the net wide by considering all non-bank credit intermediation to ensure that data gathering and surveillance cover all areas where risks to the financial system might potentially arise, and thereafter, to narrow the focus for policy purposes to the subset of non-bank credit intermediation where there are developments that increase the potential for systemic risk and there are indications of regulatory arbitrage. The narrowing down methodology is based on the FSB's High-Level Policy Framework for Strengthening Oversight and Regulation of Shadow Banking Entities published in 2013.

As per the narrowing down methodology, non-bank financial entities are classified with reference to five economic functions: (1) management of collective investment vehicles with features that make them susceptible to runs; (2) loan provisions that are dependent on short-term funding; (3) intermediation of market activities that is dependent on short-term funding or on secured funding of client assets; (4) facilitation of credit creation (for example, through credit insurance); and (5) securitisation-based credit intermediation and funding of financial entities. The narrow measure of shadow banking does not include banks, insurance companies, pension funds, public financial institutions and the central bank (Table1).

Table 1: Classification of Shadow Banks based on Economic Function

Economic Function	Definition	Entity Types	Equivalent Indian Entities
EF1	Management of collective investment vehicles with features that make them susceptible to runs	Fixed income funds, mixed funds, credit hedge funds, real estate funds	
EF2	Loan provisions that are dependent on short-term funding	Finance companies, leasing companies, factoring companies, consumer credit companies	NBFCs, HFCs
EF3	Intermediation of market activities that is dependent on short-term funding or on secured funding of client assets	Broker-dealers	
EF4	Facilitation of credit creation	Credit insurance companies, financial guarantors, monolines	Mortgage guarantee companies
EF5	Securitisation-based credit intermediation and funding of financial entities	Securitisation vehicles	Securitisation/ reconstruction companies

As per the Shadow Banking Monitoring Report 2016 of the FSB, the total financial assets of the financial entities classified as shadow banking under the economic approach grew moderately by 3 per cent, *i.e.*, US$ 34.2 trillion in 27 jurisdictions as at end-2015. The US has the largest shadow banking sector representing 40 per cent of the total financial assets. Jurisdictions in the US, the UK and the euro area represented 65 per cent of the total global shadow banking at end-2015.

Based on the economic function approach, EF1 was by far, the largest among the five economic functions globally, representing US$ 22.2 trillion worth of assets at end-2015 or 65 per cent of the narrow measure. EF3 was the second largest economic function making up 11 per cent of the narrow measure, followed by EF5 (9 per cent), EF2 (8 per cent) and EF4 (0.4 per cent).

In India, EF2 constituted 99.7 per cent of the five economic functions.

References:

FSB (2013), *Policy Framework for Strengthening Oversight and Regulation of Shadow Banking Entities*, August.

FSB (2017), *Global Shadow Banking Monitoring Report 2016,* May.

New Categories of NBFCs

III.68 The NBFC segment has evolved considerably over a period of time in terms of operations, heterogeneity, asset quality, profitability and regulatory architecture. The Reserve Bank has been working on consolidating the various categories of NBFCs. At present, there are 12 categories of NBFCs[6]. The latest addition is the NBFC – Peer to Peer Lending Platform (NBFC-P2P).

III.69 Guidelines on NBFC-P2P have been issued by the Reserve Bank in October 2017. The Reserve Bank issued a discussion paper on regulation of the peer-to-peer (P2P) lending platform as a NBFC. The Government notified P2P as a NBFC activity on September 18, 2017 following which regulations were issued on October 4, 2017. The new regulations are expected to bring a major shift in crowd funding in India.

Revised Regulatory Framework for NBFCs

III.70 A revised regulatory framework for NBFCs was put in place in November 2014, which subsequently led to the issuance of regulatory directions to bridge the gap between banking and non-banking regulations. The year saw consolidation of the revised framework with focus on addressing risks, reducing regulatory arbitrage and simplifying regulations to facilitate smooth compliance culture among NBFCs. A few such measures are enumerated as under:

- Infrastructure Debt Fund-NBFCs (NBFC-IDFs) were earlier allowed to raise resources through issuance of bonds of minimum five-year maturity. To improve efficacy of the Asset Liability Management (ALM), NBFC-IDFs were allowed to raise funds through shorter tenor bonds and commercial papers (CPs) from the domestic market to the extent of up to 10 per cent of their total outstanding borrowings on April 21, 2016.
- With effect from July 28, 2016, guidelines relating to relief measures to be provided in areas affected by natural calamities were extended to NBFCs.

III.71 To address operational issues faced by NBFC-MFIs and to align with other stipulations on pricing of credit, on February 2, 2017, NBFC-MFIs were advised to use the average borrowing cost for the preceding quarter plus a margin instead of the average borrowing cost during the financial year plus a margin for computation of interest rate to be charged on loans.

III.72 Effective July 6, 2017, it was decided to extend the marketing and distribution network of the National Pension System (NPS) through NBFCs with asset size of ₹5 billion and above subject to certain conditions to maximise coverage under NPS. NBFCs will ensure that the NPS subscriptions collected by them from the public are deposited on the day of the collection (T+0 basis; with T being the date of receipt of clear funds, either by cash or any other mode).

III.73 NBFCs are increasingly outsourcing some of their operations on a continuing basis. In the process, NBFCs are exposed to various risks such as strategic risk, reputation risk, compliance risk, operational risk, legal risk, exit strategy risk, counterparty risk, country risk, contractual risk, access risk, concentration risk and systemic risk. Taking into consideration the need to put in place necessary safeguards for addressing the risks associated with outsourcing activities, guidelines on "Managing Risks and Code of Conduct in

[6] NBFCs can be divided into 12 categories, *viz.*, 1) Asset Finance Company (AFC); 2) Loan Company (LC); 3) Investment Company (IC); 4) Core Investment Company (CIC); 5) Factoring – NBFC; 6) Infrastructure Debt Fund Non-Banking Financial Company (IDF – NBFC); 7) Infrastructure Finance Company (IFC); 8) Non-Banking Financial Company-Micro Finance Institutions (NBFC-MFIs); 9) Non-Operative Financial Holding Company (NOFHC); 10) Mortgage Guarantee Companies (MGC); 11) NBFC-Account Aggregator (AA); and 12) NBFC-Peer to Peer Lending platform (NBFC-P2P).

Outsourcing of Financial Services by NBFCs" have been issued on November 9, 2017. The underlying principles behind these directions are that the regulated entity shall ensure that outsourcing arrangements neither diminish its ability to fulfil its obligations to customers and Reserve Bank nor impede effective supervision by the Reserve Bank. NBFCs have to take steps to ensure that the service provider employs the same high standard of care in performing the services as is expected to be employed by the NBFCs, if the activities were conducted within the NBFCs and not outsourced. Accordingly, NBFCs shall not engage in outsourcing that would result in their internal control, business conduct or reputation being compromised or weakened.

Asset Reconstruction Companies (ARCs)

III.74 At present there are 24 ARCs in the country, which are regulated and supervised by the Reserve Bank under the provisions of the Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest Act, 2002 (SARFAESI Act, 2002). After an amendment to the SARFAESI Act 2002 carried out in August 2016 through the Enforcement of Security Interest and Recovery of Debts Laws and Miscellaneous Provisions (Amendment) Act, 2016, securitisation companies and reconstruction companies will be known as ARCs. Some salient features brought out through the amendment are:

i. As an ARC, a sponsor is required to be a fit and proper person in accordance with the criteria as may be specified in the guidelines issued by the Reserve Bank.

ii. An ARC is required to obtain prior approval of the Reserve Bank for appointing any director on its board of directors or as managing director or chief executive officer.

iii. The scope of funding by way of investment in security receipts (SRs) has been expanded by including non-institutional investors, which may be specified by the Reserve Bank in consultation with SEBI.

iv. The Reserve Bank's statutory powers to formulate directions on: (i) the fee and other charges, which may be charged or incurred for management of financial assets acquired by any ARC; and (ii) transfer of SRs issued by qualified buyers have been strengthened.

v. The Reserve Bank has been empowered to carry out audit and inspection of the ARCs. It has also been empowered to remove the chairman or any director or appoint additional directors on the board of directors of an ARC or appoint any of its officers as an observer to observe the working of the board of directors of such an ARC.

vi. The amount of penalty on the defaulting ARCs for failure to comply with any direction issued by the Reserve Bank has been substantially enhanced.

vii. The Reserve Bank has been designated as both the Adjudicating Authority and the Appellate Authority for imposing penalties on ARCs.

viii. No secured creditor, including ARCs, are entitled to exercise the rights of enforcement of securities under Chapter III of the SARFAESI Act, 2002 unless the security interest created in its favour by the borrower has been registered with the Central Registry.

III.75 Keeping in view the greater role envisaged for ARCs in resolving stressed assets, the minimum net owned fund requirement for ARCs was raised by the Reserve Bank from ₹0.02 billion to ₹1 billion with effect from April 28, 2017. 15 ARCs were inspected in the year 2015-16 and 10 in 2016-17.

Harmonisation in Regulatory and Supervisory Policies

III.76 Non-Banking Financial Company – Micro Finance Institution (NBFC-MFI) was introduced as a new category of NBFC in December 2011. During 2014-15 and 2015-16, a number of new NBFCs-MFI were registered and the sector showed healthy growth in total assets. It was, therefore, decided to put in place a system of inspection for these companies. Accordingly, 46 MFIs were inspected during 2015-16 and 36 in 2016-17.

III.77 A formal PCA framework was introduced for NBFCs on March 30, 2017. The framework envisages corrective action for NBFCs that will be triggered once an NBFC exhibits weaknesses in its financials in terms of capital strength, profitability or asset quality. NBFCs brought under PCA will be required to formulate and implement a corrective action plan.

III.78 A comprehensive information technology framework for NBFCs was issued on June 8, 2017, which contains guidelines for systemically important NBFCs (asset size greater than ₹5 billion) on IT governance, information and cyber security, IT risk assessment, change management, IS audit, business continuity planning (BCP) and IT services outsourcing. The guidelines are to be adopted by systemically important NBFCs by June 30, 2018. Along with these, a different and simpler set of IT guidelines were also issued for smaller NBFCs (asset size less than ₹5 billion) covering BCP, adequacy to file returns, management information systems and user policies.

VIII. Customer Service / Customer Protection in Banks

III.79 A significant initiative in the area of consumer education and protection was the operationalisation of the Charter of Customer Rights. The Reserve Bank had advised banks to formulate either an exclusive Customer Rights Policy keeping the spirit of the Charter intact or dovetail the existing customer service policies suitably to integrate the Charter and its tenets with the approval of the board. During 2016-17, all banks confirmed that their customer service policies were accordingly fine-tuned to incorporate the principles of the Charter of Customer Rights. In consultation with the Indian Banks' Association (IBA), the Reserve Bank also reviewed and standardised 10 most commonly used forms by bank customers. The IBA released standard specimens of these forms during the year to banks for implementation.

III.80 After a review of the criteria for determining customer liability in unauthorised electronic banking transactions, final guidelines on customer protection – limiting the liability of customers were issued on July 6, 2017. Taking into consideration the need to prevent misuse of the cheque drawing facility and avoiding penalising customers for unintended dishonour of cheques, all SCBs (including RRBs) were advised to have in place an appropriate and transparent policy approved by the board or its committee with respect to dishonour of cheques. Banks were advised to provide adequate relevant details of transactions in the passbooks and / or statements of accounts and also incorporate information about deposit insurance cover along with the limit of coverage upfront in passbooks.

Revision of the Banking Ombudsman Scheme

III.81 A comprehensive review of the Banking Ombudsman (BO) Scheme was undertaken in 2015-16 and an amended scheme came into effect from July 1, 2017 incorporating changes relating to the pecuniary jurisdiction of the BO, compensation and introduction of additional grounds of complaint on mis-selling and electronic and mobile banking. The Reserve Bank also opened and operationalised five new offices of the BO in Dehradun, Jammu, Ranchi, Raipur and an additional office in New Delhi. The total number of BO offices has now reached 20.

III.82 The Reserve Bank is in the process of setting up an Ombudsman Scheme for NBFCs, which will initially cover all deposit-taking NBFCs and also those with customer interface and asset size of ₹1 billion and above. ARCs, infrastructure finance companies, infrastructure debt funds, core investment companies and NBFC-Factors will not be covered under the scheme for the time being. Based on experience, the coverage of the Ombudsman Scheme may be reviewed over time.

Complaint Management System

III.83 In addition to complaints being received in the offices of BOs, the Reserve Bank also receives complaints against regulated entities from their customers through the consumer education and protection cells (CEPCs) set up in every office. The Reserve Bank has initiated the setting up of a comprehensive complaint management system (CMS) with a view to harnessing IT for managing the increasing volume of complaints that it receives. This web-based application will integrate the grievance redressal mechanism in the Reserve Bank on a single IT platform to bring about better coordination and effectiveness and this will also help the Reserve Bank to manage the complaints more efficiently and also provide a robust management information system (MIS).

III.84 On receiving reports that banks were discouraging or turning away senior citizens and differently-abled persons from availing banking facilities in branches, banks were instructed to put in place explicit mechanisms for meeting the needs of such persons so that they do not feel marginalised. Instructions in this regard were issued in November 2017.

IX. Payment and Settlement Systems

III.85 The Reserve Bank's continued efforts towards migrating to a 'less-cash society' with wider adoption of electronic payments gained momentum during 2016-17. With the rapid advancement of technology and the advent of new developments and innovations in the payment landscape, the Reserve Bank enhanced its focus on the safety and resilience of the payment systems to ensure the smooth functioning of critical and systemically-important payment and settlement systems.

Cyber Risk and Cyber Security

III.86 The Reserve Bank performed a comprehensive IT examination of major banks to assess their cyber risk resilience and response. The Reserve Bank is also setting up a fully-owned subsidiary – the Reserve Bank Information Technology Private Limited (ReBIT) – that will only focus on the cyber security needs of the Reserve Bank and its regulated entities. ReBIT will: (i) carry out research in the area of cyber security, (ii) help the Reserve Bank monitor its networks, including RTGS and NEFT, (iii) help the Reserve Bank monitor computer systems of banks and their cyber security mechanisms during its regular inspections, and (iv) undertake specialised projects for the Reserve Bank on cybersecurity. Guidelines on cyber security frameworks in banks were issued by the Reserve Bank on June 2, 2016, which *inter alia*, require banks to have a board approved cyber security policy, a cyber-crisis management plan, gap assessment *vis-à-vis* the baseline requirements indicated in the guidelines, robust vendor risk management and reporting of unusual cyber security incidents within 2-6 hours. An inter-disciplinary Standing Committee on Cyber Security is being constituted to review the threats inherent in existing / emerging technologies, study adoption of various security standards / protocols and interface with stakeholders and suggest appropriate policy interventions to strengthen cyber security and resilience.

Payments System

III.87 Trade Receivables Discounting System (TReDS) is an institutional mechanism for facilitating the financing of trade receivables of MSMEs payable by corporate buyers through multiple financiers. All the three entities: Receivables Exchange of India Limited (formed by NSE Strategic Investment Corporation Limited and Small Industries Development Bank of India), Mynd Solutions Pvt Ltd and A. TREDS Limited (joint venture of Axis Bank and Mjunction Services Ltd), were issued final Certificate of Authorisation and have commenced operations. To support the settlement obligations emanating from these systems, the many-to-many settlement feature has also been enabled in the National Automated Clearing House (NACH) operated by the National Payments Corporation of India (NPCI).

III.88 As on November 2, 2017, 55 non-bank entities and 56 banks are permitted to issue and operate the payments system for pre-paid payment instruments (PPIs). In light of the developments in the field and with a view to foster innovation and competition, ensure safety and security, customer protection, *etc.*, a comprehensive review of all the instructions relating to the issuance and operation of PPIs was undertaken and Master Direction (MD) on the subject was issued on October 11, 2017. The MD gives a path for implementation of interoperability of PPIs including non-bank PPIs.

III.89 The Unified Payments Interface (UPI), for mobile banking transactions provides twin benefits of convenience of operations for customers (providing just a registered virtual address instead of details of bank accounts for making / receiving payments) and enabling merchant 'pull' payments. It is application-based and usable on smartphones with internet access. During the year, NPCI was given approval to go live for UPI. NPCI was also accorded approval to introduce USSD 2.0 (*99#) mobile banking facility (which can be used on any handset and does not require internet connection by the customers), which is integrated with the UPI.

III.90 In line with one of the major objectives of Vision-2018 for the payment and settlement systems and with a view to encourage innovative payment solutions in the country, instructions were issued to authorised card networks in the country in September 2016 for enabling interoperability in Quick Response (QR) based card payments. Subsequently, the QR code based acceptance infrastructure was expanded to facilitate payments based on UPI virtual address, Aadhaar number and Account Number + IFSC. This was launched as Bharat QR in February 2017.

III.91 In-principle approval has been accorded to NPCI to launch a pilot of BHIM-Aadhaar Pay to provide a channel for customers to make digital payments using their Aadhaar-seeded bank accounts at merchant locations. BHIM-Aadhaar Pay is a smart phone-based application. The transactions are processed as part of the existing Aadhaar Enabled Payment System (AEPS) with a separate transaction type assigned to them.

III.92 Additional settlements in the National Electronic Funds Transfer (NEFT) system at half-hour intervals were introduced on July 10, 2017 to enhance the efficiency of the system and add to customer convenience. The half-hourly settlements speed up the funds transfer process and provide faster credit to destination accounts.

X. Banking Sector Legislations

The Banking Regulation (Amendment) Act, 2017

III.93 The Banking Regulation (Amendment) Act, 2017 has amended the Banking Regulation Act, 1949, which has *inter alia* conferred power upon the Central Government for authorising the Reserve Bank to issue directions to any banking company or banking companies to initiate insolvency resolution process in respect of a default, under the provisions of the Insolvency and Bankruptcy Code, 2016. The said amendment specifically empowered the Reserve Bank to issue directions to banking companies for resolution of stressed assets and also allow the Reserve Bank to specify one or more authorities or committees to advise banking companies on resolution of stressed assets.

Amendments to the Payment and Settlement Systems Act, 2007

III.94 The Finance Act, 2017 amended certain provisions of the Payment and Settlement Systems Act, 2007. The amendment provides that the Payments Regulatory Board will exercise functions relating to the regulation and supervision of payments and settlement systems under the Act instead of the existing Board for Regulation and Supervision of Payments and Settlement. The new Board shall have the Governor of the Reserve Bank as Chairperson.

The Specified Bank Notes (Cessation of Liabilities) Act, 2017

III.95 The act, *inter alia*, provides for specified bank notes (SBNs)[7] to cease to be liabilities of the Reserve Bank or the Central Government, exchange of SBNs and prohibition on holding, transferring or receiving SBNs, penalty *etc*.

Aadhaar (Targeted Delivery of Financial and Other Subsidies, Benefits and Services) Act, 2016

III.96 The Aadhaar (Targeted Delivery of Financial and Other Subsidies, Benefits and Services) Act, 2016 provides for targeted delivery of subsidies and services to individuals residing in India by assigning them unique identity numbers called Aadhaar numbers.

XI. Overall Assessment

III.97 During the year there was continued emphasis on improving the institutional framework for a sound banking system in the country. A multi-pronged approach was used to collectively address the problem of stressed assets in the system. The risk-based supervisory process of the Reserve Bank flags risks arising out of weak credit discipline and it suggests remedial actions. The new Enforcement Department in the Reserve Bank has been mandated to develop a rule-based, consistent framework to deal with breaches of law, rules and directions. Effective deterrence enforced through such actions is expected to contribute to the strengthening of the overall credit culture. The PCA system under which specific regulatory actions are taken by the Reserve Bank if banks breach certain trigger points was revised to ensure timely supervisory action.

III.98 Important policy measures were initiated during the year to make the payment and settlement systems more robust and customer-friendly and for moving payment transactions from cash / paper modes to electronic modes. Implementation of Ind AS and the Basel III framework will be areas of focus during 2017-18. The Reserve Bank also envisages steps for improving financial literacy levels including implementing Tier II of the capacity building programmes for financial literacy counsellors and bank branch heads in rural areas. Moving forward, the focus of the Reserve Bank will be on financial stability and financial inclusion combined with a vigil of systemic risks and risks arising out of global financial interconnectedness so as to ensure a healthy, resilient and inclusive banking sector.

[7] The term “specified bank note” means a bank note of the denominational value of ₹500 or ₹1,000 of the series existing on or before the 8th day of November, 2016.

Chapter IV

Insolvency and Bankruptcy Code and Bank Recapitalisation

The enactment of the Insolvency and Bankruptcy Code, 2016 and the announcement of the recapitalisation plan for the public sector banks are likely to have far-reaching implications for the banking sector. Both will likely contribute to a stronger and more resilient banking sector in India.

I. Introduction

IV.1 The fulcrum of a robust and resilient banking sector is a comprehensive bankruptcy regime. It enables a sound debtor-creditor relationship by protecting the rights of both, by promoting predictability and by ensuring efficient resolution of indebtedness. A watershed development in India in this context is the enactment of the Insolvency and Bankruptcy Code (IBC) in May 2016.

IV.2 An allied development and logical concomitant is bank recapitalisation. In view of the impending move towards the full implementation of Basel III requirements and the need to meet the credit demands of a growing economy, buffering up the capital position of public sector banks has assumed priority.

IV.3 Against this backdrop, Section II analyses the salient features of the IBC 2016 with some insights derived from the cross-country experience. Recapitalisation of public sector banks is addressed in Section III in the milieu of cross-country comparisons and India's own historical experience with recapitalisation in the 1990s. Concluding observations are set out in Section IV.

II. Insolvency and Bankruptcy Code, 2016

IV.4 In India, the extant legal and institutional machinery for dealing with debt default, either through the Indian Contract Act, 1872 or through special laws such as the Recovery of Debts Due to Banks and Financial Institutions Act, 1993 and the Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest (SARFAESI) Act, 2002 has not been utilised well by banks. Similarly, action through the Sick Industrial Companies (Special Provisions) Act, 1985 and the winding up provisions of the Companies Act, 1956 have neither aided prompt recovery by lenders nor swift restructuring of indebted firms.

IV.5 In this setting, a landmark development is the IBC, 2016 enacted and notified in the Gazette of India in May 2016. It becomes the single law that deals with insolvency and bankruptcy by consolidating and amending various laws relating to reorganisation and insolvency resolution. The IBC covers individuals, companies, limited liability partnerships, partnership firms and other legal entities as may be notified (except financial service providers) and is aimed at creating an overarching framework to facilitate the winding up of business or engineering a turnaround or exit. The IBC aims at insolvency resolution in a time-bound manner (180 days, extendable by another 90 days under certain circumstances) undertaken by insolvency professionals.

Salient Features of IBC, 2016

IV.6 The institutional infrastructure under the IBC, 2016 rests on four pillars, *viz.*, insolvency professionals; information utilities; adjudicating authorities (National Company Law Tribunal (NCLT) and Debt Recovery Tribunal (DRT)); and the Insolvency and Bankruptcy Board of India

(IBBI). Under the provisions of the Code, insolvency resolution can be triggered at the first instance of default and the process of insolvency resolution has to be completed within the stipulated time limit.

IV.7 The first pillar of institutional infrastructure is a class of regulated persons – the 'Insolvency Professionals'. They assist in the completion of insolvency resolution, liquidation and bankruptcy proceedings and are governed by 'Insolvency Professional Agencies', who will develop professional standards and code of ethics as first level regulators.

IV.8 The second pillar of institutional infrastructure are 'Information Utilities', which would collect, collate, authenticate and disseminate financial information. They would maintain electronic databases on lenders and terms of lending, thereby eliminating delays and disputes when a default actually takes place.

IV.9 The third pillar of the institutional infrastructure is adjudication. The NCLT is the forum where cases relating to insolvency of corporate persons will be heard, while DRTs are the forum for insolvency proceedings related to individuals and partnership firms. These institutions, along with their Appellate bodies, *viz.*, the National Company Law Appellate Tribunal (NCLAT) and the Debt Recovery Appellate Tribunal (DRAT), respectively, will seek to achieve smooth functioning of the bankruptcy process.

IV.10 The fourth pillar is the regulator, *viz.*, 'The Insolvency and Bankruptcy Board of India'. This body has regulatory oversight over insolvency professionals, insolvency professional agencies and information utilities.

IV.11 For individuals, the Code provides for two distinct processes, namely, "Fresh Start" and "Insolvency Resolution", and lays down the eligibility criteria for these processes. The Code also establishes a fund (the Insolvency and Bankruptcy Fund of India) for the purposes of insolvency resolution, liquidation and bankruptcy of persons. A default-based test for entry into the insolvency resolution process permits quick intervention when the corporate debtor shows early signs of financial distress.

IV.12 On the distribution of proceeds from the sale of assets, the first priority is accorded to the costs of insolvency resolution and liquidation, followed by the secured debt together with workmen's dues for the preceding 24 months. Central and State Governments' dues are ranked lower in priority. The code proposes a paradigm shift from the existing 'debtor in possession' to a 'creditor in control' regime. Priority accorded to secured creditors is advantageous for entities such as banks.

IV.13 When a firm defaults on its debt, control shifts from the shareholders / promoters to a Committee of Creditors to evaluate proposals from various players about resuscitating the company or taking it into liquidation. This is a complete departure from the experience under the Sick Industrial Companies Act under which delays led to erosion in the value of the firm.

IV.14 Empirical evidence shows that a conducive institutional environment and an appropriate insolvency regime are key factors in recovery of stressed assets, apart from loan characteristics (Box IV.1).

IV.15 In order to further strengthen the insolvency resolution process, the Government has notified The Insolvency and Bankruptcy Code (Amendment) Ordinance, 2017 on November 23, 2017. The Ordinance provides for prohibition of certain persons from submitting a resolution plan and specifies certain additional requirements for submission and consideration of the resolution plan before its approval by the committee of creditors.

Box IV.1: Recovery of NPAs – Role of Different Factors

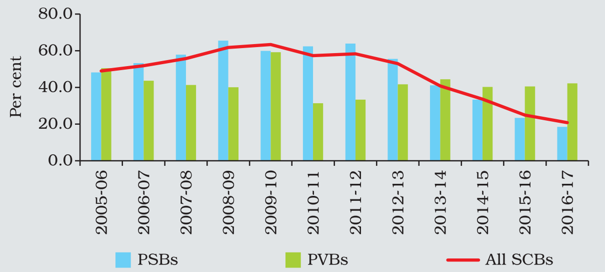
During 2015-17, the average recovery ratio[1] of Indian banks was 26.4 per cent with recovery by private sector banks (PVBs) (41.0 per cent) being much higher than by public sector banks (PSBs) (25.1 per cent). During this period, the average amount recovered through various existing legal recovery channels, *i.e.*, SARFAESI Act 2002, DRTs and Lok Adalats was only 10.8 per cent of the total amount involved (Charts 1 and 2).

Various micro (loan specific) and macro (economy specific) factors have been identified as determinants of recovery of stressed assets – higher quota of collateral; the size of the company (Grunert and Weber, 2009); the state of the business cycle (Frye, 2000); and growth in GDP and loan supervision (Dermine, *et al.*, 2006; Bello, *et al.*, 2013). In the case of India, recovery of bad loans was found to be positively associated with secured loans, term loans and banks' exposure to real estate (Misra, *et al.*, 2016).

Panel data regression on recovery (measured as reduction in NPAs) at the bank level[2] using a random effects model for a set of 71 banks for the period 2001-17 shows that a high proportion of secured loans and term loans, improvement in the insolvency regime, availability of alternative sources of funds such as debentures issued by corporates and an easing of the monetary policy stance improve the recovery of stressed assets. Factors such as term loans or secured loans assume importance in case of PSBs whereas the ability to raise resources from alternative sources like debentures matter in the case of PVBs. Moreover, loan write-offs, the insolvency environment and the macroeconomic environment were found to be equally important for both the bank groups.

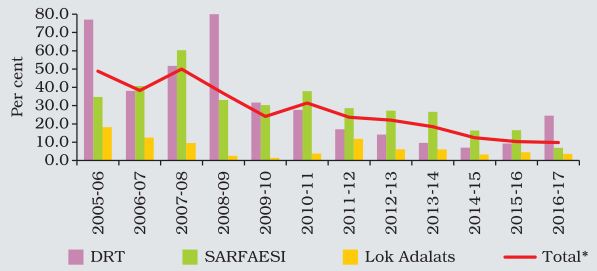
In liquidation proceedings, IBC, 2016 provides secured creditors the right to choose between (i) enforcing / realising/ settling / compromising / dealing with their security interests and applying the proceeds to recover the debts due to it, or (ii) relinquishing rights on these assets to the liquidation trust and receiving the proceeds obtained from the liquidator's sale of assets. It also provides for the contingency that the secured creditor may not be able to recover all the debt through the proceeds obtained from the sale of encumbered assets. Such creditors find a place in the liquidation waterfall, *albeit* junior to unsecured creditors and other secured creditors, and may get back additional amounts through proceeds of overall liquidation. The time-bound and creditor-friendly nature of the process are expected to raise the level of bank recovery going forward.

Chart 1: Recovery of GNPAs*



*: Refers to reduction in GNPAs during the year as percentage of GNPAs at the beginning of the year.
Source: Statistical Tables Relating to Banks in India and Report on Trend and Progress of Banking in India.

Chart 2: Recovery under Various Schemes



*: Recovered amount as percentage of outstanding amount under various recovery channels.
Source: Statistical Tables Relating to Banks in India and Report on Trend and Progress of Banking in India.

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Dermine, J. and C. Neto de Carvalho (2006), "Bank Loan Losses-given-default: A Case Study," *Journal of Banking & Finance*, No. 30, pp 1219–43.

Frye, J. (2000), "Depressing Recoveries," *Policy Studies*, Federal Reserve Bank of Chicago, October.

Grunert, Jens and Martin Weber (2009), "Recovery Rates of Commercial Lending: Empirical Evidence for German Companies," *Journal of Banking & Finance*, No. 33, pp 505–13.

Misra, Rekha, Rajmal and Radheshyam Verma (2016), "Determinants of Recovery of Stressed Assets in India: An Empirical Study", *Economic & Political Weekly*, Vol. 51, Issue No. 43, 22 October.

[1] Reduction in GNPAs during the year to outstanding GNPAs at the beginning of the year.

[2] $$\underset{}{\text{NPA reduction}_{it}} = \underset{(0.16)}{-0.387} + \underset{(0.049)^{***}}{0.696}\ \text{Termloan}_{it} - \underset{(0.048)^{**}}{0.103}\ \text{Unsecured}_{it} + \underset{(0.006)^{***}}{0.024}\ \text{Insolvency}_{it} + \underset{(0.041)}{0.037}\ \text{Debenture}_{it} - \underset{(0.009)}{0.013}\ \text{Callrate}_{it} + \varepsilon_{it}$$

R^2(overall) = 0.72. Figures in parentheses are robust standard errors. ***: $p<0.01$; **: $p<0.05$.

Bankruptcy Practices: A Cross-Country Comparison[3]

IV.16 Bankruptcy regimes vary across countries, ranging from debtor-friendly ones in France and Italy to creditor-friendly ones in the UK, Sweden and Germany. While reorganisation is generally considered to favour debtors, liquidation primarily protects creditors. The insolvency and the debt resolution regime in the US can be classified as a hybrid one, with well-defined laws and procedures for both liquidation (Chapter 7) and restructuring (Chapter 11). Reorganisation and insolvency resolutions across a few advanced and emerging economies provide an interesting backdrop for evaluating the Indian initiative.

IV.17 **Pre-packaged rescue**: The US and the UK allow pre-packaged rescue in which the debtor company and its creditors conclude an agreement for the sale of the company's business prior to the initiation of formal insolvency proceedings. The actual sale is executed on the commencement of the bankruptcy proceedings. In India such a pre-packaged rescue is not allowed without the involvement of the court or the NCLT.

IV.18 **Initiation of bankruptcy**: The US does not require proof of insolvency for a company to undergo rescue procedures under Chapter 11 of the Bankruptcy Code. In the UK, if a creditor wants to initiate a bankruptcy proceeding, it needs to produce clear evidence that an undisputed amount is due and a statutory demand has to be filed on the debtor. In India, a financial creditor, an operational creditor or the corporate debtor itself may initiate the corporate insolvency resolution process on default of ₹0.1 million and above. In some countries like Australia, Canada, Greece, Brazil and Russia, creditors may file only for liquidation. In the US, the UK, France, Germany, South Africa and China, creditors may file for both restructuring and liquidation.

IV.19 **Management of the company**: The US follows a debtor-in-possession regime in which the debtor retains management control of the company and has the exclusive right to propose a plan of reorganisation during the first 120 days. In the UK, the administrator takes over the management of the company. The administrator plays a central role in the rescue process and has the power to do anything necessary or expedient for the management of the affairs, business and property of the company. In India, the powers of the board of directors of the corporate debtor are suspended and the Adjudicating Authority (*i.e.*, NCLT) appoints an interim resolution professional. From that date, the management of the affairs of the corporate debtor vests in the interim resolution professional. A committee of creditors will approve the appointment of the interim resolution professional within 30 days of his/her appointment by the Adjudicating Authority, and subsequently approved by the Committee of Creditors with a majority vote of not less than 75 per cent of the creditors by value.

IV.20 **Scheme of rehabilitation**: In the US, each class of impaired creditors needs to consent to the resolution plan through a vote of two-thirds of that class in volume and half the allowed claims.

[3] Material for preparing this sub-section has been drawn from

i. Adalet McGowan, M. and D. Andrews (2016), "Insolvency Regimes and Productivity Growth: A Framework for Analysis", *OECD Economics Department Working Papers* No. 1309.

ii. Bolton, Patrick (2003), "Towards a Statutory Approach to Sovereign Debt Restructuring: Lessons from Corporate Bankruptcy Practices around the World", *IMF Staff Paper*, WP/03/13.

iii. Cirmizi, Elena, Leora Klapper and Mahesh Uttamchandani (2010), "The Challenges of Bankruptcy Reform", *World Bank Policy Research Working Paper* 5448, October.

iv. Government of India (2015), "Interim Report of the Bankruptcy Law Reform Committee", Ministry of Finance.

The US Bankruptcy Code also provides for 'cram down' of dissenting creditors. In the UK, acceptance of the proposal requires a simple majority (by value) of the creditors present and voting. In Germany, the plan needs to be approved by each class of creditors. In France, two committees of creditors plus a bond holders' committee are established. One creditor committee consists of all financial institutions that have a claim against the debtor and the second creditors committee consists of all the major suppliers of the debtor. Consent must be given by each committee and requires approval of two-thirds in value of those creditors who exercise their voting rights. In India, the resolution professional constitutes a committee of creditors comprising of financial creditors (excluding those that would classify as related parties to the corporate debtor) after evaluating all claims received against the corporate debtor. All material decisions taken by the resolution professionals such as sale of assets, raising interim funding and creation of security interest have to be approved by the creditors' committee. All decisions of the creditors' committee have to be approved with a majority vote of not less than 75 per cent by value of financial creditors.

IV.21 **Moratorium**: In the US, the bankruptcy law provides for an automatic moratorium on the enforcement of claims against the company and its property upon filing of a Chapter 11 petition. Similarly, the UK provides for an interim moratorium during the period between the filing of an application to appoint an administrator and the actual appointment. These moratoriums are intended to prevent a race by creditors to collect their claims, which may precipitate liquidation of the company. In India, the IBC provides for an automatic moratorium of 180 days against any debt recovery actions by the creditors, extendable by 90 days in exceptional cases. In Singapore and Brazil, the moratorium holds till the entire resolution plan is approved.

IV.22 **Rescue financing and grant of super-priority**: In most jurisdictions, the grant of super-priority for rescue financing is allowed either through specific legislative provisions or judicial interpretation. The breakup of economically valuable businesses is primarily due to the debt overhang. To address this issue, the Bankruptcy Code of the US provides for the possibility of 'super-priority' being granted to creditors who provide finance to companies in distress. The UK does not provide for super-priority funding. India's IBC also does not provide for super-priority funding.

IV.23 **Priority rules**: Similar to the US, Finland and Chile, costs associated with insolvency proceedings have the first claim in case of liquidation of assets under India's IBC. In countries such as the UK, Germany, France and Portugal, however, secured creditors have the first claim. In India, this is possible only after the costs associated with insolvency proceedings have been repaid. In Australia, Norway, Greece, Mexico and Colombia, employees' salaries have the first claim in the order of priority. In India's IBC, workmens' compensations appear after costs associated with insolvency proceedings, *pari passu* with secured creditors in the waterfall of payments in liquidation, followed by unsecured creditors.

The Progress under IBC so far

IV.24 An analysis of the transactions under the corporate insolvency resolution process indicates that the pace of admitted cases to the IBC has picked up with time (Table IV.1).

IV.25 Another interesting insight is that operational creditors have been the most aggressive in the initiation of corporate insolvency proceedings, though the number of financial creditors approaching the Board for resolution has also been increasing (Table IV.2).

IV.26 The IBBI notified the IBBI (Voluntary Liquidation Process) Regulations, 2017 on March

Table IV.1: Transactions under Corporate Insolvency Resolution Process

Quarter	Number of Corporates Undergoing Resolution at the beginning of the Quarter	Admitted	Closure by			Number of Corporates undergoing Resolution at the end of the Quarter
			Appeal/ Review	Approval of Resolution Plan	Commencement of Liquidation	
January-March 2017	0	37	1	-	-	36
April-June 2017	36	125	10	-	-	151
July-September 2017	151	214	3	2	7	353

Source : Insolvency and Bankruptcy Board of India, Quarterly Newsletter for July-September 2017.

31, 2017 which enable a corporate to liquidate itself voluntarily if it has no debt or if it is able to pay its debt in full from the proceeds of the assets to be sold under the liquidation. In pursuance of these Regulations, corporates are also tapping this route for voluntary liquidation.

IV.27 The success of the IBC hinges on the development of a supportive environment consisting of trained insolvency professionals. The registration of trained insolvency professionals has gathered pace in the recent period, with the highest registrations being accounted for by the northern region (Table IV.3).

IV.28 In addition to the progress made under various parameters, facilitating measures undertaken by the Reserve Bank and the SEBI are also expected to provide a boost to the resolution process. The Reserve Bank amended the Credit Information Companies (CIC) Regulation, 2006 on August 11, 2017 to allow resolution professionals to get access to credit information with CICs on the corporate debtor. The amended regulations also allow information utilities to access information as specified users.

Table IV.2: Initiation of Corporate Insolvency Transactions

Quarter	Initiated by			Total
	Financial Creditor	Operational Creditor	Corporate Debtor	
January-March 2017	9	7	21	37
April-June 2017	31	59	35	125
July-September 2017	82	101	31	214

Source: Insolvency and Bankruptcy Board of India, Quarterly Newsletter for July-September 2017.

IV.29 The SEBI amended the SEBI (Substantial Acquisition of Shares and Takeovers) Regulations, 2011 on August 14, 2017 to provide exemption from open offer obligations for acquisition, pursuant to resolution plans approved under the Code. It also amended the SEBI (Issue of Capital and Disclosure Requirements) Regulations, 2009 on the same day to exempt preferential issue of equity shares made in terms of the resolution plan approved under the Code from norms relating to preferential issue norms such as pricing and disclosures.

IV.30 Subsequent to the enactment of the IBC, the Banking Regulation Act, 1949 was amended[4] to empower the Reserve Bank to issue directions to any banking company or banking companies to initiate insolvency resolution in respect of a default under the provisions of the IBC. It also enables the Reserve Bank to issue directions with respect to stressed assets and specify one or more authorities or committees with such members as the Reserve Bank may appoint or approve for appointment to advise banking companies on resolution of stressed assets.

IV.31 Subsequent to promulgation of the Banking Regulation (Amendment) Act, 2017, the Reserve Bank has taken several steps to hasten

[4] *Vide* Banking Regulation (Amendment) Ordinance, 2017 (the Ordinance), subsequently enacted as Banking Regulation (Amendment) Act, 2017.

Table IV.3: Progress in Registration of Insolvency Professionals (As on September 30, 2017)

City/Region	Enrolled with			Total
	The Indian Institute of Insolvency Professionals of ICAI	ICSI Insolvency Professionals Agency	Insolvency Professional Agency of Institute of Cost Accountants of India	
Delhi	131	103	29	263
Rest of the Northern Region	101	67	16	184
Mumbai	133	53	16	202
Rest of the Western Region	81	44	7	132
Chennai	28	27	3	58
Rest of the Southern Region	67	57	16	140
Kolkata	72	15	6	93
Rest of the Eastern Region	26	5	4	35
All India	**639**	**371**	**97**	**1107**

ICAI: Institute of Chartered Accountants of India.
ICSI: Institute of Company Secretaries of India.
Source : Insolvency and Bankruptcy Board of India, Quarterly Newsletter for July-September 2017.

the process of resolution of large value stressed accounts. The Overseeing Committee (OC) was reconstituted under the aegis of the Reserve Bank with an expanded strength of five members. The Framework for Revitalising Distressed Assets in the Economy was strengthened to address some of the inherent agency and incentive failures:

i. Consent required for approval of a proposal was changed to 60 per cent by value instead of 75 per cent earlier with a view to facilitating decision making in the joint lenders' forum (JLF);

ii. Banks which were in the minority on proposals approved by the JLF are required to either exit by complying with the substitution rules within the stipulated time or adhere to the decision of the JLF;

iii. Participating banks have been mandated to implement the decision of the JLF without any additional conditionality; and

iv. Boards of banks were advised to empower their executives to implement JLF decisions without further reference to them, with non-adherence inviting enforcement actions.

IV.32 An Internal Advisory Committee (IAC) constituted by the Reserve Bank decided on an objective, non-discretionary framework for referring some of the large stressed accounts for resolution under the IBC. Based on the IAC's recommendations, the Reserve Bank issued directions on June 13, 2017 to certain banks for referring some accounts with fund and non-fund based outstanding amounts greater than ₹50 billion – with 60 per cent or more qualifying as non-performing as on March 31, 2016 – to initiate insolvency processes under the IBC, 2016. As regards other non-performing accounts which did not qualify under the above criteria for immediate reference under the IBC, banks should finalise a resolution plan within six months. In cases where a viable resolution plan is not agreed upon within six months, banks should file for insolvency proceedings under the IBC.

III. Recapitalisation of Banks

IV.33 Recapitalisation of banks has been a deliberate policy response the world over to repair banks' balance sheets and potentially increase their ability to expand their credit, including in periods of stress. Equity purchases, subordinated debt or unrequited injections of cash or bonds (negotiable or non-negotiable) by governments have been undertaken. If asset values and corporate earnings are temporarily low but will recover as credit growth picks up and the economy strengthens, then support through (temporary) government capital injections provides a lifeline for potentially viable banks to survive the pangs of balance sheet distress.

A Snapshot of Country Practices

IV.34 Countries have devised various strategies for dealing with the stock problem related to stressed assets and for recapitalising their banking sectors.

IV.35 In 1995-96, non-tradable bonds with 10-year maturity were issued in Mexico by FOBAPROA, (Fondo Bancario de Protección al Ahorro; "Banking Fund for the Protection of Savings"), a bank restructuring agency, to purchase bad assets of banks. Income from NPAs was used to redeem FOBAPROA paper. At maturity, banks wrote off 20-30 per cent of FOBAPROA paper outstanding. The Government covered the balance. In Korea, the Korean Asset Management Company (KAMCO) issued tradable bonds in 1998-99 to purchase banks' bad assets and equities[5].

IV.36 During 1998-99, zero coupon bonds with market-based yield were issued by Danaharta, a government owned asset management company (AMC) in Malaysia, to finance the purchase of banks' bad assets. Further, Danamodal, a special purpose vehicle (SPV) of the Bank Negara Malaysia (BNM), was established in 1998 to assess recapitalisation requirements of banks, undertake the recapitalisation exercise, restructure the affected institutions and monitor performance. Bank Negara Malaysia provided the initial seed capital of RM 1.5 billion. Danamodal injected capital into banking institutions after the institutions had sold their NPAs to Danaharta, but only to viable banking institutions, based on an assessment and diligent review by financial advisers. The capital injection was in the form of equity or hybrid instruments.

IV.37 In Thailand, the Government issued recapitalisation bonds in 1999-2000 to purchase bank equity. The bonds were tradable. Non-tradable recapitalisation bonds were also issued to purchase bank debentures. Both were of maturity of 10 years with market-related fixed interest rates.

IV.38 In the aftermath of the global financial crisis, several developed countries announced comprehensive rescue packages involving some combination of recapitalisation, debt guarantees and asset purchases. Capital injections in the Netherlands amounted to 5.1 per cent of GDP in 2008, in the UK (3.4 per cent), US (2.1 per cent), France (1.4 per cent) and Japan (0.1 per cent). Country practices differed widely in terms of the features of the recapitalisation plan (Table IV.4).

Recapitalisation of Public Sector Banks in India: Early Phase

IV.39 During 1993-94, the application of the first stage of prudential accounting standards and capital adequacy norms necessitated strengthening of capital positions of India's nationalised banks. The Government of India contributed ₹57 billion as equity to recapitalise nationalised banks and issued 10 per cent Government of India Nationalised Banks' Recapitalisation Bonds, 2006 on January 1, 1994. Recipient banks were required to invest the Government's capital subscription in these bonds.

IV.40 The important features of the bonds were: (i) they carried an interest rate of 10 per cent per annum to be paid at half-yearly intervals; (ii) they were repayable in six equal annual installments on the first day of January from the year commencing January 1, 2001 and onwards; (iii) they were transferable; (iv) they were not an approved security for purposes of the statutory liquidity ratio (SLR); and (v) the bonds were considered as eligible securities for purposes of obtaining a loan from any bank or financial institution. During 2006-07, these bonds were converted into tradable SLR-eligible Government of India dated securities.

[5] Andrews, Michael (2003), "Issuing Government Bonds to Finance Bank Recapitalisation and Restructuring: Design Factors That Affect Banks' Financial Performance", *IMF Policy Discussion Paper*, PDP/03/4, International Monetary Fund.

Table IV.4: Recapitalisation: Experience of Advanced Economies

Country	First Announced	Maximum Amount	Instruments	Pricing of Instruments (key elements)
France	October 13, 2008	€ 40 billion	Preferred shares, subordinated debt, and common/ordinary shares for troubled banks	For subordinated debt: Fixed rate for first five years, variable rate thereafter
Germany	October 13, 2008	€ 80 billion	Any means appropriate	Market-compatible compensation
Italy	October 8, 2008	-	Preferred shares	-
Italy	November 28, 2008	-	Undated/perpetual subordinated debt/loan	The highest of three options, with fees increasing over time
Japan	December 17, 2008	¥ 12 trillion	Preferred shares	-
Japan	March 17, 2009	¥ 1 trillion	Subordinated debt, undated/perpetual subordinated debt/loan	Minimum spreads will be set by central bank at each auction
Netherlands	October 9, 2008	€ 20 billion	Any means appropriate	8.5 per cent coupon, subject to conditions related to dividend payments
Spain	October 13, 2008	-	Common/ordinary shares, preferred shares and/or non-voting shares	-
United Kingdom	October 8, 2008	£ 50 billion	Common/ordinary shares, preferred shares	For common/ordinary shares: 8.5 per cent discount to the closing price
United States	October 13, 2008	$ 250 billion	Preferred shares, warrants	Preferred shares: 5 per cent annual dividend for five years, 9 per cent thereafter
United States	February 10, 2009	-	Mandatory convertible preferred (MCP) shares (converts after 7 years), warrants	MCP shares: 9 per cent annual dividend, paid quarterly

- : Not available.
Source: Fabio Panetta, Thomas Faeh, Giuseppe Grande, Corrinne Ho, Michael King, Aviram Levy, Federico M Signoretti, Marco Taboga and Andrea Zaghini (2009). "An Assessment of Financial Sector Rescue Programmes", *BIS Papers* No 48, July.

IV.41 The recapitalisation of nationalised banks was undertaken to ensure that all the banks were able to meet the minimum capital to risk-weighted assets ratio of 4 per cent by the end of March 1993 and also to maintain their capital unimpaired. To strike a balance between fiscal adjustment and bank capital strengthening, banks were allowed to invest in bonds of a finite tenor, so that, in addition to receipt of interest income, banks would receive a gradual inflow of principal over time.

IV.42 The release of capital by the Government was subject to the participating public sector banks undertaking certain performance obligations and commitments in respect of parameters such as changes in operational policies and in organisational structure, and use of upgraded technology to ensure an improvement in viability and profitability. Moreover, banks were required to chalk out plans to ensure excellence in customer service and maintenance of a high level of efficiency in providing various services; to improve their position through repayment and additional securities and documentation in respect of all non-performing assets above ₹10 million; formulate liability/investment management and loan policies; and outline capital expenditure and human resources development policies. The total amount of capital injected into the public sector banks during 1992-93 to 1998-99 amounted to ₹204 billion.

IV.43 The Indian banking sector escaped largely unscathed from the turmoil of the global financial crisis in view of limited exposures to toxic assets and proactive regulatory measures undertaken in response to fast growth in credit during the pre-crisis period. However, to ensure that banks maintain Tier I capital adequacy ratio in excess of 8 per cent, the Government started undertaking capital infusion programme since 2007-08 onwards. A cumulative amount of ₹131 billion was injected in PSBs during 2007-08 to 2009-10. Capital infusion by the government continued in subsequent years as well, wherein an attempt was made to link it with bank performance. A total amount of ₹666 billion was injected in PSBs during 2010-11 to 2014-15 (Chart IV.1).

Chart IV.1: Capital Infusion by the Government in PSBs

Recapitalisation of Public Sector Banks: Recent Initiatives

IV.44 As part of the *Indradhanush* plan in August 2015, the Government estimated PSBs' capital requirements at ₹1.8 trillion during 2015-16 to 2018-19, out of which ₹700 billion consisted of budgetary allocations and the remaining ₹1.1 trillion was to be raised by these banks from the market and by divesting their non-core assets. So far, under the *Indradhanush* plan, Government has infused capital of ₹519 billion in PSBs. The parameters considered for capital infusion in banks are capital requirements of respective banks; size of the banks; performance of the banks with reference to efficiency; growth of credit and deposits; reduction in the cost of operations; and potential for growth. In addition, PSBs have so far (up to October 24, 2017) been able to raise ₹213 billion from the market.

IV.45 In October 2017, the Government announced a large-scale bank recapitalisation plan of ₹2.11 trillion to reinvigorate PSBs struggling with high levels of stressed advances. Out of the ₹2.11 trillion, ₹1.35 trillion will be through recapitalisation bonds and the remaining ₹760 billion will be provided through budgetary support (around ₹180 billion) and by banks raising resources from the market (₹580 billion). Recapitalisation will take place over the rest of 2017-18 and 2018-19, but the Government intends to frontload the programme.

IV.46 The proposed recapitalisation package combines several desirable features. By deploying recapitalisation bonds, it will front-load capital injections while staggering the attendant fiscal implications over a period of time. As such, the recapitalisation bonds will be liquidity neutral for the Government except for the interest expenses that will contribute to the annual fiscal deficit. It will involve participation of private shareholders of PSBs by requiring that parts of their capital needs be met by market funding. Furthermore, it will set up a calibrated approach whereby banks that have addressed their balance-sheet issues and are in a position to use fresh capital injection for immediate credit creation can be given priority while others shape up to be in a similar position. This is expected to bring market discipline into a public recapitalisation programme[6].

IV. Summing Up

IV.47 Banks are the key financial intermediaries in India. Asset stress has hampered credit growth at a time when the financing needs for accelerating the pace of economic activity have emerged as the highest priority. The two-pronged approach in the form of the IBC, 2016 and the recapitalisation of banks is expected to aid a faster clean-up of banks' balance sheets. The combination of linking the performance of the banks with the quantum of funds injected through recapitalisation is expected to bring in discipline and disincentivise the recurrence of forbearance and stress.

[6] Patel, Urjit R. (2017), "RBI welcomes bank recapitalisation plan", Governor's Statement, October 25, 2017, Reserve Bank of India, Retrieved on November 11, 2017 from https://rbi.org.in/Scripts/BS_PressReleaseDisplay.aspx?prid=42055.

Chapter V

Operations and Performance of Commercial Banks

The balance sheets of banks remained beleaguered with persistent deterioration in the asset quality. It dented banks' profitability and constrained the financial intermediation. Consequent deleveraging resulted in historically low credit growth. Portfolio rebalancing towards less stressed sectors was also observed. Nonetheless, banks were able to strengthen their capital positions. Further progress was made towards the goal of universal financial inclusion through the ongoing financial inclusion plan and operationalisation of new differentiated banks. It is expected that through new institutional mechanisms such as Insolvency and Bankruptcy Code, the resolve on the part of the Government and the Reserve Bank to collectively address the problem of stressed assets and banks' own efforts towards improving efficiency, credit monitoring and risk management, they will be able to overcome the strains on lending capacity and efficiently perform their role as financial intermediaries.

I. Introduction

V.1 The Indian financial system remains bank-dominated, even as the availability of finance from alternative sources has increased in recent years. During 2016-17, bank credit accounted for 35 per cent of the total flow of financial resources to the commercial sector. The persistent deterioration in the banks' asset quality has dented the profitability and constrained the financial intermediation. Consequent deleveraging has resulted in historically low credit growth, although subdued demand, especially from industry, has also restrained credit off-take. Demonetisation of specified bank notes (SBNs) in November 2016 impacted the banking sector's performance transitorily in the form of a surge of low-cost deposits and abundance of liquidity in the system, which speeded up transmission of interest rate reduction and altered banks' balance sheet structures even as they were engaged in managing the process of currency withdrawal and replacement.

V.2 The Reserve Bank's ongoing regulatory and supervisory initiatives for a time-bound resolution of stressed assets and reviving credit flow to productive sectors, received statutory backing from the Government through various institutional reforms. At the same time, efforts were also made to augment the capital base of public sector banks (PSBs) to buffer them against balance sheet stress so that they can reinvigorate their primary role of financial intermediation and support inclusive growth. On their part, banks also mobilised capital and fine-tuned their business strategies to remain competitive in the evolving financial landscape.

V.3 Against this backdrop, this chapter discusses operations and performance of the Indian banking sector during 2016-17, based on the audited balance sheets of banks and off-site supervisory returns submitted to the Reserve Bank. The chapter analyses developments in balance sheets, profitability, financial soundness and credit deployment using data for 94 scheduled commercial banks (SCBs). The chapter also highlights other key issues engaging the banking system such as financial inclusion, regional penetration, customer services, indicators of payment system and banks' overseas operations. Developments related to regional rural banks (RRBs), local area banks (LABs) and the newly created small finance banks (SFBs) are analysed separately. The concluding section highlights the major issues that emerge from the analysis and offers suggestions on the way forward.

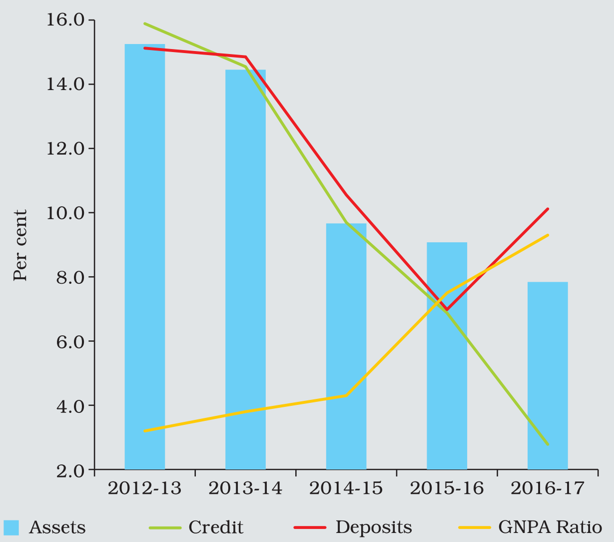
II. Balance Sheet Operations of Scheduled Commercial Banks

V.4 In an environment characterised by slowing economic activity – mainly located in industry and subdued demand, the growth in consolidated balance sheet of banks moderated further during 2016-17. Credit growth fell to a record low of 2.8 per cent[1] pulled down by persistent decline in asset quality which necessitated a sharp increase in provisioning requirements (Chart V.1). As a consequence, banks' profitability was adversely impacted and risk aversion set in.

V.5 Only private sector banks (PVBs) were able to manage positive credit growth during the year (Chart V.2).

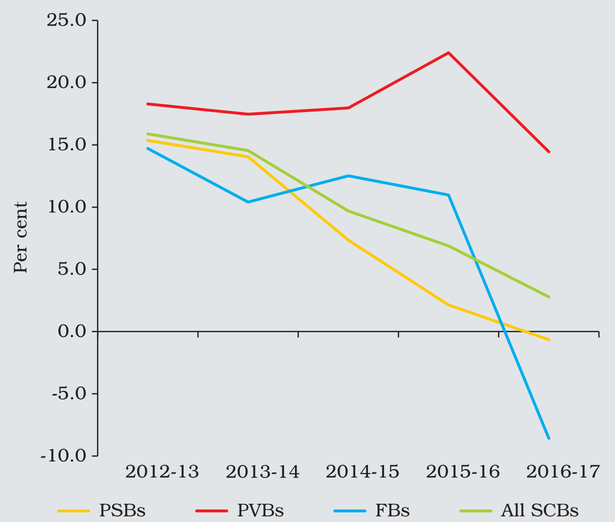
V.6 The flow of resources from non-bank sources picked up to fill the gap opened by the dwindling bank credit. In 2015-16, the banking system had met more than 50 per cent of the requirements of financing of the commercial sector; however, its share fell to 34.9 per cent during 2016-17. Within non-banks, private placements of corporate bonds and commercial papers (CPs) constituted about 21 per cent of the total funding requirements of non-financial companies. CP issuances almost doubled to ₹1,002 billion in 2016-17. The increasing recourse to the bond market by large corporates was driven by the relatively cheaper costs of funds as bond yields fully transmitted the interest rate reduction of 175 basis points during the accommodative phase of the monetary policy that began in January 2015. The enhanced flow of household savings into mutual funds, insurance firms and pension

Chart V.1: Growth in Select Banking Aggregates



Source: Annual accounts of banks.

Chart V.2: Bank Group-wise Growth in Advances



Source: Annual accounts of banks.

[1] Since this is based on audited bank balance sheet data it may differ from the credit growth reported elsewhere based on either supervisory returns or returns under Section 42 (2) of the Reserve Bank of India Act, 1934.

Table V.1: Trends in Flow of Financial Resources to the Commercial Sector from Banks and Non-banks

(Amount in ₹ billion)

Source	2013-14	2014-15	2015-16	2016-17
A. Adjusted Non-food Bank Credit	**7,627 (54.0)**	**5,850 (45.5)**	**7,755 (51.3)**	**4,952 (34.9)**
i) Non-food Credit	7,316	5,464	7,024	3,882
ii) Non-SLR Investments by SCBs	311	386	731	1,070
B. Flow from Non-banks (B1+B2)	**6,505 (46.0)**	**7,005 (54.5)**	**7,358 (48.7)**	**9,257 (65.1)**
B1. Domestic Sources	**4,302 (30.4)**	**4,740 (36.9)**	**4,899 (32.4)**	**6,499 (45.7)**
1 Public Issues by Non-financial Entities	199	87	378	155
2 Gross Private Placements by Non-financial Entities	1,314	1,277	1,135	2,004
3 Net Issuance of CPs Subscribed to by Non-banks	138	558	517	1,002
4 Net Credit by Housing Finance Companies	737	954	1,188	1,346
5 Total Accommodation by Four RBI Regulated AIFIs – NABARD, NHB, SIDBI and EXIM Bank	436	417	472	469
6 Systemically Important Non-deposit Taking NBFCs (Net of Bank Credit)	1,124	1,046	840	1,245
7 LIC's Net Investments in Corporate Debt, Infrastructure and Social Sector	354	401	369	277
B2. Foreign Sources	**2,203 (15.6)**	**2,265 (17.6)**	**2,459 (16.3)**	**2,758 (19.4)**
1 External Commercial Borrowings / FCCBs	661	14	-388	-509
2 ADR/GDR Issues excluding Banks and Financial Institutions	1	96	-	-
3 Short-term Credit from Abroad	-327	-4	-96	435
4 Foreign Direct Investments to India	1,868	2,159	2,943	2,833
C. Total Flow of Resources (A+B)	**14,132 (100.0)**	**12,855 (100.0)**	**15,113 (100.0)**	**14,209 (100.0)**

Notes: 1. -: Nil / negligible.
2. Figures in parentheses are percentages to total.
3. The sum of components may not add up due to rounding-off.

Source: RBI, SEBI, BSE, NSE, Merchant Banks, LIC and NHB.

funds helped stoke domestic institutional investors' demand for bonds. Non-banking financial companies (NBFCs) and housing finance companies (HFCs) also emerged as alternate source of funds in the non-bank segment, accounting for 18 per cent of the total financial flows. Among foreign sources, foreign direct investments were the pre-dominant source (Table V.1).

V.7 Circling back to banks' consolidated balance sheet, investments – the other major component in the asset side – also recorded a marginal deceleration, though investment in non-SLR securities picked up. Among bank groups, PSBs recorded a faster pace of investments than PVBs. On the liabilities side, deposits increased sharply due to withdrawal of SBNs within a pre-announced time period (Table V.2).

V.8 Growth in deposits was largely led by current and saving accounts (CASA) deposits, while growth in term-deposits was muted. The lacklustre growth in term-deposits is attributed to sluggish credit growth and comparatively low returns on these deposits as compared to small savings schemes and other market-based instruments. PVBs were more successful in raising deposits across all categories of deposits as compared to PSBs and foreign banks (FBs) (Chart V.3). Apart from investments and loans and advances, banks deployed deposits in the form of cash and balances with the Reserve Bank and various money market instruments.

V.9 With the persisting deceleration in credit and the sizeable influx of deposits post-

Table V.2: Consolidated Balance Sheet of Scheduled Commercial Banks

(Amount in ₹ billion)

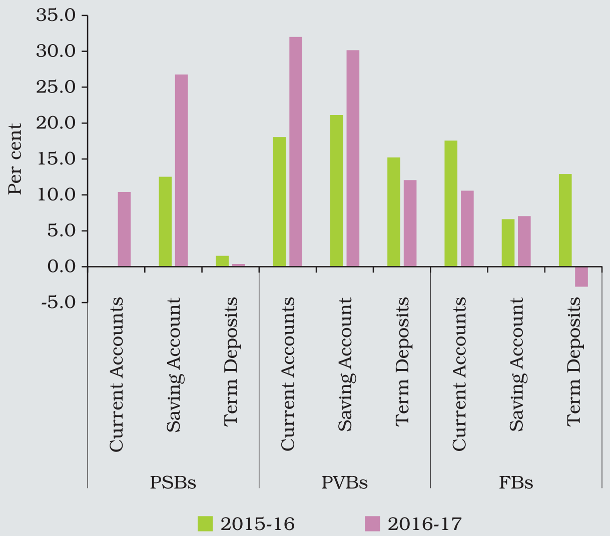
Item	As at end-March							
	Public Sector Banks		Private Sector Banks		Foreign Banks		All Scheduled Commercial Banks	
	2016	2017	2016	2017	2016	2017	2016	2017#
1. Capital	192	243	106	110	585	629	882	993
2. Reserves and Surplus	5,153	5,544	3,185	3,709	792	840	9131	10,105
3. Deposits	74,862	80,793	21,477	25,648	4,588	4,655	100,927	111,139
3.1. Demand Deposits	4,948	5,464	2,932	3,871	1,106	1,223	8,986	10,559
3.2. Savings Bank Deposits	19,513	24,738	5,511	7,173	494	529	25,518	32,451
3.3. Term Deposits	50,400	50,591	13,034	14,605	2,988	2,904	66,422	68,130
4. Borrowings	7,907	7,219	5,338	4,835	1,243	705	14,488	12,807
5. Other Liabilities and Provisions	3,567	3,558	1,362	1,712	937	1,266	5,866	6,541
Total Liabilities/Assets	**91,681**	**97,356**	**31,467**	**36,015**	**8,145**	**8,095**	**131,293**	**141,586**
1. Cash and Balances with RBI	4,185	4,842	1,217	1,585	238	374	5,639	6,805
2. Balances with Banks and Money at Call and Short Notice	3,929	5,303	759	1,300	561	759	5,248	7,374
3. Investments	22,481	25,547	7,985	8,551	2,812	2,397	33,278	36,522
3.1 Government Securities (a+b)	18,868	21,183	6,124	6,317	2,461	2,068	27,454	29,593
a) In India	18,605	20,946	6,083	6,271	2,402	2,003	27,089	29,246
b) Outside India	263	237	41	46	60	65	364	347
3.2 Other Approved Securities	3	3	-	-	-	-	3	3
3.3 Non-approved Securities	3,609	4,361	1,861	2,234	351	330	5,822	6,925
4. Loans and Advances	55,936	55,572	19,393	22,196	3,636	3,323	78,965	81,162
4.1 Bills Purchased and Discounted	2,996	2,806	520	804	685	707	4,202	4,317
4.2 Cash Credits, Overdrafts, *etc.*	23,530	23,516	5,573	6,285	1,562	1,370	30,665	31,180
4.3 Term Loans	29,409	29,251	13,300	15,107	1,388	1,247	44,098	45,665
5. Fixed Assets	841	1,200	227	255	52	48	1,121	1,507
6. Other Assets	4,310	4,892	1,886	2,128	846	1,193	7,042	8,216

Notes: 1. -: Nil / negligible.
2. #: Includes data relating to Capital Small Finance Bank Ltd. and Equitas Small Finance Bank Ltd. which were included in the Second Schedule to the Reserve Bank of India Act, 1934 with effect from November 8, 2016 and December 23, 2016, respectively.
3. Components may not add up to their respective totals due to rounding off numbers to ₹ billion.

Source: Annual accounts of respective banks.

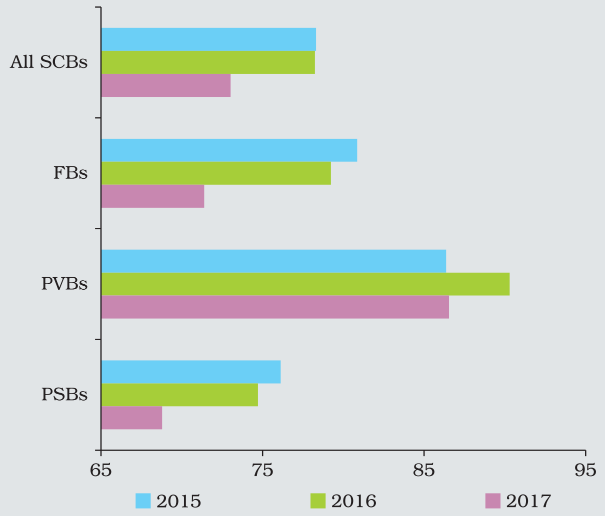
demonetisation, the credit-deposit (C-D) ratio of banks, on an outstanding basis, sharply declined to 73.0 per cent as at end-March 2017 from 78.2 per cent in the previous year (Chart V.4). The

Chart V.3: Growth in CASA and Term-deposits, Bank Group-wise



Source: Annual accounts of banks.

Chart V.4: Trends in Outstanding C-D Ratio
(End-March)



Source: Annual accounts of banks.

Table V.3: Public Issues by the Banking Sector

(Amount in ₹ billion)

Year	Public Sector Banks		Private Sector Banks		Total		Grand Total
	Equity	Debt	Equity	Debt	Equity	Debt	
1	2	3	4	5	6	7	8=(6+7)
2015-16	-	-	-	-	-	-	-
2016-17	11	-	25	-	36	-	36

Note: -: Nil / negligible.
Source: SEBI.

decline in credit turned PSBs and FBs' incremental C-D ratios negative.

Resources Raised by Banks through Public Issues and Private Placement

V.10 Banks raised resources mostly through private placements to augment their resources required for provisioning, while public issues were negligible. The higher number of private placements during 2016-17 also reflected banks' capital planning efforts to meet the gradual implementation of Basel III capital requirements and to mitigate any concerns about potential stress on their asset quality (Table V.3 and V.4).

SCBs' International Liabilities and Assets in 2016-17

V.11 During 2016-17, international liabilities and assets of banks located in India underwent contraction with the ratio of international claims to liabilities declining to 48.5 per cent from 54.1 per cent a year ago. The decline in banks' international claims in the form of outstanding export bills, nostro balances and foreign currency loans to residents exceeded the fall in banks' international liabilities on account of redemptions of Foreign Currency Non-resident (Bank) [FCNR (B)] deposits and decline in foreign currency borrowings (Table V.5 and V.6).

V.12 Liabilities due to accretions of non-resident external (NRE) rupee accounts increased further due to attractive interest rate differentials *vis-a-vis* source countries (Table V.6).

Table V.4: Resources Raised by Banks through Private Placements

(Amount in ₹ billion)

Year	2015-16		2016-17 P	
Category	No. of Issues	Amount Raised	No. of Issues	Amount Raised
1	2	3	4	5
Public Sector Banks	22	252	48	466
Private Sector Banks	13	165	18	430
Total	35	417	66	896

Note: P: Provisional.
Source: BSE, NSE and Merchant Bankers.

Table V.5: International Assets of Banks in India – By Type of Instruments
(Based on LBS Statements)

(Amount in ₹ billion)

Asset Type	Amount Outstanding (as at end-March) P		Percentage Variation	
	2016	2017	2015-16	2016-17
1. Loans and Deposits	**6570 (98.5)**	**5472 (98.0)**	**51.9**	**-16.7**
of which:				
a) Loans to Non-Residents*	1077 (16.2)	1668 (29.9)	318.0	54.9
b) Foreign Currency Loans to Residents**	1683 (25.2)	1546 (27.7)	-15.7	-8.1
c) Outstanding Export Bills	1977 (29.7)	855 (15.3)	123.3	-56.8
d) Foreign Currency in Hand, Travellers Cheques, *etc.*	0.4 (0.0)	3.5 (0.1)	-96.1	743.3
e) Nostro Balances @	1832 (27.5)	1399 (25.1)	55.8	-23.6
2. Holdings of Debt Securities	**61 (0.9)**	**66 (1.2)**	**157.8**	**8.8**
3. Other Assets @@	**37 (0.6)**	**47 (0.9)**	**-76.3**	**29.1**
Total International Assets	**6667 (100)**	**5586 (100)**	**48.0**	**-16.2**

Notes: 1. P: Provisional.
2. *: Includes Rupee loans and foreign currency (FC) loans out of non-resident deposits.
3. **: Includes loans out of FCNR (B) deposits, pre-shipment credit in foreign currency (PCFC), FC lending to and FC deposits with banks in India, *etc.*
4. @: Includes placements made abroad and balances in term-deposits with non-resident banks.
5. @@: Capital supplied to and receivable profits from foreign branches/ subsidiaries of Indian banks and other unclassified international assets.
6. Figures in parentheses are percentages to total.
7. Percentage variation could be slightly different as absolute numbers have been rounded off to ₹ billion.

Source: International Banking Statistics, RBI.

Table V.6: International Liabilities of Banks in India – By Type of Instruments
(Based on LBS Statements)

(Amount in ₹ billion)

Liability Type	Amount Outstanding (as at end-March P		Percentage Variation	
	2016	2017	2015-16	2016-17
1. Deposits and Loans	**9860 (80.0)**	**9027 (78.4)**	**17.1**	**-8.5**
a) Foreign Currency Non-resident (Bank) [FCNR (B)] Scheme	2674 (21.7)	1343 (11.7)	8.5	-49.8
b) Foreign Currency Borrowings*	1610 (13.1)	1229.5 (10.7)	14.0	-23.6
c) Non-resident External Rupee (NRE) Accounts	4045 (32.8)	5100 (44.3)	15.0	26.1
d) Non-resident Ordinary (NRO) Rupee Accounts	598 (4.9)	674 (5.9)	19.8	12.7
2. Own Issues of Securities / Bonds	**73 (0.6)**	**78 (0.7)**	**6.1**	**6.8**
3. Other Liabilities	**2392 (19.4)**	**2410 (20.9)**	**-1.7**	**0.8**
of which:				
a) ADRs / GDRs	349 (2.8)	415 (3.6)	-36.3	18.9
b) Equities of Banks Held by Non-residents	904 (7.3)	974 (8.5)	-33.7	7.8
c) Capital / Remittable Profits of Foreign Banks in India and Other Unclassified International Liabilities	1140 (9.2)	1021 (8.9)	118.0	-10.4
Total International Liabilities	**12325 (100.0)**	**11515 (100.0)**	**12.8**	**-6.6**

Notes: 1. P: Provisional.
2. *: Inter-bank borrowings in India and from abroad and external commercial borrowings of banks.
3. Figures in parentheses are percentages to total.
4. Percentage variation could be slightly different as absolute numbers have been rounded off to ₹ billion.

Source: International Banking Statistics, RBI.

Table V.7: Maturity (Residual) and Sectoral Classification of Consolidated International Claims of Banks

(Amount in ₹ billion)

Residual Maturity / Sector	Amount Outstanding (as at end-March) P		Percentage Variation	
	2016	2017	2015-16	2016-17
Total Consolidated International Claims	**5774** (100.0)	**7168** (100.0)	**42.5**	**24.2**
a) Maturity-wise				
1. Short-term (residual maturity of less than one year)	4425 (76.6)	4529 (63.2)	71.9	2.3
2. Long-term (residual maturity of one year and above)	1308 (22.7)	2605 (36.3)	-9.0	99.1
3. Unallocated	40 (0.7)	34 (0.5)	-2.5	-15.1
b) Sector-wise				
1. Banks	1784 (30.9)	1841 (25.7)	5.6	3.2
2. Official Sector	89 (1.5)	657 (9.2)	198.4	638.8
3. Non-Bank Financial Institutions	160 (2.8)	3 -		
4. Non-Financial Private	3442 (59.6)	3880 (54.1)	60.0	12.7
5. Others	299 (5.2)	787 (11.0)	64.3	163.2

Notes : 1. P: Provisional.
2. - : Nil/negligible.
3. Figures in parentheses are percentages to total.
4. The sum of components may not add up due to rounding-off.
5. Residual Maturity Unallocated comprises maturity not applicable (for example, for equities) and maturity information not available.
6. The official sector includes official monetary authorities, general government and multilateral agencies.
7. Non-financial private sector includes non-financial corporations and households including non-profit institutions serving households (NPISHs).
8. Others include non-financial public sector undertakings and the unallocated sector.
9. Percentage variation could be slightly different as absolute numbers have been rounded off to ₹ billion.

Source : Based on BIS' consolidated banking statistics (CBS) statements – immediate country risk basis.

V.13 As regards the maturity pattern of total consolidated international claims of Indian banks, there was a significant increase in claims of longer-term maturities. Sectoral shifts towards the official sector and away from banks and non-financial private sector entities reflected low absorptive capacity in the corporate sector in the face of subdued demand conditions in the economy (Table V.7).

V.14 There was also a shift towards the US from countries such as Germany, Hong Kong and the UK in the consolidated international claims of banks on countries other than India (Table V.8).

Maturity Profile of Assets and Liabilities

V.15 Banks face rollover risks with respect to their short-term liabilities and consequent liquidity stress. However, during 2016-17, the share of short-term liabilities came down driven by a sharp decline in short-term borrowings attributed to withdrawal of SBNs resulting in

Table V.8: Consolidated International Claims of Banks on Countries other than India

(Amount in ₹ billion)

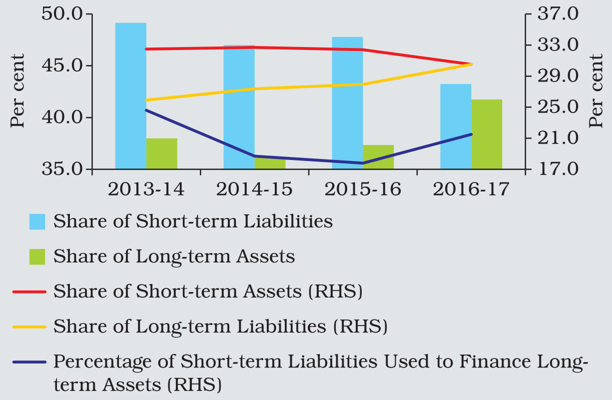
Country	Amount Outstanding P		Percentage Variation	
	2016	2017	2015-16	2016-17
1	2	3	4	5
Total Consolidated International Claims	**5,774 (100.0)**	**7,168 (100.0)**	**42.5**	**24.2**
Of which				
1. United States of America	959 (16.6)	1,870 (26.1)	5.7	95.0
2. United Kingdom	434 (7.5)	427 (6.0)	8.8	-1.8
3. Hong Kong	454 (7.9)	397 (5.5)	44.8	-12.5
4. Singapore	336 (5.8)	404 (5.6)	-12.2	20.1
5. United Arab Emirates	833 (14.4)	889 (12.4)	98.8	6.8
6. Germany	220 (3.8)	121 (1.7)	112.0	-44.9

Notes : 1. P: Provisional.
2. Figures in parentheses are percentages to total.
3. Percentage variation could be slightly different as absolute numbers have been rounded off to ₹ billion.

Source : Based on BIS' consolidated banking statistics (CBS) statements – immediate country risk basis.

larger cash reserves with banks. There was an increase in loans and advances of more than five years which pulled up the share of long-term assets and accordingly, the proportion of long-term assets financed by short-term liabilities increased over the previous year (Chart V.5; Table V.9).

Chart V.5: Trends in Maturity Profile of Assets and Liabilities



Notes: 1.Short-term is upto 1 year while long-term is more than 3 years.
2. Assets consist of loans & advances and investement. Liabilities consist of deposits and borrowings.
3. Percentage of short-term liabilities used to finance long term assets is calculated as (long-term assets minus long-term liabilities)*100 / short-term liabilities.

Source: Annual accounts of banks.

Table V.9: Bank Group-wise Maturity Profile of Select Liabilities / Assets

(As at end-March)

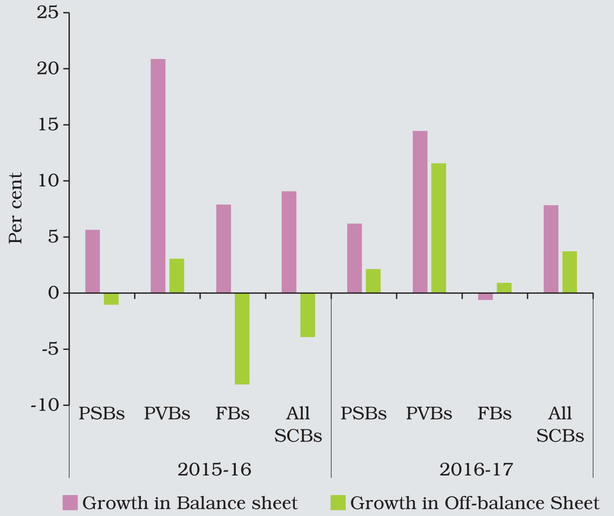
(Per cent to total under each item)

Liabilities/Assets	PSBs		PVBs		FBs		All SCBs	
	2016	2017	2016	2017	2016	2017	2016	2017#
1	2	3	4	5	6	7	8	9
I. Deposits								
a) Up to 1 year	46.5	41.6	42.6	41.5	66.3	63.0	46.5	42.5
b) Over 1 year and up to 3 years	25.6	27.9	25.0	26.0	26.2	28.9	25.5	27.5
c) Over 3 years and up to 5 years	7.7	8.6	10.9	10.5	7.3	8.0	8.3	9.0
d) Over 5 years	20.3	21.9	21.6	21.9	0.1	0.1	19.6	21.0
II. Borrowings								
a) Up to 1 year	56.6	49.9	50.4	43.9	89.7	84.7	57.2	49.5
b) Over 1 year and up to 3 years	12.4	12.9	20.1	19.3	7.4	11.8	14.8	15.4
c) Over 3 years and up to 5 years	9.7	10.4	12.3	13.1	1.8	1.2	10.0	10.9
d) Over 5 years	21.3	26.8	17.2	23.7	1.1	2.3	18.0	24.2
III. Loans and Advances								
a) Up to 1 year	30.7	28.3	32.8	32.5	67.0	62.5	32.9	30.9
b) Over 1 year and up to 3 years	38.2	34.3	35.3	33.8	18.8	18.4	36.6	33.5
c) Over 3 years and up to 5 years	11.8	10.6	12.0	12.8	4.3	8.0	11.5	11.1
d) Over 5 years	19.3	26.9	19.9	20.8	9.9	11.2	19.0	24.6
IV. Investment								
a) Up to 1 year	17.3	19.8	53.3	46.9	83.8	73.9	31.2	29.7
b) Over 1 year and up to 3 years	17.3	14.1	14.5	16.8	8.7	17.4	15.9	15.0
c) Over 3 years and up to 5 years	12.1	11.8	8.3	8.5	1.4	5.7	10.3	10.6
d) Over 5 years	53.3	54.3	23.9	27.8	6.2	3.0	42.5	44.7

Notes: 1. The sum of components may not add upto 100 due to rounding-off.
2. #: Includes data relating to Capital Small Finance Bank Ltd. and Equitas Small Finance Bank Ltd. which were included in the Second Schedule to the Reserve Bank of India Act, 1934 with effect from November 8, 2016 and December 23, 2016, respectively.

Source: Balance sheets of respective banks.

Chart V.6: Growth in Balance Sheet and Off-balance Sheet Transactions



Source: Annual accounts of banks.

V.16 A similar pattern was observed across bank groups as well.

SCBs' Off-balance Sheet Operations

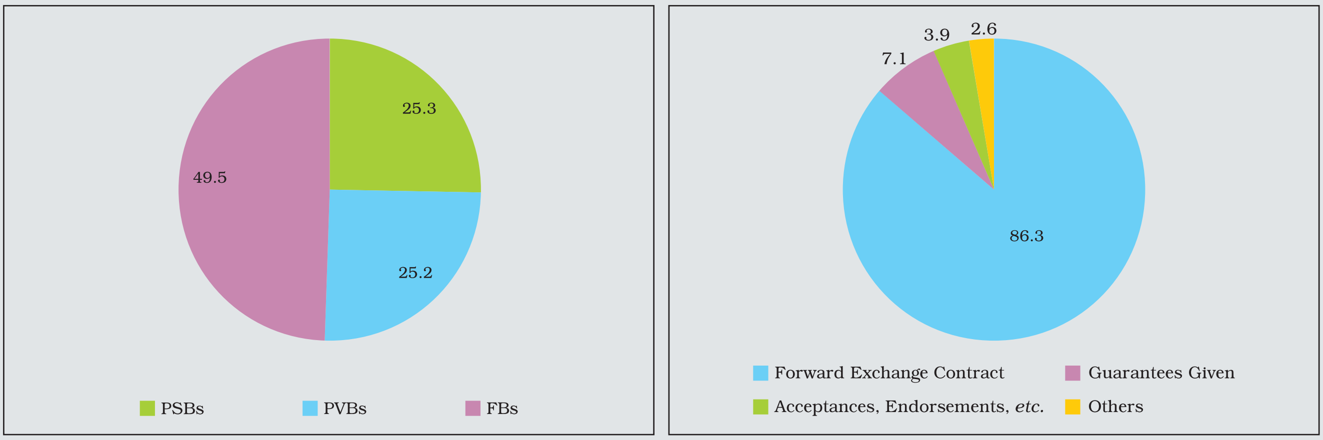
V.17 Off-balance sheet transactions play a significant role in hedging the risks associated with long-term financial assets on banks' balance sheets and in improving profitability, especially in the context of tepid credit growth. During 2016-17, off-balance sheet activities expanded across all bank groups. Forward exchange contracts (including interest rate swaps) occupied more than 85 per cent share in banks' total off-balance sheet operations (Chart V.6 & V.7; Appendix Table V.2).

V.18 FBs recorded the lowest growth, although they constituted almost half of the total off-balance sheet operations of banks.

III. Financial Performance of Scheduled Commercial Banks

V.19 SCBs' total income increased marginally in 2016-17 mainly driven by non-interest income. Interest income growth was restrained by subdued credit growth and increase in NPAs. On the expenditure side, the interest expended also experienced negligible growth due to the surge in low cost funding from CASA deposits on account of demonetisation and the slower pace of transmission of policy rate cuts to lending rates *vis-a-vis* deposit rates. The lower increase in net interest income *vis-à-vis* a year ago resulted in a marginal decline in banks' net interest margin (NIM), although with the introduction of the Marginal Cost of Funds based Lending Rate (MCLR) since April 2016 banks appear to have tweaked their spreads over the MCLR in order to maintain their NIM (Table V.10).

Chart V.7: Composition of Off-balance Sheet Exposures of the Banking Sector - 2016-17



Source: Annual accounts of banks.

Table V.10 : Trends in Income and Expenditure of Scheduled Commercial Banks

(Amount in ₹ billion)

Item	2015-16		2016-17#	
	Amount	Percentage Variation	Amount	Percentage Variation
1. Income	11,350	5.8	12,053	6.2
a) Interest Income	9,909	5.3	10,120	2.1
b) Other Income	1,441	8.8	1,933	34.1
2. Expenditure	11,009	11.9	11,614	5.5
a) Interest Expended	6,661	4.6	6,692	0.5
b) Operating Expenses	2,254	11.2	2,485	10.2
Of which : Wage Bill	1,195	8.3	1,275	6.7
c) Provisions and Contingencies	2,094	45.2	2,437	16.4
3. Operating Profit	2,436	4.4	2,876	18.1
4. Net Profit	341	-61.7	439	28.6
5. Net Interest Income (NII) (1a-2a)	3,249	7.0	3,428	5.5
Net Interest Margin (NII as percentage of average assets)	2.6		2.5	

Notes: 1.#: Includes data relating to Capital Small Finance Bank Ltd. and Equitas Small Finance Bank Ltd. which were included in the Second Schedule to the Reserve Bank of India Act, 1934 with effect from November 8, 2016 and December 23, 2016, respectively.
2. Percentage variations could be slightly different as absolute numbers have been rounded off to ₹ billion.

Source: Annual accounts of respective banks.

V.20 Operating expenses slowed down on account of rationalisation of branches and manpower which, in turn, resulted in an improvement in banks' operating profits. Provisions and contingencies eased in relation to the high base of the previous year although they remained elevated in view of the sustained stress on the asset quality and the implementation of Asset Quality Review (AQR) by the Reserve Bank, which resulted in improved recognition of NPAs. The sharp increase in banks' net profits in 2016-17 needs to be viewed in the context of a low base in 2015-16 when the net profits had declined precipitously owing to sizeable provisioning requirement (Table V.10).

V.21 Bank group-wise, PSBs continued to record net losses during 2016-17 although they moderated in relation to a year ago. The State Bank Group incurred losses in contrast to net profits a year ago whereas nationalised banks reduced their losses year-on-year. PVBs posted a muted increase in profits, resulting in a decline in return on assets (RoA). Concurrently, their return on equity (RoE), which reflects a bank's efficiency in churning profits from every unit of equity, also declined. In contrast, FBs improved their RoA and RoE over the previous year (Table V.11).

Table V.11: Return on Assets and Return on Equity of SCBs – Bank Group-wise

(Per cent)

Bank group	Return on Assets		Return on Equity	
	2015-16	2016-17	2015-16	2016-17
Public Sector Banks	-0.07	-0.10	-3.47	-2.05
Private Sector Banks	1.50	1.30	13.81	11.87
Foreign Banks	1.45	1.62	8.0	9.11
All SCBs	**0.40**	**0.35**	**3.58**	**4.16**

Notes: Return on assets = Return on assets for the bank groups are obtained as weighted average of return on assets of individual banks in the group, weights being the proportion of total assets of the bank as percentage to total assets of all banks in the corresponding bank group.
Return on equity = Net profit / Average total equity.

Source: Annual accounts of banks.

V.22 The spread – the difference between returns and cost of funds – which is a measure of banks' operational efficiency remained around the same level as the previous year. PVBs posted an improvement in spread as against PSBs and FBs, which reported lower spreads in relation to the previous year (Table V.12).

IV. Soundness Indicators

Capital Adequacy

V.23 The progressive implementation of Basel III capital requirements has provided an impetus for the banking system as a whole to scale up capital to risk-weighted assets ratio (CRAR). Consequently, all categories of banks in India remained well above the requirement of 10.25 per cent (including the capital conservation buffer (CCB) for March 2017 and 11.5 per cent for end-March 2019 when Basel III will be fully operational (Chart V.8).

Table V.12: Cost of Funds and Return on Funds – Bank Group-wise

(Per cent)

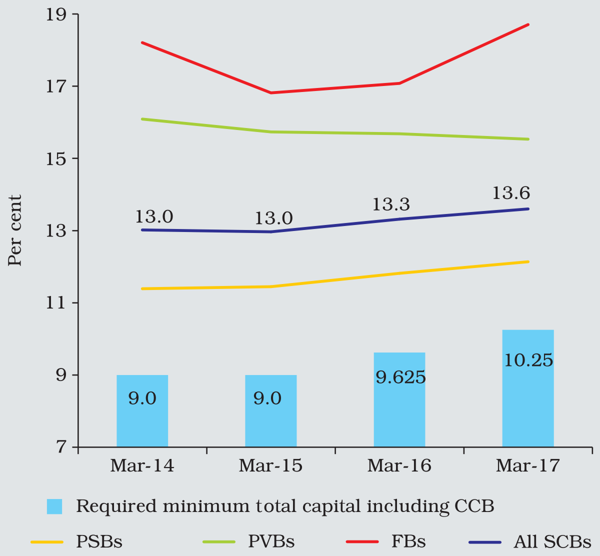
Bank Group / Year		Cost of Deposits	Cost of Borrowings	Cost of Funds	Return on Advances	Return on Investments	Return on Funds	Spread
1	2	3	4	5	6	7	8	9 = 8-5
PSBs	2015-16	6.19	5.27	6.11	9.02	7.80	8.68	2.57
	2016-17	5.70	4.80	5.62	8.44	7.49	8.15	2.53
PVBs	2015-16	6.08	6.27	6.11	10.46	7.49	9.59	3.48
	2016-17	5.59	6.56	5.76	9.99	7.49	9.28	3.52
FBs	2015-16	4.46	4.00	4.36	8.95	7.28	8.22	3.86
	2016-17	4.24	4.25	4.24	8.77	6.89	7.97	3.73
All SCBs	2015-16	6.09	5.50	6.02	9.35	7.68	8.87	2.85
	2016-17	5.61	5.44	5.59	8.86	7.45	8.43	2.84

Notes: 1. Cost of deposits = Interest paid on deposits/Average of current and previous year's deposits.
2. Cost of borrowings = (Interest expended – Interest on deposits)/Average of current and previous year's borrowings.
3. Cost of funds = Interest expended /(Average of current and previous year's deposits plus borrowings)
4. Return on advances = Interest earned on advances /Average of current and previous year's advances.
5. Return on investments = Interest earned on investments /Average of current and previous year's investments.
6. Return on funds = (Interest earned on advances + Interest earned on investments) / (Average of current and previous year's advances plus investments).
7. Data for 2017 include small finance banks.

Source: Calculated from balance sheets of respective banks.

V.24 Even Tier I ratios were well above the minimum requirement of 7 per cent (Table V.13). Among the bank groups, PSBs had the lowest CRAR although improvement is becoming evident in recent years. PVBs have consistently maintained higher CRAR. Overall, the banks have intensified efforts to strengthen their capital positions by raising capital through various instruments from the market, intermittent capital infusion by the Government and modification in treatment of certain balance sheet items in order to align with Basel Committee on Banking Supervision (BCBS) guidelines. In this direction, Government's Indradhanush plan of August 2015 and its announcement of further recapitalisation of PSBs in October 2017 is expected to significantly improve the capital position of PSBs.

Chart V.8: CRAR - Bank Group-wise



Source: Off-site returns.

V.25 PSBs were allowed to raise capital from the markets through Follow-on Public Offers (FPOs) or Qualified Institutional Placement (QIP) in August 2016 by diluting the Government's holding up to 52 per cent in a phased manner based on capital requirements, stock performance, liquidity and market conditions. Further, in order to create strong and competitive banks, Government has given in-principle approval for PSBs to amalgamate through an Alternative Mechanism[2]. Any such proposal would be solely based on commercial considerations and will need to originate from the boards of respective banks.

[2] The Cabinet gave in-principle approval for PSBs to amalgamate through an Alternative Mechanism on August 23, 2017. The proposals received from banks for in-principle approval to formulate schemes of amalgamation will be placed before the Alternative Mechanism. After in-principle approval, the banks will take steps in accordance with law and the Securities and Exchange Board of India (SEBI) requirements. The final scheme will be notified by the Government in consultation with the Reserve Bank.

Table V.13: Component-wise Capital Adequacy of SCBs
(As at end-March)

(Amount in ₹ billion)

	PSBs		PVBs		FBs		SCBs	
	2016	2017	2016	2017	2016	2017	2016	2017
1. Capital Funds	**6,647**	**7,047**	**3,705**	**4,239**	**1,296**	**1,184**	**11,647**	**12,470**
i) Tier I Capital	5,138	5,480	3,109	3,643	1,208	1,110	9,455	10,233
ii) Tier II Capital	1,509	1,567	596	596	88	74	2,192	2,237
2. Risk Weighted Assets	**56,260**	**58,053**	**23,622**	**27,289**	**7,584**	**6,328**	**87,466**	**91,671**
3. CRAR (1 as % of 2)	**11.8**	**12.1**	**15.7**	**15.5**	**17.1**	**18.7**	**13.3**	**13.6**
Of which: Tier I	9.1	9.4	13.2	13.3	15.9	17.5	10.8	11.2
Tier II	2.7	2.7	2.5	2.2	1.2	1.2	2.5	2.4

Source: Off-site returns.

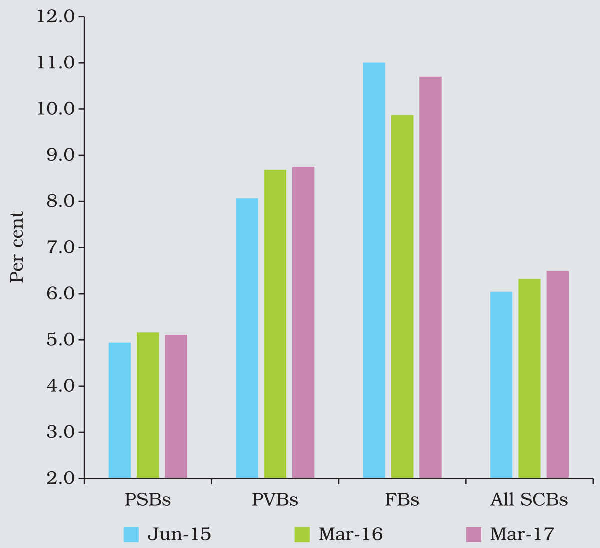
Leverage Ratio

V.26 Leverage ratio is being maintained by Indian banks with effect from April 1, 2015 as a supplement to risk-based capital ratios to constrain the build-up of leverage and avoid destabilising deleveraging. Defined as the ratio of Tier I capital to total exposure (including on-balance sheet exposures, derivative exposures, securities financing transaction exposures and off-balance sheet items), the leverage ratio showed an improvement for the banking system as a whole in 2016-17, although PSBs were placed much below other bank-groups (Chart V.9). In view of testing of a minimum Tier I leverage ratio of 3 per cent by the BCBS till 2017, the Reserve Bank has been monitoring individual banks against an indicative leverage ratio of 4.5 per cent.

Liquidity Coverage Ratio

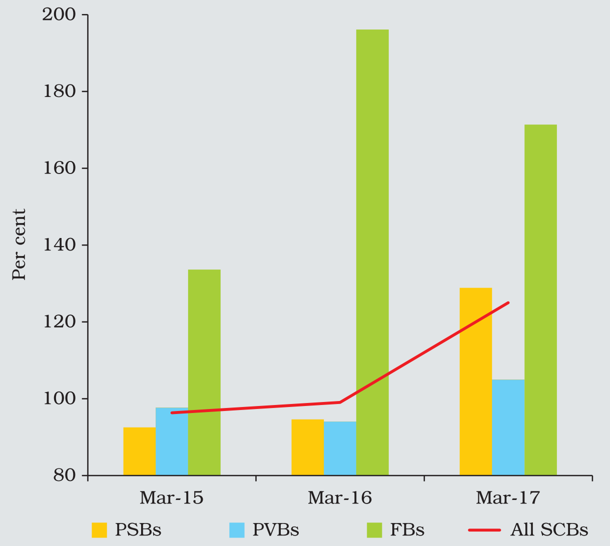
V.27 The liquidity coverage ratio (LCR) is intended to build banks' short-term resilience to potential liquidity disruptions. LCR requires the banks to have adequate high quality liquid assets (HQLAs) to withstand a 30-day liquidity shock – net cash outflows in a severe stress scenario. Implementation of the LCR was phased in by the Reserve Bank at 60 per cent from January 1, 2015 to reach 100 per cent on January 1, 2019. The LCR is a more sophisticated tool than the statutory liquidity ratio (SLR) for liquidity risk management, since it takes into account the liquidity profile of both assets and liabilities. Furthermore, the LCR does not impound funds of banks for lending beyond what is necessary to maintain adequate liquidity on an on-going basis. Moreover, as the LCR includes securities apart from G-secs, it is expected to give a fillip to other market segments, especially the corporate bond market. Currently, banks have to comply with both SLR and LCR regulations, but the SLR is being gradually brought down to facilitate a smooth transition to LCR reaching 100 per cent by January 1, 2019. At present, a total carve-out from the SLR is 11

Chart V.9: Leverage Ratio - Bank Group-wise



Source: Off-site returns.

Chart V.10: Liquidity Coverage Ratio



Source: Off-site returns.

per cent of banks' net demand and time liabilities (NDTL) that is available for consideration for LCR. During 2016-17, banks significantly improved their LCR position and each bank-group was able to maintain LCR above 100 per cent, with the PSBs' LCR being much higher than that of PVBs (Chart V.10).

Net Stable Funding Ratio

V.28 The net stable funding ratio (NSFR) strengthens resilience over a longer-term time horizon than the LCR as it requires banks to fund their activities with stable sources of funding on an ongoing basis. The NSFR seeks to discourage banks from relying on short-term wholesale funding thereby promoting funding stability and encouraging better assessment of funding risk across all on- and off-balance sheet items. As per the Basel III requirement, NSFR is the ratio of available stable funding relative to the amount of required stable funding. Available stable funding is defined as the portion of capital and liabilities expected to be reliable over the time horizon considered by the NSFR, which extends to one year. The NSFR has not been phased in so far but banks will be required to maintain NSFR of at least 100 per cent on an ongoing basis, which is planned to be implemented in 2018.

Non-performing Assets

V.29 The asset quality of banks deteriorated further during the year with the gross non-performing assets (GNPA) ratio reaching 9.3 per cent of total advances. PSBs' GNPA ratio rose to 11.7 per cent by March 2017. Although much lower for PVBs, their GNPA ratio rose sharply during the year. FBs showed marginal improvement in asset quality. The net NPA ratio, which is an indicator of the quality of the loan book as it is adjusted for provisions, rose to more than 5 per cent (Table V.14).

V.30 A deterioration in the asset quality of banks adversely impacts their lending capacity with downside risks to overall macroeconomic conditions (Box V.1).

Table V.14: Trends in Non-performing Assets – Bank Group-wise

(Amount in ₹ billion)

Item	PSBs*	PVBs	FBs	All SCBs#
Gross NPAs				
Closing Balance for 2015-16	5,400	562	158	6,119
Opening Balance for 2016-17	5,400	562	158	6,120^
Addition during the year 2016-17	3,275	814	66	4,157
Recovered during the year 2016-17	1,000	237	36	1,274
Written-off during the year 2016-17	827	207	51	1,085
Closing Balance for 2016-17	6,847	932	136	7,918
Gross NPAs as per cent of Gross Advances**				
2015-16	9.3	2.8	4.2	7.5
2016-17	11.7	4.1	4.0	9.3
Net NPAs				
Closing Balance for 2015-16	3,204	267	28	3,498
Closing Balance for 2016-17	3,831	478	21	4,331
Net NPAs as per cent of Net Advances				
2015-16	5.7	1.4	0.8	4.4
2016-17	6.9	2.2	0.6	5.3

Notes: 1. * : Includes IDBI Bank Ltd. and Bharatiya Mahila Bank.
2. # : Includes data relating to Capital Small Finance Bank Ltd. and Equitas Small Finance Bank Ltd., which were included in the Second Schedule to the Reserve Bank of India Act, 1934 with effect from November 8, 2016 and December 23, 2016, respectively.
3. ^ : Opening balance for 2016-17 is different from closing balance for 2015-16 due to inclusion of two small finance banks in 2016-17.
4. ** : Calculated taking gross NPAs from annual accounts of respective banks and gross advances from off-site returns.

Source: Annual accounts of banks and off-site returns.

Box V.1: NPAs and Credit Cycles in India – Priority *versus* Non-Priority Sectors

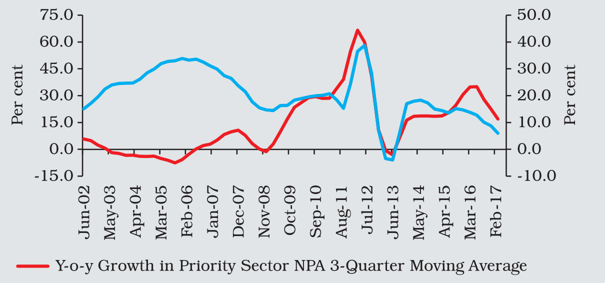
The evolution of NPAs tends to be pro-cyclical *albeit* with a lag. When NPA ratios rise above a certain threshold, they have a negative impact on banks' willingness to lend indicative of non-linearities and reverse causality also at work (Tracey, 2011; Cucinelli, 2015).

It is observed in the Indian banking system that while credit growth on the aggregate positively affects the NPA ratio in the Indian economy (Chavan and Gambacorta, 2016), there are bi-directional effects as well. The NPA ratio has a negative contemporaneous effect on overall credit growth (RBI, 2017). These system-level relationships are investigated at a segment-specific level, that is, across the priority and non-priority sectors in view of observed differences in the levels of NPAs and credit growth as well as in access to alternative sources of finance in the two sectors.

Quarterly data on year-on-year (y-o-y) credit and NPA growth for both priority and non-priority sectors from March 2002 to June 2017 was filtered to extract deviations from the trend in the form of growth cycles. A visual observation of the y-o-y growth in NPAs and credit in the priority sector suggests that they generally moved in opposite directions. The only exception being a close co-movement with more than characteristic volatility for an intermediate period between December 2011 and June 2014 (Chart 1A). In the non-priority sector, movement in opposite directions was generally observed (Chart 1B).

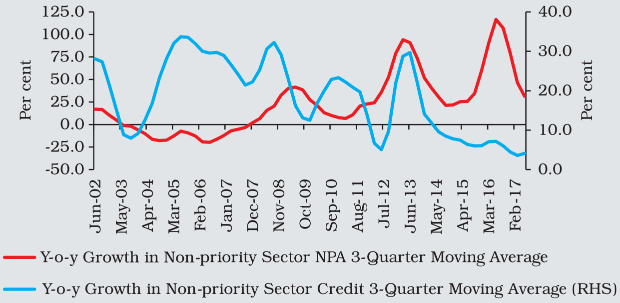
For the priority sector, Granger causality at a lag length (5) optimised through the AIC, LR and HQ criteria in a VAR framework indicated bi-directional causality between these two cycles.[3] NPA growth cycles affected credit growth cycles negatively and significantly with a lag of four quarters while credit growth cycles positively and significantly affected NPA growth cycles with a lag of one quarter. Agriculture forms a substantial part of priority sector lending. The bulk of agricultural credit is primarily disbursed before the four-quarter long agricultural crop year while repayment of credit is due after the harvest following each cropping season which are of a shorter term by nature. These lags then seem intuitively plausible.

Chart 1A: Growth in Gross Advances *versus* Growth in Gross NPAs - Priority Sector



Source: Off-site returns.

Chart 1B: Growth in Gross Advances *versus* Growth in Gross NPAs - Non-priority Sector



Source: Off-site returns.

For the non-priority sector, Granger causality at an optimal lag length of 6 indicated a bi-directional causality between the credit growth cycle and the NPA growth cycle. Cross-correlation coefficients showed that the credit growth cycle and the NPA growth cycle in the non-priority sector were positively and significantly correlated with a lag of 16 quarters. The long gestation period of infrastructural and core industrial projects covered under the non-priority sector could explain the longer lag in this sector. However, the NPA growth cycle negatively affected the credit growth cycle after about just one quarter. Banks responded to the stress on their balance sheets by curtailing the supply of credit to the sector.

To conclude, the effects of credit growth on NPA growth played out, as expected, in both priority and non-priority sectors in line with the sector-specific characteristics. On the other hand, growing credit risk in the non-priority sector evoked a more prompt contraction in credit growth to that sector as compared to the characteristic lag in the impact of credit risk on bank lending in the priority sector. For some time now, the non-priority sector has contributed more to the weakening quality of assets on the bank balance sheets than the priority sector. Hence, it is not surprising that a reduction in lending activities in the non-priority sector followed soon after sharp increases in the NPA growth cycle in the sector.

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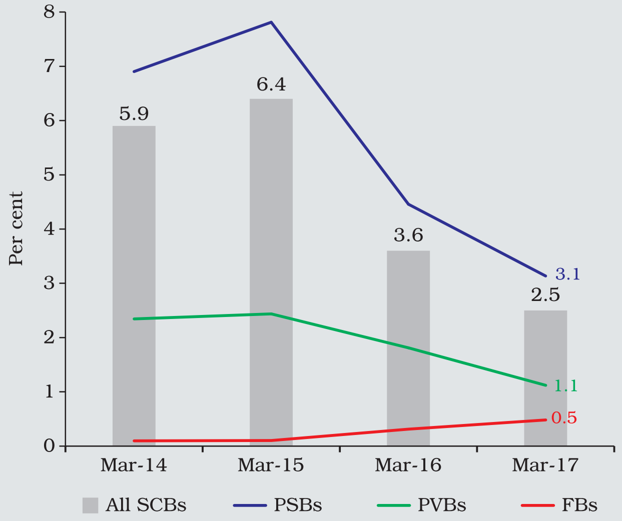
[3] AIC – Akaike Information Criterion; LR – Sequential Modified Likelihood Ratio; HQ – Hannan-Quinn Information Criterion.

Chart V.11: Restructured Standard Advances as per cent of Gross Advances



Source: Off-site returns.

V.31 Following the AQR in July 2015, the asset quality of banks deteriorated sharply. Accounts identified as NPAs in the list of one bank led to loan facilities extended to the same borrower by other banks being identified as NPAs too. The withdrawal of regulatory forbearance on restructured advances since April 1, 2015 also contributed to a steady shift of restructured standard advances into NPAs (Chart V.11).

V.32 The share of doubtful and loss assets in total loan assets of PSBs and PVBs increased during 2016-17, indicating an increase in the stickiness of NPAs. In the case of PSBs, the pace of loans slipping into the sub-standard asset category declined in the last quarter of the year (Table V.15).

V.33 Large borrowers who have an exposure of ₹50 million or more accounted for about 86.5 per cent of all NPAs, while their share in total advances was 56 per cent by end-March 2017. All large borrowal loan accounts with any sign of stress (including special mention account-0 (SMA-0), SMA-1, SMA-2, NPAs and restructured loans) accounted for about 32 per cent of the total funded amount outstanding of PSBs as against 17.4 per cent in the case of PVBs. This suggests persisting stress on the asset quality of the banking system (Chart V.12).

V.34 This is corroborated by the high slippage ratio – the ratio of fresh NPAs to standard advances at the beginning of the year – of the banking system *albeit* with some improvement over the previous year. Among bank groups, the slippage ratio of PSBs declined while that of PVBs firmed up during 2016-17 (Chart V.13).

V.35 Sector-wise, more than three-fourth of the delinquent loans were concentrated in the non-priority sector with industries recording the

Table V.15: Classification of Loan Assets – Bank Group-wise

(As at end-March)

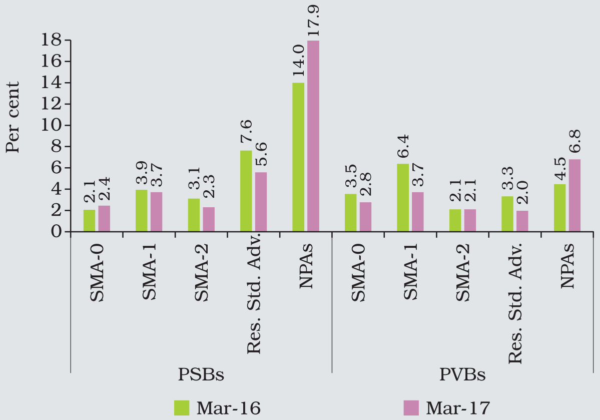
(Amount in ₹ billion)

Bank Group	Year	Standard Assets		Sub-Standard Assets		Doubtful Assets		Loss Assets	
		Amount	Per cent*	Amount	Per cent*	Amount	Per cent*	Amount	Per cent*
PSBs#	2016	52,875	90.7	2,005	3.4	3,232	5.5	163	0.3
	2017	51,816	88.3	1,731	3.0	4,904	8.4	213	0.4
PVBs	2016	19,184	97.2	186	0.9	311	1.6	62	0.3
	2017	21,748	95.9	310	1.4	519	2.3	90	0.4
FBs	2016	3,606	95.8	62	1.6	60	1.6	36	0.9
	2017	3,304	96.0	40	1.2	83	2.4	14	0.4
All SCBs	2016	75,666	92.5	2,252	2.8	3,603	4.4	260	0.3
	2017	76,868	90.7	2,081	2.5	5,505	6.5	316	0.4

Notes: 1. Constituent items may not add up to the total due to rounding-off.
2. *: As per cent to gross advances.
3. #: Includes IDBI Bank Ltd. and Bharatiya Mahila Bank.

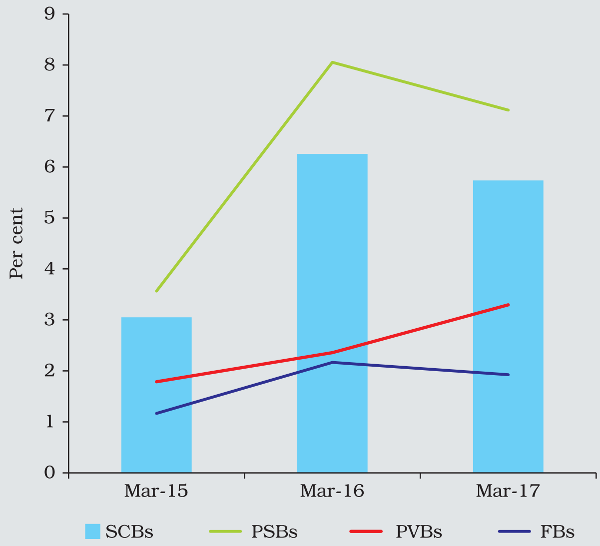
Source: Off-site returns.

Chart V.12: Share of Loan Accounts with Possible Stress in Total Funded Amount Outstanding in case of Large Borrowal Accounts



Notes : SMA-0, where principal or interest payment was not overdue for more than 30 days but the account showed signs of incipient stress;
SMA-1, where principal or interest payment was overdue for 31-60 days;
SMA-2, where principal or interest payment was overdue for 61-90 days.
Source: Central Repository of Information on Large Credits (CRILC) database.

Chart V.13: Slippage Ratio



Source: Off-site returns.

highest level of NPAs, followed by the infrastructure sector (Table V.16).

V.36 Within industries, basic metals and products had the highest level of stress (GNPAs plus restructured standard advances). Other industrial sectors with elevated levels of stress were vehicle and transport equipment, cement, construction, textiles and engineering. In general, PSBs' exposure to industries in stress was much higher as compared to that of PVBs (Chart V.14).

V.37 Micro and small enterprises (MSEs) NPAs rose to reach 8.4 per cent in March 2017 while

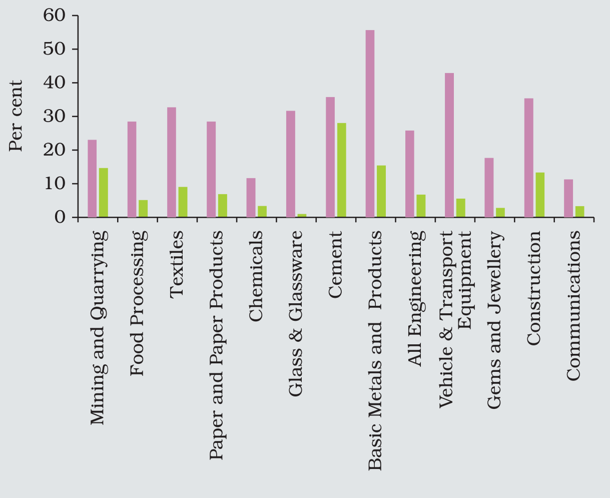
Table V.16: Sector-wise NPAs of Banks
(As at end-March)

(Amount in ₹ billion)

Bank Group	Priority Sector		*Of which*						Non-priority Sector		Total NPAs	
			Agriculture		Micro and Small Enterprises		Others					
	Amt.	Per cent#	Amt.	Per cent#	Amt.	Per cent#	Amt.	Per cent#	Amt.	Per cent#	Amt.	Per cent#
PSBs*												
2016	1,281	25.5	448	8.9	658	13.1	175	3.5	3,740	74.5	5,021	100.0
2017	1,543	24.1	548	8.5	757	11.8	238	3.7	4,868	75.9	6,411	100.0
PVBs												
2016	101	21.0	40	8.2	47	9.6	15	3.1	382	79.0	484	100.0
2017	133	18.0	53	7.2	64	8.7	16	2.2	605	82.0	738	100.0
FBs												
2016	23	14.3	0.4	0.3	4	2.3	19	11.7	135	85.7	158	100.0
2017	24	17.8	1	0.5	4	3.1	19	14.2	112	82.2	136	100.0
All SCBs												
2016	**1,405**	**24.8**	**488**	**8.6**	**708**	**12.5**	**208**	**3.7**	**4,257**	**75.2**	**5,662**	**100.0**
2017	**1,700**	**23.3**	**602**	**8.3**	**825**	**11.3**	**273**	**3.7**	**5,585**	**76.7**	**7,285**	**100.0**

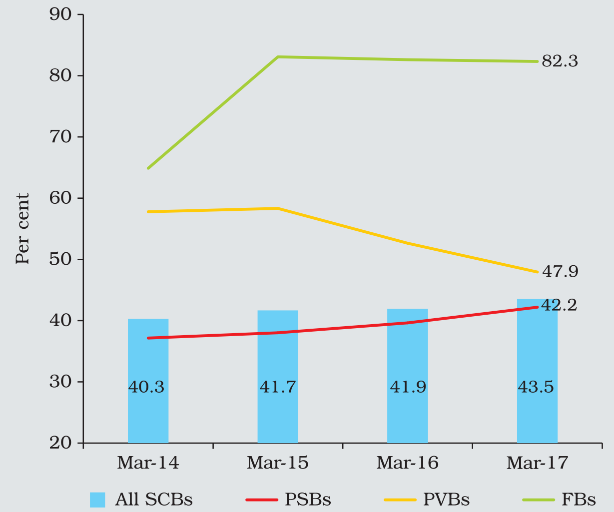
Notes: 1. Amt.: – Amount.
2. #: Share in total NPAs.
3. *: Includes IDBI Bank Ltd and Bhartiya Mahila bank.
4. Constituent items may not add up to the total due to rounding off.
Source: Off-site returns.

Chart V.14: Stressed Assets to Gross Advances in Select Industries (End-March)



Source: Off-site returns.

Chart V.16: Provision Coverage Ratio

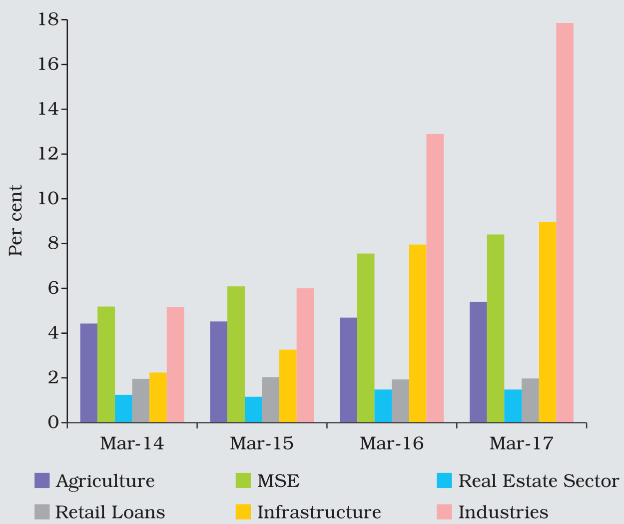


Note: Provision coverage ratio is not write-off adjusted.
Source: Off-site returns.

retail loans and the real estate sectors continued to record moderate NPAs (Chart V.15).

V.38 There was an improvement in the provision coverage ratio (PCR) for the banking system as a whole barring PVBs (Chart V.16).

Chart V.15: GNPA Ratio for Select Sectors



Source: Off-site returns.

Revised Prompt Corrective Action Framework

V.39 The Reserve Bank introduced the revised prompt corrective action (PCA) framework with effect from April 1, 2017 based on the financials of the banks for the year ended March 31, 2017. Capital (CRAR/ common equity tier (CET) I ratio), asset quality (net non-performing assets (NNPA) ratio), profitability (return on assets) and leverage (Tier I leverage ratio) are the key areas for monitoring in the revised framework[4]. Breach of any risk threshold will result in invocation of PCA by the Reserve Bank (Table V.17). So far, seven PSBs have been put under PCA.

Recovery of NPAs

V.40 Recovery of banks' NPAs remains poor, having declined to 20.8 per cent by end-March 2017 from 61.8 per cent in 2009. During 2016-17, Debt Recovery Tribunals (DRTs) made the highest amount of recovery, followed by the Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest

[4] In the revised framework, the CET I ratio and the tier I leverage ratio have been added as additional indicators. Various corrective actions on breach of risk thresholds have also been fine-tuned.

Table V.17: Revised PCA Matrix – Indicators and Risk Thresholds

Indicator	Risk Threshold 1	Risk Threshold 2	Risk Threshold 3
CRAR + applicable CCB*	>=7.75% but <10.25%	>=6.25% but <7.75%	-
CET I Capital Ratio + applicable CCB*	>=5.125% but <6.75%	>=3.625% but <5.125%	<3.625%
NNPA Ratio	>=6.0% but <9.0%	>=9.0% but <12.0%	>=12.0%
RoA	Negative RoA for two consecutive years	Negative RoA for three consecutive years	Negative RoA for four consecutive years
Tier I Leverage Ratio	>=3.5% but <= 4.0%	<3.5%	-

Note: *: Applicable CCB is 1.25%, 1.875% and 2.5% as on March 31, 2017, March 31, 2018 and March 31, 2019, respectively.
Source: Reserve Bank of India.

(SARFAESI) Act and Lok Adalats. The significant improvement in the case of DRTs was due to opening of new tribunals, strengthening existing infrastructure and computerised processing of court cases (Table V.18).

V.41 An alternate option for banks for enforcement of security interest is sale of NPAs to securitisation companies/reconstruction companies (SCs/RCs) registered under the SARFAESI Act, 2002 with banks taking some haircut on every sale. An analysis of purchase of NPAs by SCs / RCs indicates that acquisition cost as a proportion of the book value of assets increased from 28.7 per cent in March 2014 to 36 per cent in March 2017, indicating that the banks had to incur lower haircuts on account of sale of NPAs.

V.42 Recent years have witnessed a sharp pick-up in the sale of stressed assets to SCs/RCs by PVBs and FBs, however, sale of NPAs by PSBs remains lukewarm (Chart V.17).

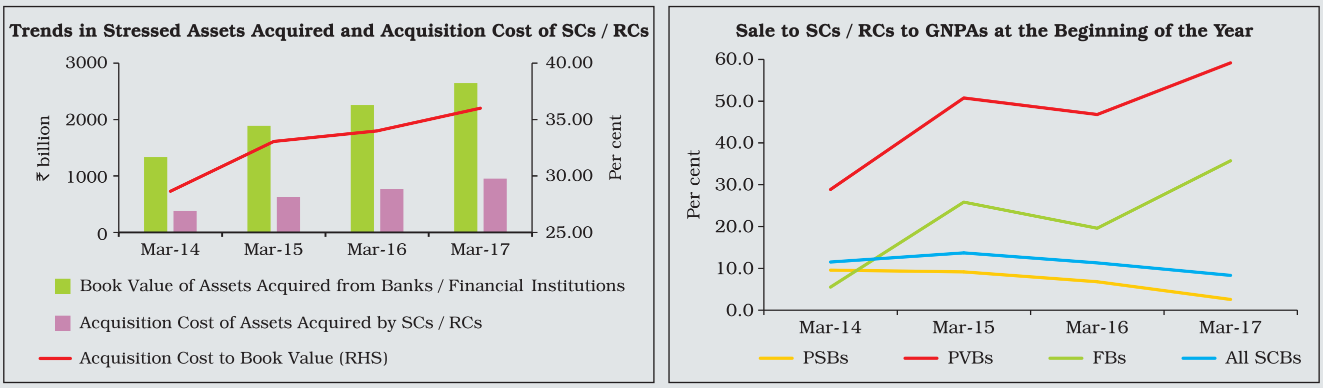
Table V.18: NPAs of SCBs Recovered through Various Channels

(Amount in ₹ billion)

Recovery Channel	2015-16				2016-17			
	No. of Cases Referred	Amount Involved	Amount Recovered*	Col. (4) as % of Col. (3)	No. of Cases Referred	Amount Involved	Amount Recovered*	Col. (8) as % of Col. (7)
1	2	3	4	5	6	7	8	9
i) Lok Adalats	4,456,634	720	32	4.4	2,152,895	1,058	38	3.6
ii) DRTs	24,537	693	64	9.2	28,902	671	164	24.4
iii) SARFAESI Act	173,582	801	132	16.5	80,076	1,131	78	6.9
Total	**4,654,753**	**2,214**	**228**	**10.3**	**2,261,873**	**2,860**	**280**	**9.8**

Notes: 1. *: Refers to amount recovered during the given year, which could be with reference to cases referred during the given year as well as during the earlier years.
2. DRTs – Debt Recovery Tribunals.

Chart V.17: Stressed Asset Sales to SCs / RCs



Source: Quarterly statement submitted by SCs / RCs.

Table V.19: Details of Financial Assets Securitised by SCs / RCs

(Amount in ₹ billion)

Item	Jun-14	Jun-15	Jun-16	Jun-17
1. Book Value of Assets Acquired	1598	1750	2377	2627
2. Security Receipts Issued by SCs / RCs	520	536	790	940
3. Security Receipts Subscribed to by				
(a) Banks	429	441	651	777
(b) SCs / RCs	74	73	114	142
(c) FIIs	1	1	3	3
(d) Others (Qualified Institutional Buyers)	16	21	22	18
4. Amount of Security Receipts Completely Redeemed	107	123	149	156

Source: Quarterly statement submitted by SCs / RCs.

V.43 Seller banks subscribed to more than 80 per cent of the total security receipts (SRs) issued (Table V.19).

V. Sectoral Distribution of Bank Credit

Sectoral Deployment

V.44 At the aggregate level, growth in non-food credit decelerated during 2016-17, extending a slowdown that commenced in 2015. Credit to industries, which accounted for 38 per cent of total non-food credit went into contraction. Within this category, the decline in credit to infrastructure was stark. Credit to the services sector, especially in the trade segment, picked up. With respect to non-bank financial companies (NBFCs) which accounted for more than one-fifth of the credit to the services sector, it remained in double-digits although some moderation set in during 2016-17 (Table V.20).

V.45 Credit to agriculture and allied activities and personal loans also experienced deceleration in growth (Chart V.18).

Retail Loans

V.46 Housing loans, which account for more than half of the retail loan portfolio of banks, decelerated sharply, attributable to the transitory effects of demonetisation and uncertainty regarding the implementation of the Real Estate (Regulation and Development) Act. In June 2017,

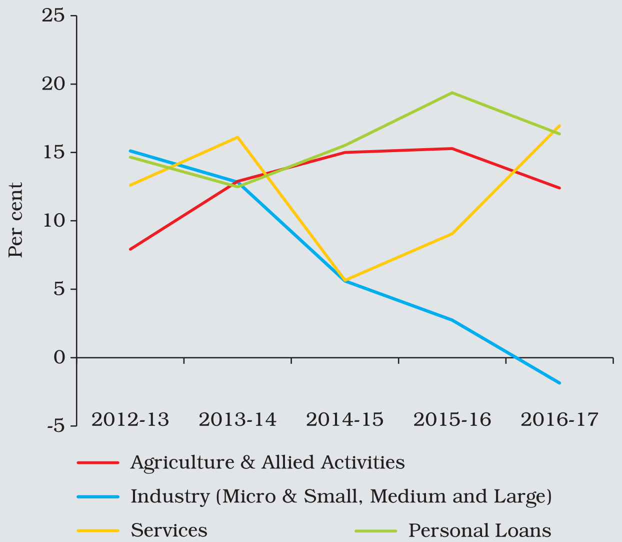
Table V.20: Sectoral Deployment of Gross Bank Credit

(Amount in ₹ billion)

Sr No	Item	Outstanding as on		Percentage Variation	
		Mar-16	Mar-17	2015-16	2016-17
1	**Agriculture & Allied Activities**	**8,829**	**9,924**	**15.3**	**12.4**
2	**Industry** *of which*	**27,307**	**26,800**	**2.7**	**-1.9**
	2.1 Infrastructure	9,648	9,064	4.4	-6.1
	2.2 Micro and Small Industries	3,715	3,697	-2.3	-0.5
3	**Services** *of which*	**15,411**	**18,022**	**9.1**	**16.9**
	3.1 Trade	3,811	4,279	4.2	12.3
	3.2 Commercial Real Estate	1,776	1,856	6.7	4.5
	3.3 Tourism, Hotels & Restaurants	371	375	0.1	1.2
	3.4 Computer Software	191	179	10.9	-6.3
	3.5 Non-banking Financial Companies	3,527	3,910	13.2	10.9
4	**Personal Loans** *of which*	**13,922**	**16,200**	**19.4**	**16.4**
	4.1 Credit Card Outstanding	377	521	23.7	38.4
	4.2 Education	682	701	7.7	2.7
	4.3 Housing (including Priority Sector Housing)	7,468	8,601	18.8	15.2
	4.4 Advances against Fixed Deposits (including FCNR (B), NRNR Deposits, *etc.*)	667	661	6.7	-0.9
5	**Non Food Credit (1-4)**	**65,469**	**70,946**	**9.1**	**8.4**
6	**Gross Bank Credit**	**66,500**	**71,347**	**9.0**	**7.3**

Note: Percentage variations could be slightly different as absolute numbers have been rounded off to ₹ billion.
Source: Sectoral deployment of bank credit, Reserve Bank of India.

Chart V.18: Growth in Credit to Major Sectors



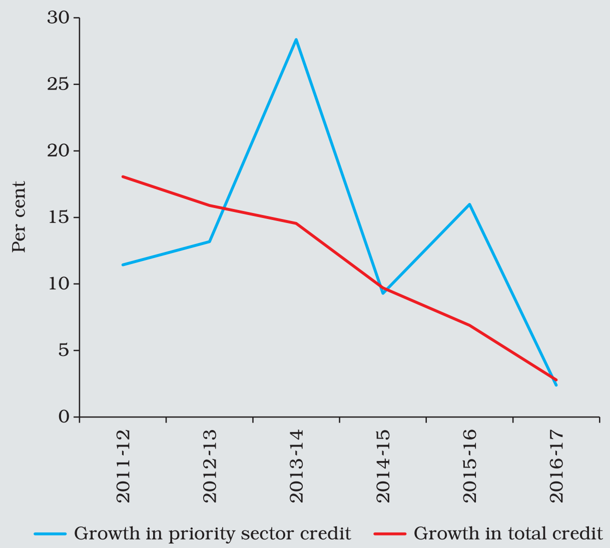
Source: Sectoral deployment of bank credit, Reserve Bank of India.

risk weights and provisioning on standard assets on certain categories of individual housing loans were reduced with a view to providing a boost to the housing segment. Auto loans, another major component of retail loans, continued to record robust growth, *albeit* with some deceleration in 2016-17. Likewise, credit was robust in respect of consumer durables and credit card loans while education loans slowed down and advances against fixed deposits shrank (Table V.21).

Priority Sector Credit

V.47 Priority sector credit growth slowed sharply during the year in line with deceleration in overall credit. However, methodological changes in the reporting and monitoring of priority sector regulations by the Reserve Bank accentuated it[5] (Chart V.19).

Chart V.19: Growth in Credit to Priority Sectors



Source: Annual accounts of banks and off-site returns.

V.48 PVBs exceeded the overall priority sector target of 40 per cent of Adjusted Net Bank Credit (ANBC) or credit equivalent amount of off-balance sheet exposure (OBE), whichever is higher, but shortfalls were reported in certain sub-targets in respect of total agriculture, small and marginal farmers, non-corporate individual farmers and weaker sections. PSBs marginally missed the overall priority sector target, but they could achieve various sub-targets except for micro-enterprises (Table V.22).

Table V.21 : Retail Loan Portfolio of Banks

(Amount in ₹ billion)

Sr. No	Item	Amount Outstanding		Percentage Variation	
		2016	2017	2016	2017
1	Housing Loans	7625	8530	18.5	11.9
2	Consumer Durables	182	215	-0.3	18.4
3	Credit Card Receivables	469	649	24.2	38.3
4	Auto Loans	1543	1866	24.0	20.9
5	Education Loans	681	728	9.5	6.9
6	Advances against Fixed Deposits (incl. FCNR (B), *etc.*)	723	680	11.4	-6.0
7	Advances to Individuals against Shares, Bonds, *etc.*	52	51	-10.0	-2.8
8	Other Retail Loans	2689	3355	-4.2	24.8
	Total Retail Loans	**13965 (19.2)**	**16074 (21.2)**	**12.9**	**15.1**

Notes: 1. Figures in parentheses represent percentage share of retail loans in total loans and advances. The amount of total loans and advances are as provided in the off-site returns of SCBs.
2. Percentage variations could be slightly different as absolute numbers have been rounded off to ₹ billion.

Source: Off-site returns.

Priority Sector Lending Certificates

V.49 Introduced in April 2016, priority sector lending certificates (PSLCs) allow the market mechanism to enable the achievement of priority sector lending targets by leveraging on the comparative strengths of different banks. While PVBs and FBs are typically buyers of PSLCs; PSBs, SFBs and RRBs are sellers. The total trade value of PSLCs was ₹498 billion during 2016-17 out of which 48.3 per cent of the trades occurred during Q4:2016-17. Trading tends to be concentrated in the last month of each quarter as it makes business sense for buyer banks to part with the premium only at the end of the quarter to realise the time value of money to the maximum. The highest weighted average

[5] From 2016-17, monitoring of priority sector achievement against the target was shifted from end of the financial year to average of priority sector target /sub-target achievement as at the end of each quarter.

Table V.22: Priority Sector Lending by Banks
(As at March 31, 2017)

(Amount in ₹ billion)

Item	Target / sub-target (per cent of ANBC/ OBE)	Public Sector Banks		Private Sector Banks		Foreign Banks	
		Amount outstanding	Per cent of ANBC/OBE	Amount outstanding	Per cent of ANBC/OBE	Amount outstanding	Per cent of ANBC/OBE
1	2	3	4	5	6	7	8
Total Priority Sector Advances	**40**	**19,889**	**39.5**	**7,110**	**42.5**	**1,238**	**36.9**
of which							
Total Agriculture	18	9,229	18.3	2,762	16.5	176	-
Small and Marginal Farmers	8	4,375	8.7	920	5.5	-	-
Non-corporate Individual Farmers#	11.7	6,273	12.5	1,750	10.5	-	-
Micro Enterprises	7.5	3,151	6.3	1,386	8.3	-	-
Weaker Sections	10	5,753	11.4	1,507	9.0	53	-

Notes: 1. -: Nil/negligible.
2. Data are provisional.
3. #: Domestic SCBs were directed to ensure that their overall lending to non-corporate farmers does not fall below the system-wide average of the last three years' achievement. All efforts should be made to reach the level of 13.5 per cent direct lending to the beneficiaries who earlier constituted the direct agriculture sector. The applicable system wide average figure for computing achievement under priority sector lending will be notified every year. For FY 2016-17, the applicable system wide average figure is 11.70 per cent.
4. As on March 31, 2017, the specified priority sector lending targets / sub-targets is applicable for domestic SCBs/foreign banks with 20 branches or more as per cent of ANBC or credit equivalent amount of OBE, whichever is higher as on March 31 of the preceding year. The target for the total priority sector, total agriculture and weaker sections in case of foreign banks with 20 branches and above is to be achieved by March 2018. The sub-target for small and marginal farmers and micro-enterprises for foreign banks with 20 branches and above would be made applicable post-2018 after a review in 2017.
5. For foreign banks having less than 20 branches, the target of 40 per cent of ANBC or credit equivalent amount of OBE, whichever is higher, as on March 31 of the preceding year is to be achieved in a phased manner by March 2020.

premiums on PSLCs across various categories were observed in the first quarter of 2016-17 since the PSLCs purchased during the first quarter can be reckoned for achievement at all the four quarterly reporting dates.

V.50 Highest PSLC premiums were observed for the PSLC – small and marginal farmers (SMF) as it is the only PSLC which can be reckoned for achievement under all of the following targets, *viz.*, SMF, non-corporate farmers, agriculture, overall priority sector and weaker sections. The lowest premiums were observed for PSLC-General, which are counted towards the overall target only.

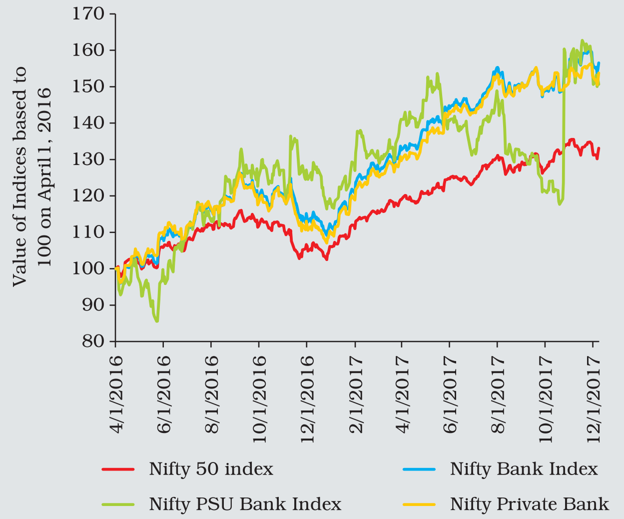
Credit to Sensitive Sectors

V.51 Credit to sensitive sectors decelerated during 2016-17. The real estate sector, which accounts for 93 per cent of total loans to sensitive sectors was adversely impacted by demonetisation, which was also reflected in credit demand. About 20 per cent of total loans and advances of SCBs goes to the real estate sector. While PSBs maintained the tempo of loans to the sector, PVBs recorded a decline (Appendix Table V.4).

VI. Operations of Scheduled Commercial Banks in the Capital Market

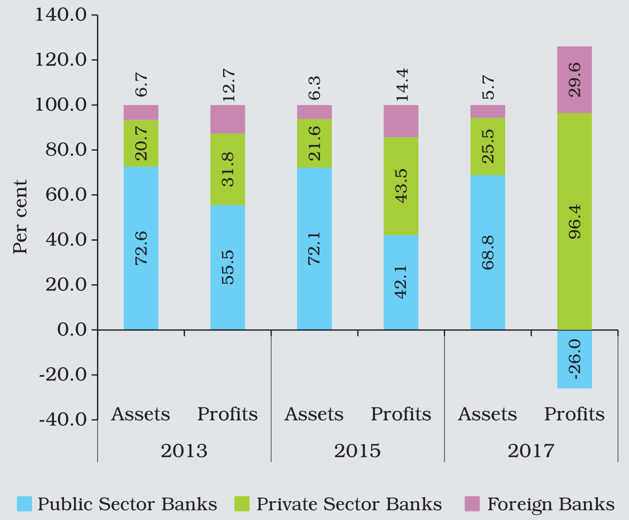
V.52 During 2016-17 and during 2017-18 so far, the Nifty Bank Index has outperformed Nifty 50 reflecting better performance of bank equities as compared to other sectors. Movement in the Nifty Bank Index was guided by a host of factors including enactment of the Insolvency and Bankruptcy Code (IBC), 2016, easing of the monetary policy rate, net purchases by domestic mutual funds following the liquidity glut due to demonetisation, net purchases by foreign institutional investors (FIIs) due to a favourable global equity market, revision of the PCA framework by the Reserve Bank, promulgation of the Banking Regulation (Amendment) Ordinance, 2017 and identification of stressed accounts by the Reserve Bank for resolution through the IBC. In Q1:2016-17, the Nifty Private Bank Index yielded better returns than the Nifty PSU Bank

Chart V.20: Relative Performance of Bank Indices and Nifty 50



Source: Thomson Reuters Eikon.

Chart V.21: Bank Group-wise Share in Total Assets and Profits of Banking Sector (End-March)



Source: Annual accounts of banks.

Index. However, later during the year the Nifty PSU Bank Index outperformed the Nifty Private Bank Index possibly due to value buying of PSB stocks by investors, proposed restructuring of PSBs, expectation of early resolution of NPA problem and deceleration in the growth of fresh NPAs. Following the promulgation of the Banking Regulation (Amendment) Ordinance, 2017[6] which empowers the Reserve Bank to direct banks to initiate insolvency proceedings in respect of corporate borrowers in default, under the IBC, 2016 in May 2017 and the identification of certain accounts by the Reserve Bank, the Nifty PSU Bank Index corrected. However, following the announcement by the Government to recapitalise PSBs on October 24, 2017, Nifty PSU Bank Index rallied sharply. Although, it marginally corrected, thereafter (Chart V.20).

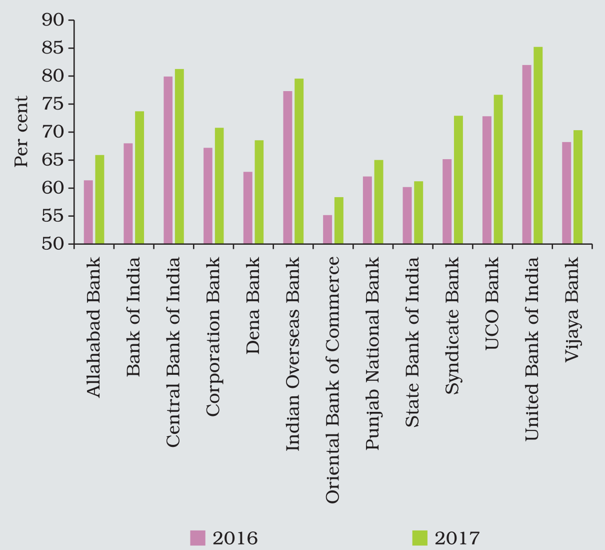
VII. Ownership Pattern in Scheduled Commercial Banks

V.53 While the Indian banking system is dominated by PSBs, the share of PVBs has been rising in recent years (Chart V.21).

V.54 During 2016-17, 13 out of 27 PSBs witnessed increased public shareholding due to recapitalisation (Chart V.22).

V.55 At the end of March 2017, the maximum foreign shareholding in the case of PSBs was only up to 12.2 per cent. By contrast, four PVBs had

Chart V.22: Public Shareholding in Select PSBs



Source: Off-site returns.

6 Subsequently, the Banking Regulation (Amendment) Act, 2017 was enacted by the Parliament, which received the assent of the President on August 25, 2017.

foreign shareholding in excess of 50 per cent. (Appendix Table V.5).

VIII. Foreign Banks' Operations in India and Overseas Operations of Indian Banks

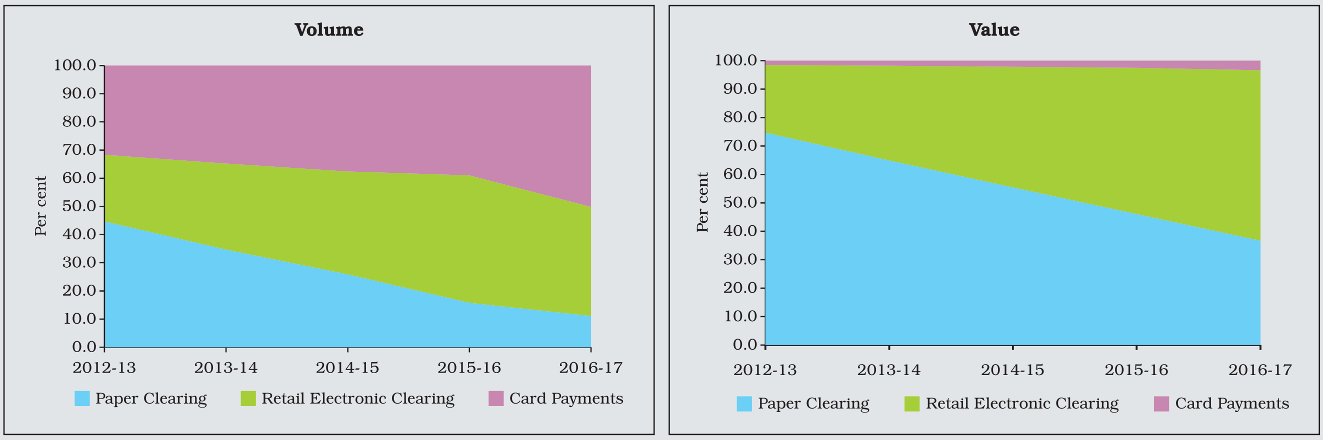
V.56 At end-March 2017, 44 foreign banks were operating through 295 branches, down from 46 foreign banks with 325 branches in 2016. In addition, there were 39 representative offices of foreign banks. Indian banks had 186 branches abroad as well as overseas presence in the form of 26 subsidiaries, 53 representative offices and eight joint ventures. The number of branches of Indian banks declined during the year reflecting efforts towards rationalisation so as to improve efficiency and minimise costs (Table V.23). Unlike Indian banks operating abroad, no foreign bank operates as a wholly owned subsidiary in India, despite near national treatment given to them by the Reserve Bank.

Table V.23: Overseas Operations of Indian Banks
(As at end-March)

Name of the Bank	Branch		Subsidiary		Representative Office		Joint Venture Bank		Other Offices*		Total	
	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017
1	2	3	4	5	6	7	8	9	10	11	12	13
I. Public Sector Banks	**168**	**166**	**23**	**23**	**35**	**35**	**7**	**8**	**33**	**36**	**266**	**268**
1 Allahabad Bank	1	1	0	0	0	0	0	0	0	0	1	1
2 Andhra Bank	0	0	0	0	2	2	0	0	0	0	2	2
3 Bank of Baroda	51	50	9	9	1	1	2	2	10	10	73	72
4 Bank of India	28	29	5	5	5	4	0	0	0	0	38	38
5 Canara Bank	8	8	0	1	1	1	0	0	0	0	9	10
6 Central Bank of India	0	0	0	0	2	2	0	0	0	0	2	2
7 Corporation Bank	0	0	0	0	2	2	0	0	0	0	2	2
8 Dena Bank	0	0	0	0	1	1	0	0	0	0	1	1
9 Indian Bank	4	4	0	0	0	0	0	0	0	0	4	4
10 Indian Overseas Bank	8	8	0	0	3	2	0	0	3	3	14	13
11 IDBI Bank Ltd.	1	1	0	0	0	0	0	0	0	0	1	1
12 Punjab National Bank	3	3	3	2	3	4	1	2	0	0	10	11
13 State Bank of India	55	53	5	5	7	7	4	4	20	23	91	92
14 State Bank of Travancore	0	0	0	0	1	1	0	0	0	0	1	1
15 State Bank of Hyderabad	0	0	0	0	1	1	0	0	0	0	1	1
16 Syndicate Bank	1	1	0	0	0	0	0	0	0	0	1	1
17 UCO Bank	4	4	0	0	0	1	0	0	0	0	4	5
18 Union Bank	4	4	1	1	3	3	0	0	0	0	8	8
19 United Bank of India	0	0	0	0	2	2	0	0	0	0	2	2
20 Oriental Bank of Commerce	0	0	0	0	1	1	0	0	0	0	1	1
II. Private Sector Bank	**20**	**20**	**3**	**3**	**18**	**18**	**0**	**0**	**0**	**0**	**41**	**41**
21 Axis Bank	5	5	1	1	3	3	0	0	0	0	9	9
22 HDFC Bank Ltd.	3	3	0	0	3	3	0	0	0	0	6	6
23 ICICI Bank Ltd.	12	12	2	2	6	5	0	0	0	0	20	19
24 IndusInd Bank Ltd.	0	0	0	0	3	3	0	0	0	0	3	3
25 Federal Bank Ltd.	0	0	0	0	1	2	0	0	0	0	1	2
26 Kotak Mahindra Bank Ltd.	0	0	0	0	1	1	0	0	0	0	1	1
27 Yes Bank	0	0	0	0	1	1	0	0	0	0	1	1
All Banks	**188**	**186**	**26**	**26**	**53**	**53**	**7**	**8**	**33**	**36**	**307**	**309**

Note: *: Other Offices include marketing / sub-office, remittance centres, *etc.*
Source: Reserve Bank of India.

Chart V.23: Instruments of Retail Payments



Note: Card payments include payments made through pre-paid payment instruments.

IX. Payment System Indicators of Scheduled Commercial Banks

V.57 The Reserve Bank took various policy measures to expand and strengthen the payment system infrastructure and to introduce various innovative products, which are accessible, convenient, cost-effective and secure as envisaged in the Payment System Vision Document 2016-18. The withdrawal of high denomination SBNs provided a boost to the objective of a 'less-cash society' as people shifted to card based transactions and various modes of electronic payments (such as NACH, NEFT, UPI, PPI and IMPS). During 2016-17, 88.8 per cent of the non-cash retail payments in terms of volume and 63.3 per cent of the non-cash retail payments in terms of value were undertaken through cards and electronic modes (Chart V.23).

Growth in ATMs

V.58 The coverage of ATMs increased as the total number of ATMs installed crossed 0.2 million as at end March 2017 (Table V.24).

V.59 However, saturation is observed in the growth of ATMs in view of steady deceleration in the number of ATMs across various bank groups in recent years, which may be attributable to electronic transactions, disincentivising the number of cash withdrawals and increasing use of credit/debit cards for retail payments. Further, the cost of transactions at ATMs is higher than interchange recovered by the acquirer. Hence, banks are reluctant to set up new ATMs (Chart V.24).

Off-site ATMs

V.60 The share of off-site ATMs in total ATMs for all SCBs remained less than 50 per cent. In the case of PSBs, however, which account for 71 per cent of the total ATMs, the share of off-site ATMs was merely 41.7 per cent as against 60.8 per cent and 77.3 per cent in case of PVBs and FBs, respectively (Table V.24).

White-label ATMs

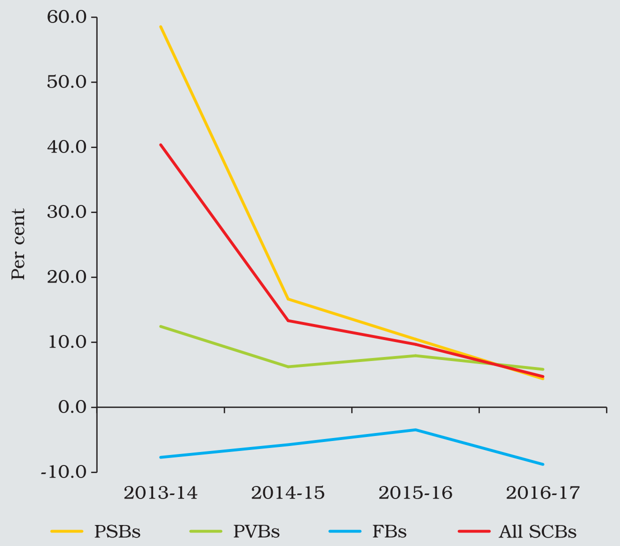
V.61 The number of white label ATMs (WLAs), set up, owned and operated by non-bank entities,

Table V.24 : ATMs of Scheduled Commercial Banks
(As at end-March 2017)

Sr. No.	Bank Group	On-site ATMs	Off-site ATMs	Total Number of ATMs
1	2	3	4	5
I	Public Sector Banks	86,545	62,010	148,555
II	Private Sector Banks	23,045	35,788	58,833
III	Foreign Banks	219	747	966
IV	**All SCBs**	**109,809**	**98,545**	**208,354**

Note: Data excludes White Label ATMs (WLAs).

Chart V.24: Growth of ATMs



Note: Data excludes WLAs.

increased by 8.9 per cent to 14,121 by end-March 2017 from previous year. It needs to be noted that 88.7 per cent of the WLAs are operated by only two WLA operators. Unlike the ATMs which are concentrated in urban and metropolitan centres, around 74 per cent of the WLAs were located in rural (42.4 per cent) and semi-urban centres (31.6 per cent).

Debit and Credit Cards

V.62 Both debit and credit cards issued by SCBs recorded growth of more than 16 per cent during 2016-17 though debit cards witnessed further deceleration in growth. Rupay cards issued under the Pradhan Mantri Jan Dhan Yojana (PMJDY) was a major driver of increase in number of debit cards. PSBs (82.9 per cent) and PVBs (62.4 per cent) continued to maintain a strong lead in debit and credit cards, respectively (Table V.25; Chart V.25).

Pre-paid Payment Instruments

V.63 The usage of pre-paid payment instruments (PPIs) for remittances as also for payment towards goods and services has been on an increase. The withdrawal of SBNs accelerated the usage of PPIs.

Table V.25: Credit and Debit Cards Issued by Scheduled Commercial Banks

(As at end-March 2017)

(in million)

Sr No.	Bank Group	Outstanding Number of Credit Cards		Outstanding Number of Debit Cards	
		2016	2017	2016	2017
1	2	3	4	5	6
I	Public Sector Banks	5.0	6.1	548.5	639.5
II	Private Sector Banks	14.7	18.6	110.3	128.2
III	Foreign Banks	4.7	5.1	3.0	4.0
IV	**All SCBs**	**24.5**	**29.8**	**661.8**	**771.6**

Note: Figures may not add up to the total due to rounding-off.

The volume of PPIs sharply rose to 1,964 million as at end-March 2017 from 748 million in the previous year. The value of PPIs also witnessed significant growth during the year (Chart V.26). According to the Reserve Bank's guidelines, the maximum value of a pre-paid payment instrument shall not exceed ₹100,000 at any point of time.

Unified Payments Interface

V.64 The unified payments interface (UPI) was introduced in 2016-17 to provide an alternative and convenient means of electronic payments. In this regard, National Payments Corporation of

Chart V.25: Trends in Debit and Credit Cards

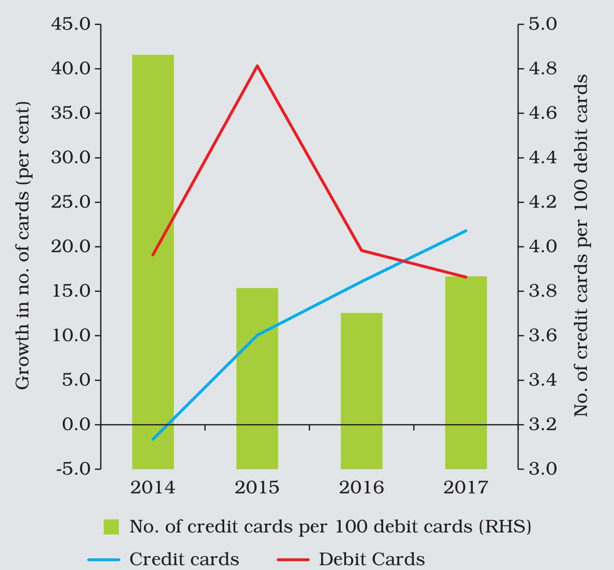
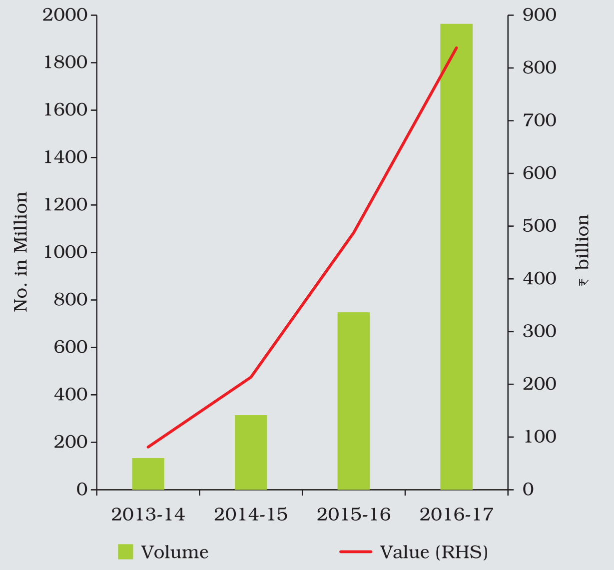


Chart V.26: Progress of Pre-paid Payment Instruments



India (NPCI) was accorded approval to introduce unstructured supplementary service data (USSD) 2.0 mobile banking facility (*99# which can be used on any handset and does not require internet connection by the customers), which is integrated with UPI. The UPI allows money transfers between any two bank accounts by using a smartphone as well as feature phone (USSD 2.0). It also allows a customer to pay directly from a bank account to different merchants, both online and offline on the basis of virtual address instead of bank account details. During the year, 17.9 million transactions worth ₹69.5 billion occurred through UPI.

X. Customer Service

V.65 Consumer protection and awareness has assumed a critical role for the Reserve Bank in view of the increasing customer base of banks, predominantly from vulnerable sections of society, and the introduction of technology based banking products. In this direction, the Reserve Bank set up five more Banking Ombudsman (BO) offices in addition to the existing 15 BO offices to ensure fair treatment of customers. During 2016-17, the total number of complaints increased by 27.3 per cent, up from 20.9 per cent in the previous year. Except for a few BO offices in Tier II cities, most of the Tier I[7] and Tier II cities recorded a significant increase in the number of complaints (Table V.26).

Table V.26: Region-wise Complaints Received at Banking Ombudsman Offices

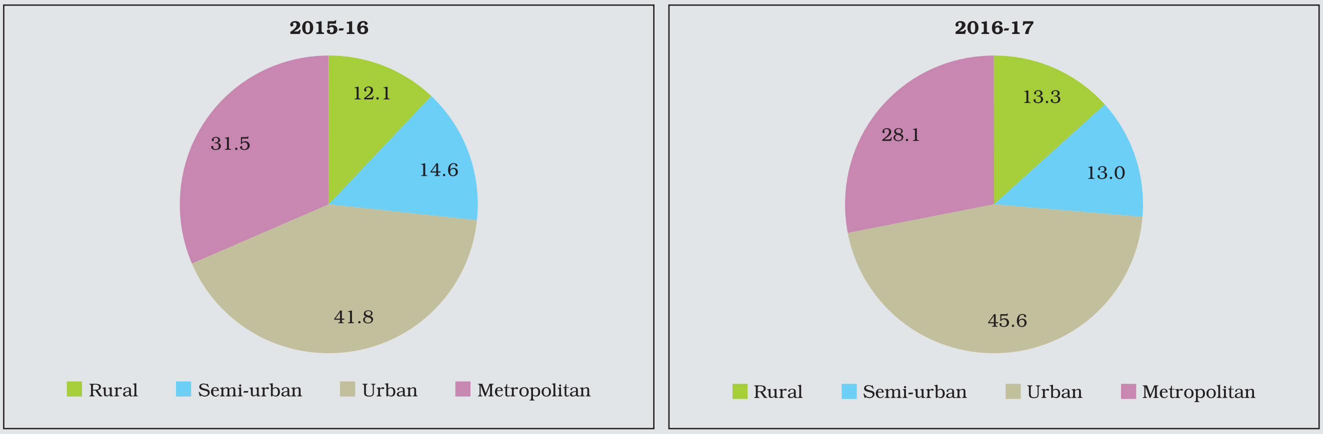
BO Office	Number of Complaints		Percentage Variation
	2015-16	2016-17	2016-17
Ahmedabad	5,909	9,552	61.7
Bengaluru	5,119	7,042	37.6
Bhubaneswar	3,050	2,582	-15.3
Bhopal	5,748	5,671	-1.3
Kolkata	4,846	7,834	61.7
Chennai	8,645	9,007	4.2
Chandigarh	4,571	8,189	79.2
Guwahati	1,328	1,569	18.1
Hyderabad	5,910	6,570	11.2
Jaipur	4,664	6,740	44.5
Kanpur	9,621	8,150	-15.3
Patna	5,003	6,225	24.4
Mumbai	12,333	16,299	32.2
New Delhi	22,554	24,837	10.1
Thiruvananthapuram	3,593	3,855	7.3
*New Delhi II	0	4,935	-
*Dehradun	0	948	-
*Ranchi	0	715	-
*Raipur	0	237	-
*Jammu	0	30	-
Total	**102,894**	**130,987**	**27.3**

Notes: 1. -: Nil/negligible.
2. * Offices opened in 2016-17.
3. Includes SCBs, RRBs and UCBs.
Source: Various Regional Offices of Banking Ombudsman.

V.66 BO offices in six Tier I cities received 54.7 per cent of the total complaints. Population-group wise, the largest proportion of complaints was received from urban areas followed by metropolitan, semi-urban and rural areas. During 2016-17, the share of complaints from urban and rural bank customers further increased while the share of metropolitan and semi-urban customers ebbed (Chart V.27).

[7] Tier I cities are New Delhi, Mumbai, Chennai, Kolkata, Bengaluru and Hyderabad.

Chart V.27: Population Group-wise Distribution of Complaints Received at BOs



V.67 In recent years, non-observance of the fair practices code has been a major complaint against banks, followed by complaints related to ATM/ credit/debit cards, non-adherence to the code of the Banking Codes and Standards Board of India (BCSBI) and pensions (Chart V.28).

V.68 Bank group-wise, PSBs (67.9 per cent) received the largest number of complaints, followed by PVBs (29.3 per cent) and FBs (2.7 per cent), largely reflecting their shares in total loans. However, if number of complaints is normalised by the number of branches / number of accounts (deposit + loans), the highest number of complaints were against FBs, followed by PVBs and PSBs (Chart V.29).

Chart V.28: Share of Major Types of Complaints

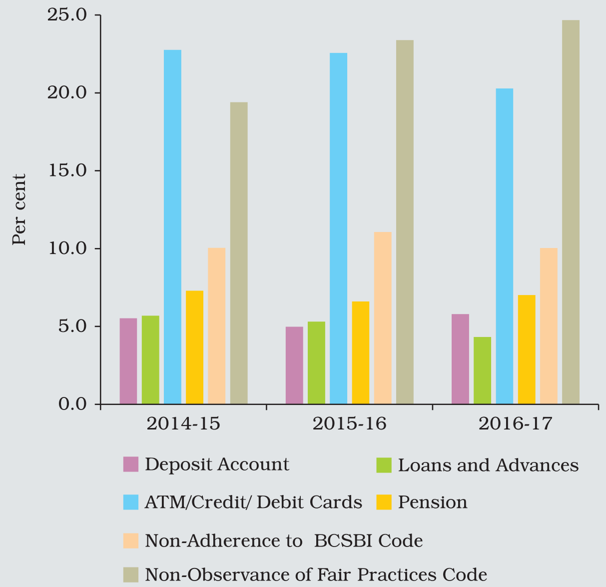
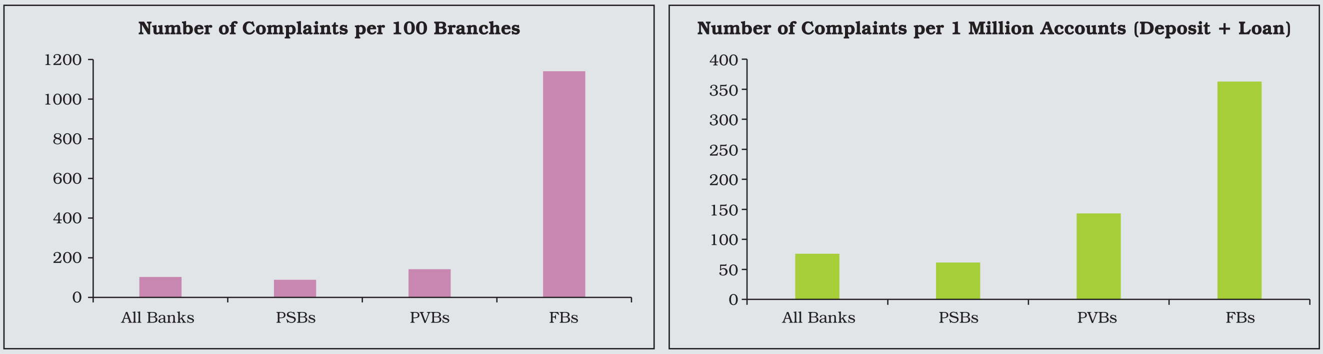


Chart V.29: Number of Complaints per Bank Branch / Account – 2016-17



Note: The number of complaints per accounts are worked out for 2015-16 since data on the number of accounts are not available for 2016-17.
Source: Data from various Regional Offices of the Banking Ombudsman, Basic Statistical Returns of Scheduled Commercial Banks in India and Quarterly Statistics on Deposits and Credit of Scheduled Commercial Banks.

XI. Financial Inclusion

V.69 Under the advice of the Reserve Bank, SCBs have been devising three-year financial inclusion plans (FIP) congruent with their business strategies and comparative advantages as an integral part of their corporate plans. FIP include self-set targets to expand their outreach in terms of outlets and customer base as well as to offer a range of products suited for the purpose. They include specific goals for coverage of unbanked villages, opening of accounts and other specific products aimed at financially excluded segments. Two phases of the financial inclusion plans, *i.e.*, Phase-I (2010-13) and Phase-II (2013-16) have already been completed. Considerable progress was made through these financial inclusion plans towards achieving universal financial inclusion (Table V.27). Currently, the third phase of FIP (2016-19) is being implemented under which granular monitoring is done at the district level to assess the progress in financial inclusion. FIPs have also been extended to cover the small finance banks and they have been advised to report on the progress made under various financial inclusion parameters as prescribed by the Reserve Bank.

V.70 During 2016-17, the number of brick and mortar branches in rural areas declined marginally. With an increasing number of villages being covered through business correspondents (BCs) and other modes, the total number of banking outlets in villages showed a marginal uptick (Table V.27).

V.71 The dominance of BCs in banking services in rural areas can be gauged from the fact that in March 2017, about 91 per cent of the banking outlets in villages were BCs as against 50.5 per cent in March 2010 (Chart V.30). This underscores the increasing importance of technology in the provision of banking services. Further, given that BCs which provide banking services over a minimum of 4 hours per day and for at least 5 days a week have been recognised as banking outlets, their importance is set to increase further.

Pradhan Mantri Jan Dhan Yojana

V.72 The period since August 2014 is co-terminus with the implementation of the Pradhan

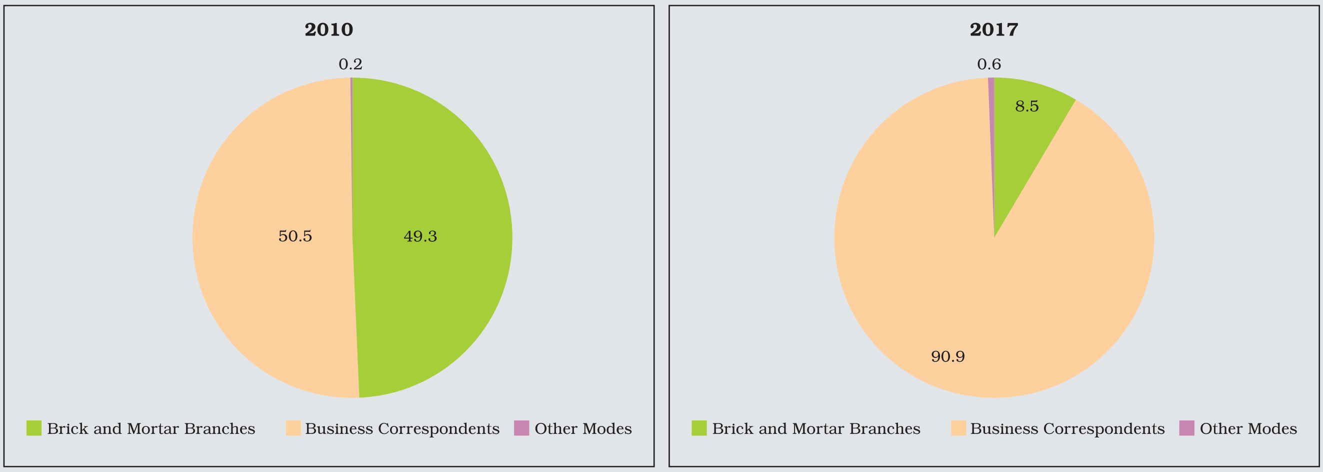
Table V.27: Progress under Financial Inclusion Plans, All SCBs including RRBs

Sr. No.	Particulars	Mar-10	Mar-16	Mar-17	Half year ended Sep-17*	Percentage change (Mar-2016 – Mar-17)
1	Banking Outlets in Villages – Branches	33,378	51,830	50860	49,527	-1.9
2	Banking Outlets in Rural Location – Branchless Mode	34,316	534,477	547,233	511,383	2.4
3	Banking Outlets in Villages – Total	67,694	586,307	598,093	560,910	2.0
4	Urban Locations Covered through BCs	447	102,552	102,865	123,941	0.3
5	BSBDA – Through Branches (No. in million)	60	238	254	245	6.7
6	BSBDA – Through Branches(Amt. in ₹ billion)	44	474	691	635	45.8
7	BSBDA – Through BCs (No. in million)	13	231	280	278	21.2
8	BSBDA – Through BCs (Amt. in ₹ billion)	11	164	285	306	73.8
9	BSBDA – Total (No. in million)	73	469	533	522	13.6
10	BSBDA – Total (Amt. in ₹ billion)	55	638	977	941	53.1
11	OD Facility Availed in BSBDAs (No. in million)	0.2	9	9	6	0.0
12	OD Facility Availed in BSBDAs (Amt. in ₹ billion)	0.1	29	17	4	-41.4
13	KCCs – Total (No. in million)	24	47	46	46	-2.1
14	KCCs – Total (Amt. in ₹ billion)	1,240	5,131	5,805	5,896	13.1
15	GCC – Total (No. in million)	1	11	13	12	18.2
16	GCC – Total (Amt. in ₹ billion)	35	1,493	2,117	1,806	41.8
17	ICT A/Cs-BC – Total Transactions (No. in million)	27	827	1,159	662	40.1
18	ICT A/Cs-BC – Total Transactions (Amt. in ₹ billion)	7	1,687	2,652	1,831	57.2

Notes: 1. Absolute and percentage variation could be slightly different as numbers have been rounded off to million / billion.
2. *: Data excludes 8 RRBs.

Source: Reserve Bank of India.

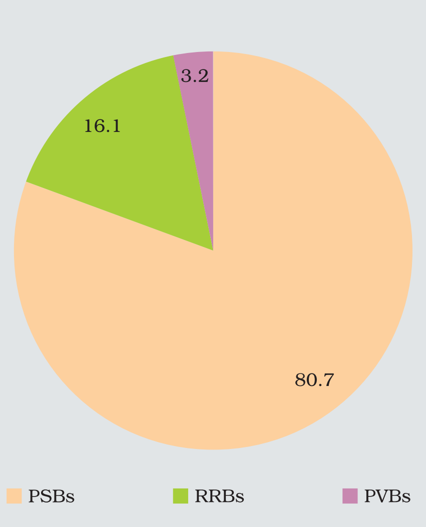
Chart V.30: Banking Outlets in Villages (Percentage Share in Total)



Mantri Jan Dhan Yojana (PMJDY) of the Government of India, which has given a big push to financial inclusion from the supply side. During this period of a little more than three years, more than 300 million PMJDY accounts have been opened and about 231 million Rupay debit cards have been issued. In this drive, more than 96 per cent of these accounts were opened with PSBs and RRBs (Chart V.31).

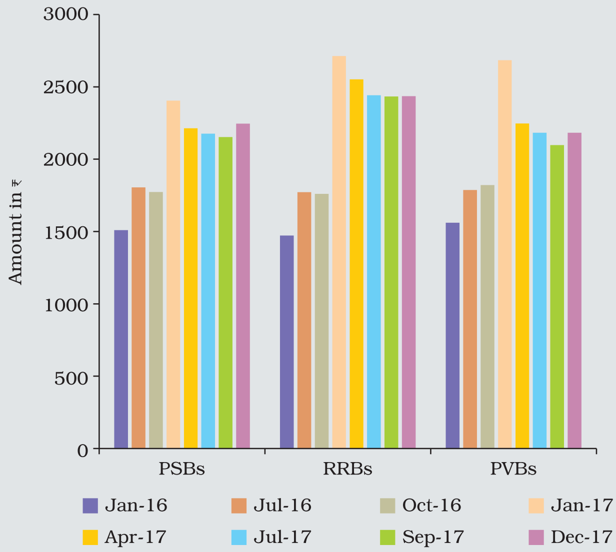
V.73 A steady increase in the usage of these accounts across bank-groups has also been observed. Following demonetisation, there was a sharp increase in the average balances in these accounts. Although the average balance per account has come down subsequently, they still remain at a level higher than in the pre-demonetisation period (Chart V.32). Given the increased focus on supply side measures so far, there is also a need to focus on enhancing capabilities so that the individual is in a position to avail the offered services and demand preferred products and services suitable to her need/choice.

Chart V.31: Bank Group-wise Share in PMJDY Accounts
(As on December 6, 2017)



Source: https://pmjdy.gov.in.

Chart V.32: Average Balance in PMJDY Accounts



Source: https://pmjdy.gov.in.

V.74 The increasing focus on the BC model has also resulted in a steady decline in new brick and mortar branches. During 2016-17, newly opened branches declined by more than 30 per cent. A disconcerting feature is that 45 per cent of the new branches were opened in Tier-I centres. A declining proportion of the branches were opened in Tier-VI centres (population less than 5,000) in recent years, which lie in rural areas (Table V.28).

V.75 Nonetheless, banking penetration has improved significantly and the gap across various geographical regions has declined on account of the efforts made towards expanding access to the formal financial system. Under-banked geographical regions such as the north-east as well as the eastern and central regions recorded noteworthy improvement in population per bank branch. In the Southern region, which has the highest banking penetration, population per branch declined to 6,801 in March 2017 (Chart V.33).

Distribution of ATMs

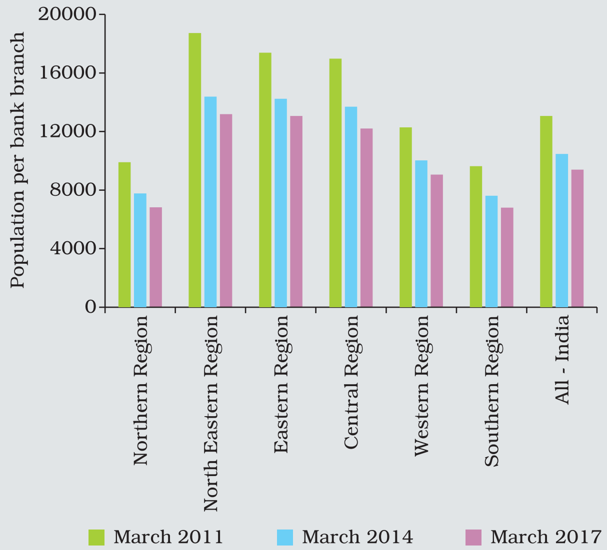
V.76 Over the years, the spread of ATMs has played an important role in enhancing access to banking services. During 2016-17, the share of ATMs in metropolitan centres increased, while the share of ATMs in rural and urban centres marginally declined. In terms of geographical distribution, 32.1 per cent of the ATMs were concentrated in the southern region. The eastern and north-eastern region had the least penetration of ATMs. This largely mirrors the geographical distribution of bank branches (Chart V.34).

Table V.28: Tier-wise Break-up of Newly Opened Bank Branches

Tier	2013-14	2014-15	2015-16	2016-17
Tier I	3,118 (27.2)	3,094 (35.4)	2,736 (39.2)	2,174 (45.0)
Tier II	824 (7.2)	606 (6.9)	531 (7.6)	327 (6.8)
Tier III	1,293 (11.3)	1,045 (12.0)	873 (12.5)	558 (11.6)
Tier IV	1,025 (8.9)	745 (8.5)	559 (8.0)	365 (7.6)
Tier V	1,463 (12.7)	835 (9.6)	635 (9.1)	611 (12.7)
Tier VI	3,757 (32.7)	2,405 (27.5)	1,652 (23.6)	795 (16.5)
Total	**11,480 (100.0)**	**8,730 (100.0)**	**6,986 (100.0)**	**4,830 (100.0)**

Note: Figures in parentheses are percentages to total.
Source: Reserve Bank of India.

Chart V.33: Banking Penetration across Regions



Source: Reserve Bank of India and MOSPI.

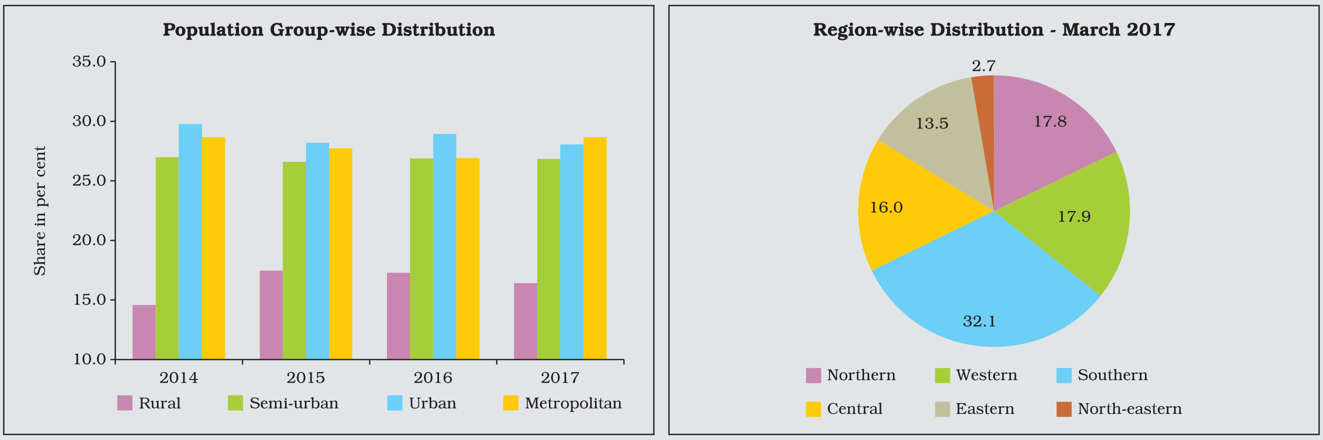
V.77 ATMs in urban and metropolitan centres accounted for 56.8 per cent of the total. In contrast to PSBs whose ATMs were relatively well distributed across various population centres, ATMs of PVBs and FBs were concentrated in urban and metropolitan centres (Table V.29).

Table V.29: Percentage Share of ATMs of SCBs at Various Centres
(As at end-March 2017)

Bank group	Rural	Semi-urban	Urban	Metro-politan
1	2	3	4	5
Public Sector Banks	19.7	28.3	28.9	23.1
Private Sector Banks	8.4	23.6	26.2	41.8
Foreign Banks	1.6	1.8	18.9	77.7
Total	**16.4**	**26.8**	**28.1**	**28.7**

Source: Reserve Bank of India.

Chart V.34: Distribution of ATMs



Note: Data excludes WLAs.

Microfinance Programme

V.78 Steady progress has been made in the delivery of microfinance through self-help groups (SHGs) and joint liability groups (JLGs). SHG-bank linkage continued to be the dominant mode of microfinance with about 1.9 million SHGs credit linked with bank financing of ₹388 billion during 2016-17. Although the number of micro finance institutions (MFIs) financed by banks increased significantly, the amount of loans disbursed declined (Table V.30).

Cross-country Experience in Financial Inclusion

V.79 Due to various efforts made by the Government and the Reserve Bank, the overall score for financial inclusion as brought out by The

Table V.30: Progress of Microfinance Programmes

(As at end-March)

Item	Self-Help Groups							
	Number (in Million)				Amount (₹ billion)			
	2013-14	2014-15	2015-16	2016-17	2013-14	2014-15	2015-16	2016-17
Loans Disbursed by Banks	1.4	1.6	1.8	1.9	240	276	373	388
	(0.2)	(0.7)	(0.9)	(1.0)	(35)	(114)	(194)	(200)
Loans Outstanding with Banks	4.2	4.5	4.7	4.8	429	515	572	616
	(1.3)	(2.2)	(2.5)	(2.8)	(102)	(232)	(306)	(341)
Savings with Banks	7.4	7.7	7.9	8.6	99	111	137	161
	(2.3)	(3.4)	(3.9)	(4.3)	(25)	(55)	(73)	(87)
	Microfinance Institutions							
	Number				Amount (₹ billion)			
Loans Disbursed by Banks	545	597	647	2,314	103	147	208	193
Loans Outstanding with Banks	2,422	4,660	2,020	5,357	165	219	256	292
	Joint Liability Groups							
	Number (in Million)				Amount (₹ billion)			
Loans Disbursed by Banks	0.21	0.46	0.57	0.70	22	44	62	95

Notes: 1. Figures in brackets give the details of SHGs covered under the National Rural Livelihoods Mission (NRLM) and the National Urban Livelihoods Mission (NULM) for 2014-15, 2015-16 and 2016-17, respectively. Earlier year data in brackets cover only NRLM / Swarnajayanti Gram Swarojgar Yojana (SGSY) groups.

2. Actual number of MFIs availing loans from banks would be less than the number of accounts, as most of MFIs avail loans several times from the same bank and also from more than one bank.

Source: NABARD.

Table V.31: Financial Inclusion in BRICS and Other Emerging Economies, 2016

	Overall Score	Government Support for Financial Inclusion	Regulatory and Supervisory Capacity for Financial Inclusion	Prudential Regulation	Regulation and Supervision of Credit Portfolios	Regulation of Electronic Payments	Grievance Redress and Dispute Resolution Mechanisms
Colombia	89	100	58	100	100	75	100
India	78	83	58	75	89	100	83
Kenya	61	78	58	88	64	100	25
Mexico	60	78	58	92	50	50	50
Indonesia	55	44	83	46	83	50	83
Brazil	51	78	42	46	19	75	42
South Africa	51	39	42	63	33	50	58
Russia	49	61	58	21	69	50	17
Turkey	46	22	58	67	47	50	33
China	44	44	17	46	50	75	42

Note: Normalised score 0-100 where 100 = best.
Source: Global Microscope 2016 – The Enabling Environment for Financial Inclusion, The Economist Intelligence Unit.

Economist Intelligence Unit's Global Microscope improved to 78 out of 100 in 2016 from 61 in 2014. The overall score assesses the regulatory ecosystem for financial inclusion by evaluating 12 indicators across a range of emerging and developing economies covering 55 countries. India occupied the third position in terms of overall ranking, much ahead of its BRICS peers and other emerging economies. India had an impeccable score in terms of regulation of electronic payments (Table V.31). This underscores the widespread positive action taken to create a regulatory environment which is conducive to digital economic activity. A pan-India survey conducted by the Reserve Bank showed that the average score in various financial literacy indicators was below the minimum required threshold suggested by the OECD/INFE (International Network on Financial Education) Toolkit. This suggests the need to integrate financial literacy in the agenda of financial inclusion for promoting inclusive growth.

XII. Regional Rural Banks

V.80 Regional Rural Banks (RRBs) were established to bring together the positive features of credit co-operatives and commercial banks and to address the credit needs of backward sections in rural areas. The number of RRBs operating in the country has come down to 56 as at end-March 2017 from 196 in 2005 through amalgamation and consolidation of existing RRBs to improve their financial performance and soundness. Many RRBs have been recapitalised by the Government intermittently to meet the minimum 9 per cent CRAR in a sustainable manner and also to enable them to extend more credit to the productive sectors. Given their mandate to focus on rural areas, about 90 per cent of their loan portfolios consisted of priority sector lending, with agriculture constituting 74.6 per cent of their total priority sector loans in March 2017 (Table V.32).

Table V.32: Purpose-wise Outstanding Advances by RRBs
(As at end-March)

(Amount in ₹ billion)

Sr. No.	Purpose	2016	2017 P
1	2	3	4
I	**Priority (i to v)**	**1779**	**1934**
	Per cent of Total Loans Outstanding	86.1	89.2
	i Agriculture	1317	1444
	ii Micro, Small and Medium Enterprises	252	282
	iii Education	26	27
	iv Housing	132	132
	v Others	52	49
II	**Non-priority (i to vi)**	**286**	**232**
	Per cent of Total Loans Outstanding	13.9	10.7
	i Agriculture	1	-
	ii Micro, Small and Medium Enterprises	12	8
	iii Education	-	-
	iv Housing	11	15
	v Personal Loans	74	60
	vi Others	189	149
Total (I+II)		**2065**	**2166**

Notes: 1. -: Nil / negligible.
2. P: Provisional.
Source: NABARD.

V.81 The consolidated balance sheet of RRBs recorded a significant expansion during the year. Current and saving deposits increased by 20 per cent or more, partly reflecting the impact of demonetisation. Borrowings also increased, largely from sponsor banks and others sources. On the assets side, RRBs maintained a healthy credit growth, while investments made a turnaround (Table V.33).

V.82 Despite a sharp increase in provisioning due to higher NPAs, the net profits of RRBs increased in 2016-17 largely attributed to increase in both interest and other income coupled with decline in operating expenses, in contrast to the decline in profits during the previous year. RoA remained stable, nonetheless NIM declined (Table V.34).

Table V.33: Consolidated Balance Sheet of Regional Rural Banks

(Amount in ₹ billion)

Sr. No.	Item	At end-March		Percentage Variation	
		2016	2017 P	2015-16	2016-17 P
1	Share Capital	64	64	3142.1^	0.1
2	Reserves	207	231	10.4	11.7
3	Share Capital Deposits / Tier II Bonds	1	-	-98.4	-
4	Deposits	3135	3719	14.8	18.6
	4.1 Current	89	107	-21.9	19.9
	4.2 Savings	1480	1881	12.9	27.1
	4.3 Term	1566	1731	20.0	10.6
5	Borrowings	479	560	-19.4	16.9
	5.1 NABARD	399	402	-13.9	0.7
	5.2 Sponsor Bank	57	96	-48.6	66.7
	5.3 Others	22	62	17.4	179.0
6	Other Liabilities	123	197	1.1	59.2
Total Liabilities / Assets		**4009**	**4771**	**8.4**	**19.0**
7	Cash in Hand	27	28	10.1	2.2
8	Balances with RBI	124	150	13.8	20.6
9	Other Bank Balances	46	65	-43.6	39.2
10	Investments	1696	2098	4.2	23.7
11	Loans and Advances (net)	1952	2239	14.7	14.3
12	Fixed Assets	11	11	13.3	5.9
13	Other Assets #	152	180	7.9	18.4

Notes: 1. -: Nil / negligible.
2. P: Provisional.
3. #: Includes accumulated losses.
4. Percentage variations could be slightly different as absolute numbers have been rounded off to ₹ billion.
5. ^: Share capital deposits merged with share capital.

Source: NABARD.

Table V.34: Financial Performance of Regional Rural Banks

(Amount in ₹ billion)

Sr. No.	Item	Amount		Percentage variation	
		2015-16	2016-17 P	2015-16	2016-17 P
1	2	3	4	5	6
A	**Income (i + ii)**	**354**	**388**	**10.9**	**9.6**
	i Interest Income	333	352	10.5	5.7
	ii Other Income	21	36	18.2	71.4
B	**Expenditure (i+ii+iii)**	**334**	**365**	**14.5**	**9.3**
	i Interest Expended	217	228	14.7	5.1
	ii Operating Expenses	97	95	7.1	-2.1
	of which, Wage Bill	69	67	23.2	-2.9
	iii Provisions and Contingencies	21	42	66.2	100.0
C	**Profit**				
	i Operating Profit	22	60	-24.7	172.0
	ii Net Profit	20	23	-27.1	15.0
D	**Total Average Assets**	**3808**	**4288**	**8.4**	**12.6**
E	**Financial ratios #**				
	i Operating Profit	0.6	1.3	-	-
	ii Net Profit	0.5	0.5	-	-
	iii Income (a + b)	9.3	9.0	-	-
	(a) Interest Income	8.7	8.2	-	-
	(b) Other Income	0.6	0.8	-	-
	iv Expenditure (a+b+c)	8.8	8.5	-	-
	(a) Interest Expended	5.7	5.3	-	-
	(b) Operating Expenses	2.5	2.2	-	-
	of which, Wage Bill	1.8	1.6	-	-
	(c) Provisions and Contingencies	0.5	1.0	-	-
F	**Analytical Ratios (%)**			-	-
	Gross NPA Ratio	6.8	8.1	-	-
	CRAR	12.8	9.7	-	-

Notes: 1: P: Provisional.
2: #: Financial ratios are percentages with respect to average total assets.
3. Percentage variations could be slightly different as absolute numbers have been rounded off to ₹ billion.

Source: NABARD.

XIII. Local Area Banks

V.83 Since April 2016, one local area bank (LAB) which accounted for about three-fourth of the assets of all LABs, has converted into a small finance bank (SFB). This has led to significant erosion in the significance of LABs as a bank-group. At end-March 2017, the total assets of LABs were ₹7.9 billion, accounting for mere 0.01 per cent of the total assets of all SCBs (Table V.35).

Table V.35 : Profile of Local Area Banks
(As at end-March)

(Amount in ₹ billion)

	2013-14	2014-15	2015-16	2016-17
Assets	18.8	23.1	27.6	7.9
Deposits	16.2	20.1	23.9	6.4
Gross Advances	10.7	13.2	15.8	4.7

Note: For 2016-17, data pertain to three LABs. For earlier years, it pertains to four LABs.
Source: Off-site returns (domestic).

V.84 During 2016-17, LABs (adjusted for one LAB converting into SFB) witnessed deceleration in asset growth as compared to the previous year. At the same time, the growth in net interest income was subdued. Nonetheless, LABs managed to report positive net profits due to lower growth in operating expenses and decline in provisions and contingencies (Table V.36).

V.85 LABs were established as local banks in the private sector. They were expected to bridge the gaps in credit availability and enhance and strengthen the institutional credit framework in rural and semi-urban areas. They were also expected to provide efficient and competitive financial intermediation services in their areas of operation comprising three contiguous districts. However, the LABs have inherent weaknesses owing to their small size, concentration risks, constraints in terms of uncompetitive cost structures and their inability to attract and retain professional staff due to locational disadvantages. Small finance banks were introduced as an alternative banking model to overcome some of these shortcomings and to further expand the access to institutional credit.

XIV. Small Finance Banks

V.86 Small finance banks (SFBs) were given licenses in 2016 with the objective of furthering financial inclusion by primarily undertaking the basic banking activities of acceptance of deposits and lending to unserved and underserved sections such as small business units; small and marginal farmers; micro and small industries; and other unorganised sector entities, through high technology-low cost operations. In this context, SFBs are required to: (i) have 25 per cent of their branches in unbanked rural centres within one year from the date of commencement of operations, (ii) have at least 50 per cent of their loan portfolios of up to ₹2.5 million, (iii) not undertake any para-banking activity, except that is allowed as per the licensing guidelines, and (iv) extend 75 per cent of their ANBC to the sectors eligible for classification as priority sector lending by the Reserve Bank.

Table V.36: Financial Performance of Local Area Banks

(Amount in ₹ billion)

	Amount		Percentage Variation	
	2015-16	2016-17#	2015-16	2016-17*
1. Income (i+ii)	3.0	1.1	18.3	10.7
i) Interest Income	2.7	0.9	17.9	6.7
ii) Other Income	0.3	0.2	22.7	33.9
2. Expenditure(i+ii+iii)	2.7	0.9	20.9	12.0
i) Interest Expended	1.7	0.5	20.7	12.3
ii) Provisions and Contingencies	0.2	0.1	22.1	-3.1
iii) Operating Expenses	0.9	0.4	21.2	15.3
of which, Wage Bill	0.5	0.2	20.5	7.4
3. Profit				
i) Operating Profit / Loss	0.4	0.2	4.5	5.0
ii) Net Profit / Loss	0.3	0.1	-4.0	1.2
4. Net interest income	1.0	0.4	13.3	1.7
5. Total assets	27.6	7.9	19.6	11.6
6. Financial Ratios @				
i) Operating Profit	1.6	2.7	-	-
ii) Net Profit	1.0	1.5	-	-
iii) Income	11.9	13.5	-	-
iv) Interest Income	10.7	11.1	-	-
v) Other Income	1.1	2.4	-	-
vi) Expenditure	10.9	12.0	-	-
vii) Interest Expended	6.6	5.9	-	-
viii) Operating Expenses	3.6	5.1	-	-
ix) Wage Bill	1.8	2.3	-	-
x) Provisions and Contingencies	0.6	1.0	-	-
xi) Net Interest Income	4.1	5.2	-	-

Notes: 1. #: Data pertains to three LABs. For the previous year, it pertains to four LABs.
2. *: For 2015-16, data of three LABs were used to calculate the percentage change.
3. @: Ratios to average total assets.
4. Financial ratios for 2016-17 are calculated based on the assets of the current year only.
5. 'Wage bill' is taken as payments to and provisions for employees.

Source: Off-site returns.

V.87 Moreover, SFBs need to comply with prudential norms and regulations of the Reserve Bank as applicable to existing commercial banks, including the requirements of maintenance of cash reserve ratio (CRR) and the SLR. No forbearance has, however, been provided for complying with the statutory provisions. The minimum capital requirement for SFBs has been set as 15 per cent of the risk weighted assets as against 10.25 per cent in case of SCBs as at end-March 2017, although CCB is not applicable to SFBs. In total, 10 SFBs have been given licenses and six SFBs have started operations by end-March 2017. It is interesting to note that eight out of the 10 licensed SFBs were operating as NBFCs in the microfinance sector.

V.88 As at end-March 2017, there were 397 functioning offices of SFBs. To promote financial inclusion, SFBs have been allowed three years from the date of their commencement to align their banking networks with the new branch authorisation policy of the Reserve Bank. During this time, their existing structure as MFIs/NBFCs may continue and existing branches will be treated as banking outlets subject to the condition that at least 25 per cent of them are converted from existing MFIs must be opened in unbanked rural centres during a financial year.

V.89 As regards their funding profile, borrowings constituted about 60 per cent of their liabilities, while the share of deposits was only 18 per cent. This may be because all the six SFBs were earlier operating as NBFCs, which have high reliance on borrowings from banks and other financial institutions for their operations. On the assets side, loans and advances constituted about 61 per cent of total assets (Table V.37).

V.90 Of the total loans, 93.4 per cent went to the priority sector with a focus on agriculture and micro, small and medium enterprises (Table V.38).

Table V.37: Consolidated Balance Sheet of Small Finance Banks

(Amount in ₹ billion)

Sr. No.	Item	End-March 2017
1	Share Capital	33
2	Reserves	16
3	Tier II Bonds	7
4	Deposits	50
	4.1 Current	1
	4.2 Savings	12
	4.3 Term	36
5	Borrowings (Including Tier II Bonds)	165
	5.1 Bank	69
	5.2 Others	97
6	Other Liabilities	12
Total Liabilities / Assets		**276**
7	Cash in Hand	2
8	Balances with RBI	7
9	Balances with Banks and Other Financial Institutions	24
10	Investments	60
11	Loans and Advances (net)	168
12	Fixed Assets	5
13	Other Assets	10

Note: Based on balance sheets of six SFBs which had commenced their operations before March 31, 2017.
Source: Off-site returns.

V.91 As regards financial performance, the SFBs' return on assets was similar to RRBs, while their asset quality was better than other bank groups (Table V.39).

Table V.38: Purpose-wise Outstanding Advances by Small Finance Banks

(Share in percentage)

Sr. No.	Purpose	End-March 2017
	Per cent to Gross Loans Outstanding	
I	**Priority**	**93.4**
	i Agriculture	25.7
	ii Micro, Small and Medium Enterprises	34.2
	iii Education	0.8
	iv Housing	2.6
	v Others	30.2
II	**Non-priority**	6.6
Total (I+II)		**100.0**

Note: Based on balance sheets of six SFBs which had commenced their operations before March 31, 2017.
Source: Off-site returns.

Table V.39: Financial Performance of Small Finance Banks

(Amount in ₹ billion)

Sr. No.	Item	2016-17
A	**Income (i + ii)**	20.8
	i Interest Income	17.9
	ii Other Income	2.9
B	**Expenditure (i+ii+iii)**	19.4
	i Interest Expended	8.8
	ii Operating Expenses	8.9
	of which, Wage Bill	4.9
	iii Provisions and Contingencies	1.7
C	**Profit**	
	i Operating Profit (EBPT)	3.1
	ii Net Profit (PAT)	1.4
D	**Total assets**	276.3
E	**Financial ratios#**	
	i Operating Profit	1.1
	ii Net Profit	0.5
	iii Income (a + b)	7.5
	(a) Interest Income	6.5
	(b) Other Income	1.0
	iv Expenditure (a+b+c)	6.7
	(a) Interest Expended	3.2
	(b) Operating Expenses	3.2
	of which, Staff Expenses	1.8
	(c) Provisions and Contingencies	0.3
F	**Analytical Ratios (%)**	
	Gross NPA Ratio	1.8
	CRAR	26.3

Notes: 1. #: As per cent to total assets.
2. Percentage variations could be slightly different as absolute numbers have been rounded off to ₹ billion.
3. Based on balance sheets of six SFBs which had commenced their operations before March 31, 2017.

Source: Off-site returns.

XV. Overall Assessment

V.92 During 2016-17, the banking sector remained beleaguered with worsening asset quality with implications in the form of declining profitability and lacklustre credit growth. The contribution of the banking sector to the total flow of financial resources to the commercial sector declined. Portfolio rebalancing was also observed in banks' loan books, with a shift towards agriculture in the priority sector and services and personal loans in the non-priority sectors. Despite these impediments, banks were able to strengthen their capital positions in sync with the gradual implementation of Basel III capital requirements and remained much above the regulatory minimum. In terms of the leverage ratio, banks were in a comfortable position.

V.93 Banks' balance sheets were impacted by demonetisation, which led to a significant increase in low cost deposits and a concomitant increase in liquidity, which reduced their borrowing requirements. In the face of low credit off-take, banks deployed resources in money market instruments and non-SLR investments. Off-balance sheet exposures of banks recovered from negative growth in the previous year. Notwithstanding positive tail winds in the form of low cost funds made available post-demonetisation, the financial performance of banks, especially PSBs, was weighed down by high provisioning on account of NPAs. As a result, PSBs reported net losses for the second year in a row.

V.94 With the ongoing third phase of the financial inclusion plan and the fillip provided by the PMJDY, further progress was made towards the goal of universal financial inclusion. With the latest branch authorisation policy that recognises BCs, which provide banking services for a minimum of 4 hours per day and for at least 5 days a week, as a banking outlet, the importance of technology in banking services is going to increase further. Operationalisation of SFBs and payments banks is expected to further expand the geographical penetration of banking services at low cost in an affordable manner, providing further impetus to the financial inclusion agenda. Further, the introduction of innovative products for digital payments and their facilitation through various incentives by the Government is also expected to provide a boost to the objective of a 'less-cash' society. At the same time, to ensure that bank customers are treated fairly, the Reserve Bank further strengthened the Banking Ombudsman Scheme.

V.95 Looking ahead, it is expected that through new institutional mechanisms such as the IBC, the Government and the Reserve Bank's resolve to collectively address the problem of stressed assets and banks' own efforts toward improving efficiency, credit monitoring, risk management and internal accruals, they will be able to overcome the strains on lending capacity and efficiently perform their role as financial intermediaries. In this direction, the Government's initiative in the form of an 'Alternative Mechanism' for consolidation of PSBs will help create strong and efficient banks. Nonetheless, banks will have to adapt and adjust to the rapidly evolving financial environment brought about by the entry of niche players and emerging financial technologies.

Chapter VI

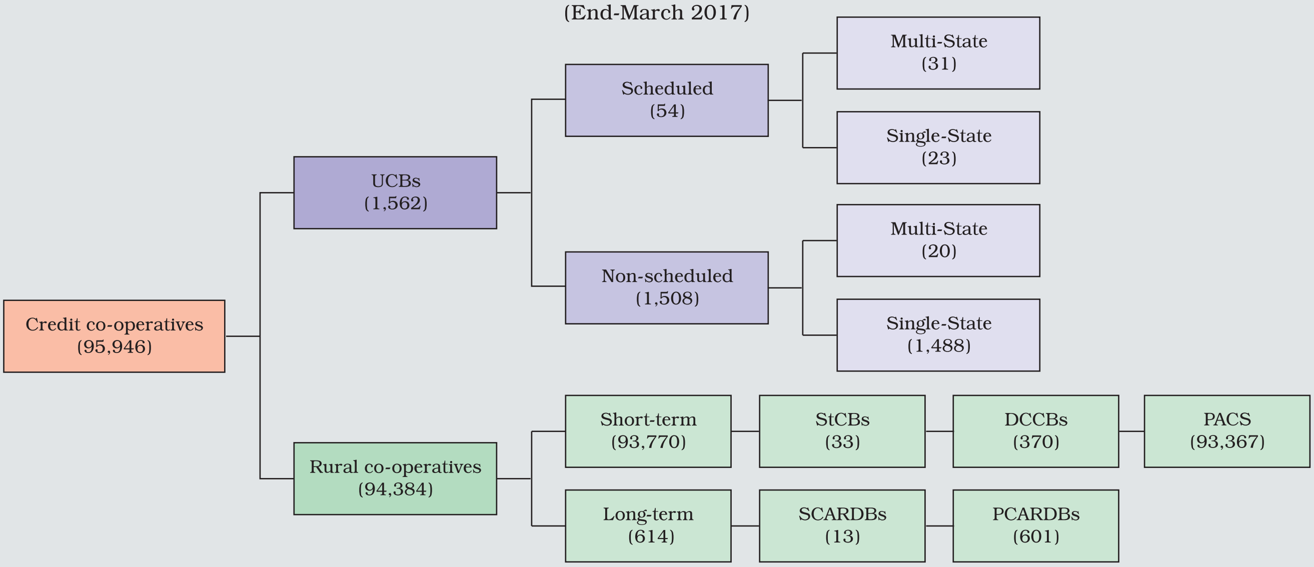
Developments in Co-operative Banking

Co-operatives, which have often been plagued by fragile financial health, on the whole, portrayed a sanguine picture in the financial results of the latest year. Following on-going consolidation efforts, urban co-operative banks exhibited expansion in balance sheet size and recorded improved profitability. Developments in the rural co-operative sector ensured a turnaround in the performance of the apex-level long-term rural credit co-operatives while the short-term rural credit co-operatives continued to exhibit improved performance.

I. Introduction

VI.1 Credit co-operatives, comprising of urban co-operative banks (UCBs) and rural co-operative credit institutions, were formed as exclusive institutions to meet specific developmental objectives embodied in the extension of formal financial services to villages and small towns in India. Their geographic and demographic outreach plays a pivotal role in credit delivery and inclusiveness in the financial system. Yet their share is relatively small in the bank-dominated Indian financial system. At the end of March 2016, the assets of rural and urban co-operatives taken together were 10.6 per cent of the total assets held by SCBs.[1] There were 1,562 UCBs and 94,384 rural co-operatives, including short-term and long-term co-operatives, at end-March 2017 (Chart VI.1). Rural co-operatives accounted for a predominant share in the assets of the co-operative sector (Chart VI.2).

Chart VI.1: Structure of Co-operative Credit Institutions in India
(End-March 2017)

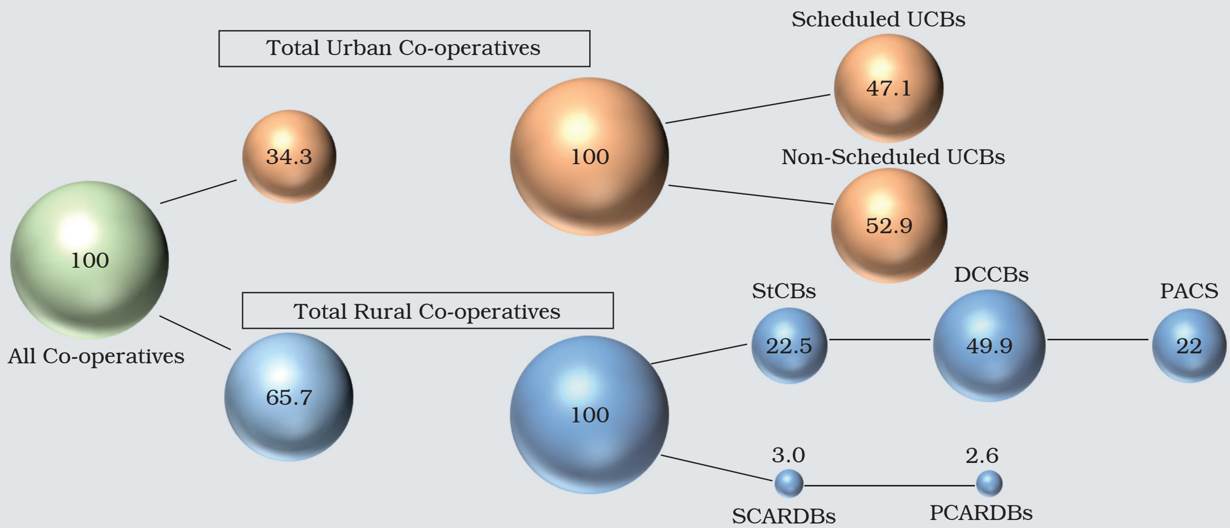


StCBs: State Co-operative Banks; DCCBs: District Central Co-operative Banks; PACS: Primary Agricultural Credit Societies; SCARDBs: State Co-operative Agriculture and Rural Development Banks; PCARDBs: Primary Co-operative Agriculture and Rural Development Banks.

Notes: 1. Figures in parentheses indicate the number of institutions at end-March 2017 for UCBs and at end-March 2016 for rural co-operatives.
2. For rural co-operatives, the number of co-operatives refers to reporting co-operatives.

[1] Data on rural co-operatives are available with a lag of one year, the latest being for end-March 2016.

Chart VI.2: The Structure of Co-operatives by Asset Size



Notes: 1. Figures in Per cent.
2. Bubble Size is scaled to Asset Size.

VI.2 Co-operatives have been hamstrung by fragile financial health stemming from operational and governance-related issues[2]. Remedial measures have been implemented from time to time, shaping the emergence of a consolidated and resilient urban co-operative banking sector. However, in the case of rural co-operatives and particularly long-term institutions, financial debilities persist.

VI.3 Against this backdrop, this chapter analyses the performance of co-operatives in 2016-17. The rest of the chapter is organised into four sections. Section II reviews the performance of UCBs, based on financial and soundness indicators. Section III assesses the short-term and long-term rural co-operative credit structure. Section IV provides a comparative assessment of short-term and long-term rural co-operative credit institutions. Section V gives an overall assessment.

II. Urban Co-operative Banks

VI.4 In pursuance of the recommendations of the Marathe Committee (1992), the Reserve Bank followed an active licensing policy for UCBs to allow them to tap area-specific deposit mobilisation and credit absorption potential. As a result, the period 1993-2004 witnessed a proliferation in the number of UCBs. Their poor financial health prompted the Reserve Bank to conceive a Vision Document in 2005, which envisaged a multi-layered regulatory and supervisory strategy aimed at shoring up their viability. The ensuing mergers/ amalgamations/exits led to a reduction in the number of UCBs (Chart VI.3). Beginning with 2004-05, the UCB sector has undergone 128 mergers till March 2017 with Maharashtra accounting for the maximum number of them, followed by Gujarat and Andhra Pradesh (Chart VI.4).

[2] These issues have been examined by the Reserve Bank in 2005 in its draft Vision Document for UCBs and by the Working Group to Examine Issues Relating to Augmenting Capital of UCBs, 2006 (Chairman: Shri N. S. Vishwanathan).

Chart VI.3: Fall in Number of UCBs since 2005

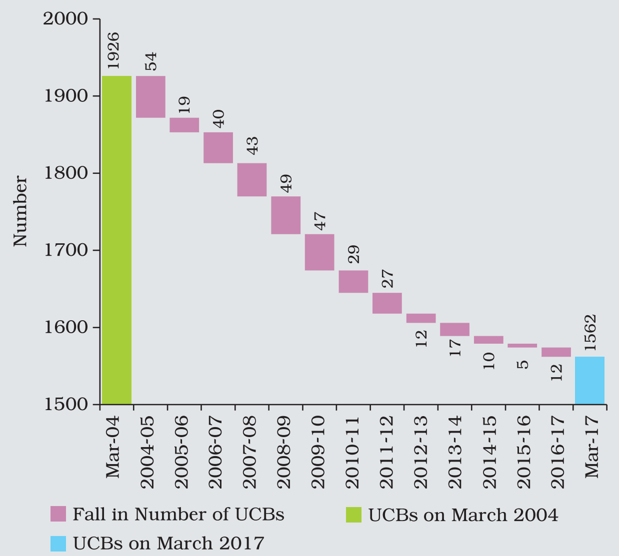
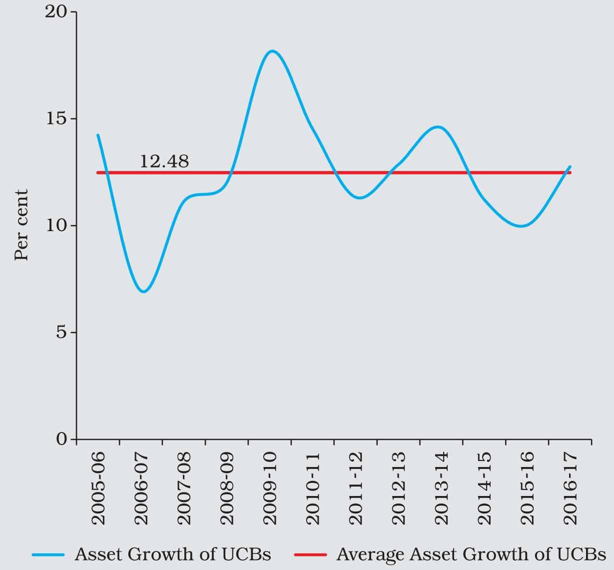
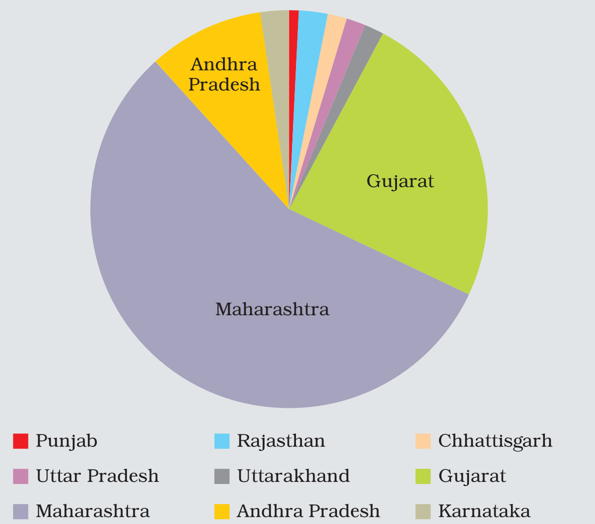


Chart VI.5: Asset Growth of UCBs



VI.5 Notwithstanding the sharp fall in the number of UCBs, there was a massive expansion in their balance sheets underscoring the effectiveness of the consolidation drive. In recent years though, UCBs' growth in assets has decelerated to close to its long run average (Chart VI.5).

Chart VI.4: Geographical Distribution of UCB Mergers
(Cumulative basis as at end-March 2017)



VI.6 The success of the consolidation drive of the UCBs is visible in other parameters as well. The share of Tier II UCBs[3] – both in number and assets – has increased rapidly over time (Chart VI.6 and Table VI.1).

VI.7 Along with consolidation, a significant development has been the movement in the mode of distribution of total deposits of the UCBs to larger size buckets. This is indicative of the expansion and diversification of their customer base (Table VI.2 and Chart VI.7).

[3] Tier-I UCBs were defined by:

- Deposit base below ₹1 billion operating in a single district.
- Deposit base below ₹1 billion operating in more than one district, provided that the branches are in contiguous districts, and deposits and advances of branches in one district separately constitute at least 95 per cent of the total deposits and advances, respectively, of the bank.
- Deposit base below ₹1 billion, with branches originally in a single district, which subsequently became multi-district due to a re-organisation of the district.

All other UCBs are defined as Tier-II UCBs.

Chart VI.6: Rise of the Tier II UCBs
(End-March)

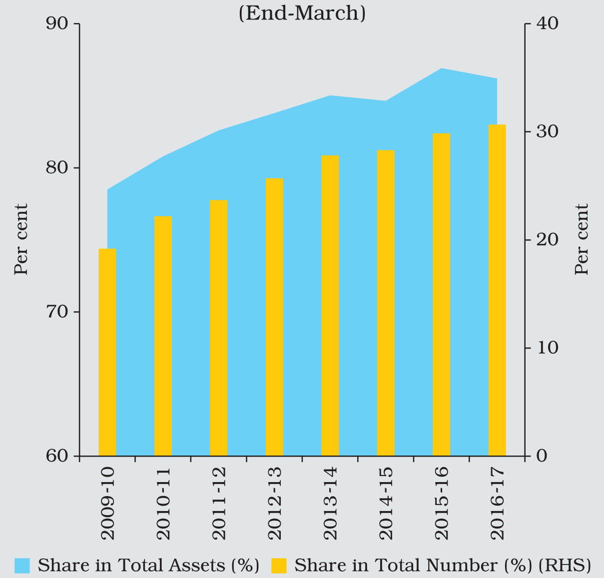
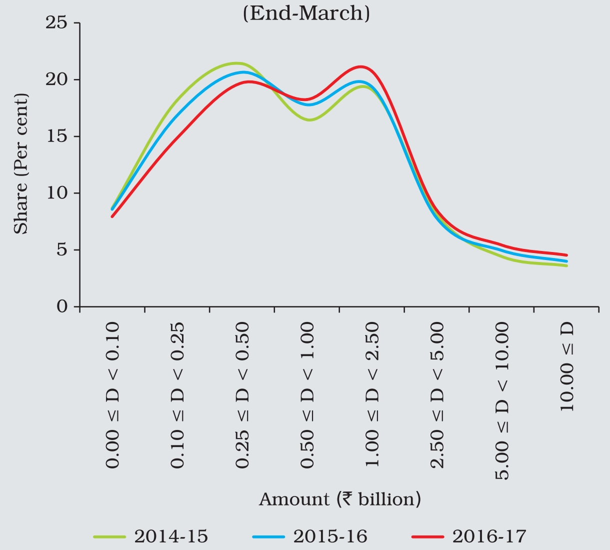


Chart VI.7: Changing Distribution of Deposits of UCBs
(End-March)



Note: D - Deposits.

VI.8 In 2016-17, the shift in the distribution of advances towards larger buckets was less discernible than the shift in the distribution of deposits (Chart VI.8).

Table VI.1: Tier-wise Distribution of Urban Co-operative Banks
(End-March 2017)

(Amount in ₹ billion)

Tier Type	Number of Banks		Deposits		Advances		Assets	
	Number	% to Total	Amount	% to Total	Amount	% to Total	Amount	% to Total
1	2	3	4	5	6	7	8	9
Tier I UCBs	1,083	69.3	603.3	13.6	317.8	12.2	745.0	13.8
Tier II UCBs	479	30.7	3,831.4	86.4	2,294.4	87.8	4,654.1	86.2
All UCBs	**1,562**	**100.0**	**4,434.7**	**100.0**	**2,612.2**	**100.0**	**5,399.1**	**100.0**

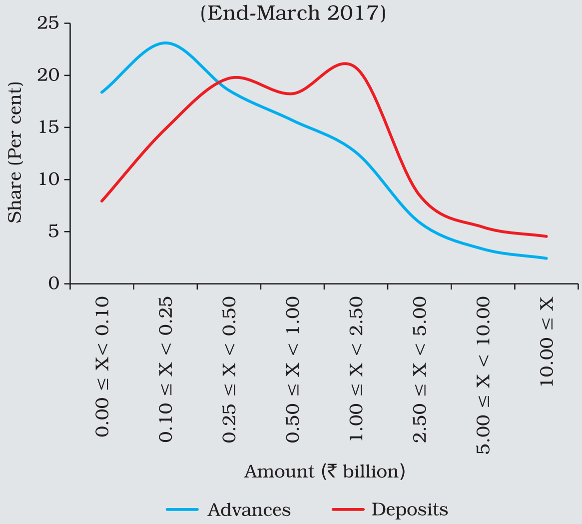
Note: Data are provisional.

Table VI.2: Distribution of UCBs by Deposits and Advances
(End-March 2017)

Deposits (₹ billion)	Number of UCBs		Amount of Deposits		Advances (₹ billion)	Number of UCBs		Amount of Advances	
	Number	% Share	Amount	% Share		Number	% Share	Amount	% Share
1	2	3	4	5	6	7	8	9	10
0.0 - 0.10	124	7.9	7.5	0.2	0.00 - 0.10	287	18.4	16.1	0.6
0.10 - 0.25	232	14.9	41.7	0.9	0.10 - 0.25	361	23.1	62.0	2.4
0.25 - 0.50	308	19.7	118.4	2.7	0.25 - 0.50	290	18.6	105.3	4.0
0.50 - 1.00	285	18.2	210.2	4.7	0.50 - 1.00	245	15.7	181.3	6.9
1.00 - 2.50	324	20.7	537.7	12.1	1.00 - 2.50	197	12.6	315.4	12.1
2.50 - 5.00	133	8.5	506.8	11.4	2.50 - 5.00	92	5.9	331.0	12.7
5.00 - 10.00	85	5.4	627.5	14.1	5.00 - 10.00	52	3.3	363.4	13.9
10.00 and above	71	4.5	2,385.0	53.8	10.00 and above	38	2.4	1,237.8	47.4
Total	**1,562**	**100.0**	**4,434.7**	**100.0**	**Total**	**1,562**	**100.0**	**2,612.3**	**100.0**

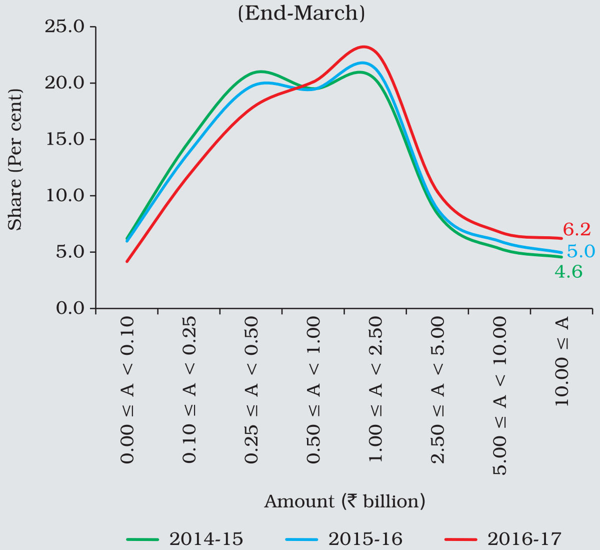
Notes: 1. Data are provisional.
2. Components may not add up to the total due to rounding off.

Chart VI.8: Distribution of UCBs by Deposits *versus* Advances
(End-March 2017)



Note: X - Deposits/Advances.

Chart VI.9: Distribution of UCBs by Asset Size
(End-March)



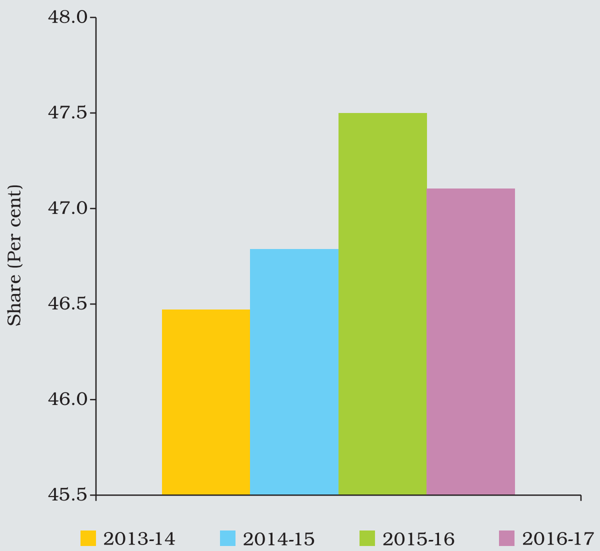
Note: A - Assets.

VI.9 The UCB sector has also witnessed a high degree of asset concentration. The bi-modality of the asset-class distribution in 2014-15 has transformed into a unimodal pattern in a higher size asset class. The share of UCBs with an asset size of more than ₹10 billion increased from 4.6 per cent in 2014-15 to 6.2 per cent in 2016-17 (Chart VI.9). The number of scheduled UCBs increased from 50 in 2014-15 to 54 in 2016-17, although the increase in the asset share of scheduled UCBs (SUCBs) moderated in 2016-17 (Chart VI.10).[4]

Balance Sheet

VI.10 Balance sheet of UCBs expanded in 2016-17 on account of an increased growth in net worth (capital plus reserves) and deposits on the liability side. An increase in investments and other assets also contributed to balance sheet expansion. Loans and advances of UCBs witnessed muted growth reflecting subdued demand conditions in the economy, which manifested into, among other things, a slowdown in the growth of the small-ticket retail loans and the housing loans segments, which the urban-focused UCBs mainly cater to (Table VI.3).

Chart VI.10: Asset Share of Scheduled UCBs
(End-March)



[4] Scheduled UCBs are urban credit co-operatives included in the Second Schedule of the RBI Act, 1934 and include UCBs that have paid-up capital and reserves of not less than ₹0.5 million and demand and time liabilities of not less than ₹7.5 billion and which carry out their businesses as per the norms prescribed by the Reserve Bank.

Table VI.3: Liabilities and Assets of Urban Co-operative Banks
(End-March)

(Amount in ₹ billion)

Assets/Liabilities	Scheduled UCBs		Non-Scheduled UCBs		All UCBs		Rate of Growth (%) (All UCBs)	
	2016	2017	2016	2017	2016	2017	2015-16	2016-17
1	2	3	4	5	6	7	8	9
Liabilities								
1. Capital	36	40	74	82	110	122	10.6	10.5
	(1.6)	(1.6)	(3.0)	(2.9)	(2.3)	(2.3)		
2. Reserves	142	158	154	177	296	335	8.1	13.3
	(6.3)	(6.2)	(6.1)	(6.2)	(6.2)	(6.2)		
3. Deposits	1,844	2,073	2,078	2,362	3,922	4,435	10.4	13.1
	(81.1)	(81.5)	(82.6)	(82.7)	(81.9)	(82.1)		
4. Borrowings	24	31	2	3	26	34	16.5	29.8
	(1.1)	(1.2)	(0.1)	(0.1)	(0.5)	(0.6)		
5. Other Liabilities	228	242	209	232	437	474	7.8	8.5
	(10.0)	(9.5)	(8.3)	(8.1)	(9.1)	(8.8)		
Assets								
1. Cash in Hand	12	15	30	30	42	45	12.1	6.0
	(0.5)	(0.6)	(1.2)	(1.0)	(0.9)	(0.8)		
2. Balances with RBI	87	99	15	15	102	115	4.5	12.8
	(3.8)	(3.9)	(0.6)	(0.5)	(2.1)	(2.1)		
3. Money at Call and Short Notice	18	39	14	12	33	51	56.0	55.1
	(0.8)	(1.5)	(0.6)	(0.4)	(0.7)	(0.9)		
4. Investments	585	662	624	759	1,209	1,420	63.9	17.5
	(25.7)	(26.0)	(24.8)	(26.6)	(25.3)	(26.3)		
5. Loans and Advances	1,187	1,292	1,262	1,320	2,449	2,612	9.2	6.7
	(52.2)	(50.8)	(50.2)	(46.2)	(51.2)	(48.4)		
6. Other Assets	235	259	159	290	394	549	8.0	39.5
	(10.3)	(10.2)	(6.3)	(10.1)	(8.2)	(10.2)		
Total Liabilities/Assets	**2,274**	**2,543**	**2,514**	**2,856**	**4,788**	**5,399**	**10.0**	**12.8**
	(100)	**(100)**	**(100)**	**(100)**	**(100)**	**(100)**		

Notes: 1. Data for 2017 are provisional.
2. Figures in parentheses are percentages to total liabilities / assets.
3. Components may not add up to the total due to rounding off.
4. Y-o-y variations could be slightly different because absolute numbers have been rounded off to ₹1 billion in the table.

VI.11 Historically, investments have been the preferred use of funds among UCBs resulting in low credit-to-deposit ratios. During 2016-17, however, incremental credit-to-deposit ratio of UCBs was higher than that of SCBs (Chart VI.11). The investment-to-deposit ratio of UCBs had dipped below that of the SCBs for the first time in 2015-16 as balances with central/state co-operative banks ceased to be reckoned as SLR investments from April 1, 2015. The wedge between the investment-to-deposit ratio of SCBs and UCBs narrowed down in 2016-17 (Chart VI.12).

VI.12 There was a turnaround in the growth of UCBs' SLR investments, which had declined a year ago and also there was an accelerated pace of growth in non-SLR investments in 2016-17 (Chart VI.13 and Table VI.4).

Chart VI.11: Credit to Deposit Ratio
(End-March)

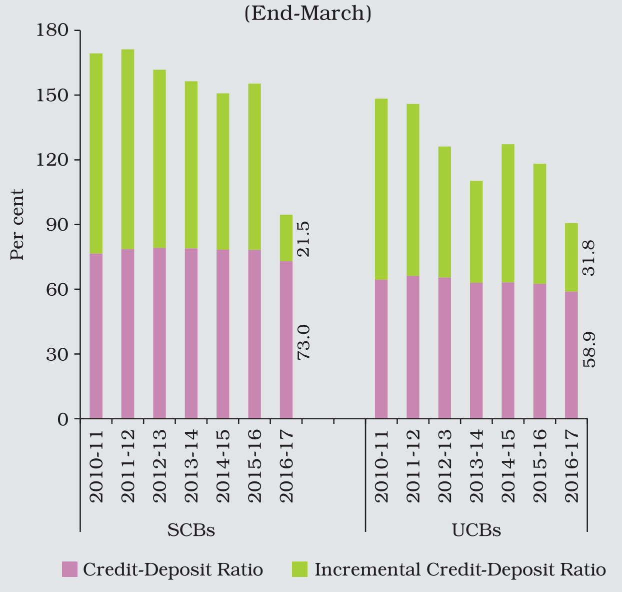


Chart VI.12: Investment to Deposit Ratio
(End-March)

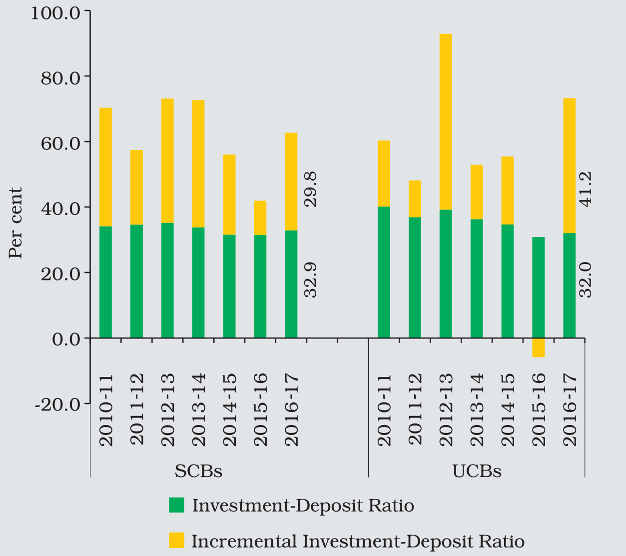
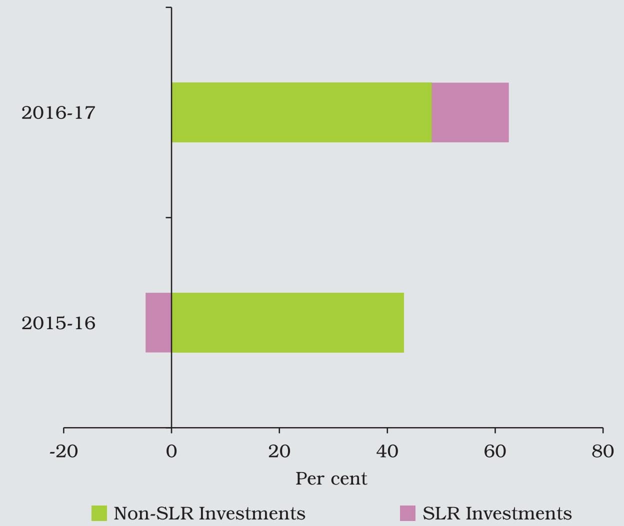


Chart VI.13: SLR and Non-SLR Investments of UCBs: End-March
(y-o-y percentage variation)



VI.13 The increase in SLR investments, despite easing regulatory requirements, reflected a sharp hike in investment in Central and State Government securities.[5]

Table VI.4: Investments by Urban Co-operative Banks

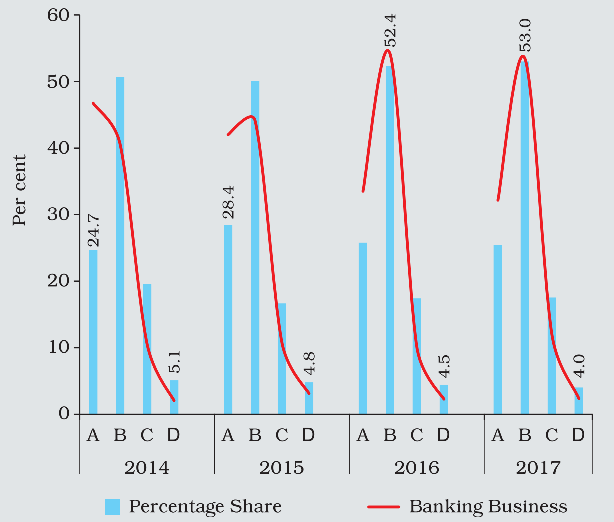
(Amount in ₹ billion)

Item	End-March			Variation (%)	
	2015	2016	2017	2015-16	2016-17
1	2	3	4	5	6
Total Investments (A + B)	**1,231 (100.0)**	**1,209 (100.0)**	**1,420 (100.0)**	**-1.8**	**17.5**
A. SLR Investments (i to iv)	**1,152 (93.6)**	**1,096 (90.7)**	**1,253 (88.2)**	**-4.8**	**14.3**
(i) Central Government Securities	792 (68.7)	878 (80.1)	954 (76.2)	11.0	8.7
(ii) State Government Securities	175 (15.2)	215 (19.6)	293 (23.4)	22.9	36.7
(iii) Other Approved Securities	4 (0.4)	3 (0.3)	5 (0.4)	-20.4	61.5
(iv) Balances with Central / State Co-operative Banks	181 (15.7)				
B. Non-SLR Investments	**79 (6.4)**	**113 (9.3)**	**167 (11.8)**	**43.0**	**48.2**

Notes: 1. Data for 2017 are provisional.
2. Figures in parentheses are share in respective type of investments.
3. Components may not add up to the total due to rounding off.
4. The reckoning of the balances with Central / State Co-operative Banks has been discontinued for SLR since April 1, 2015.
5. Y-o-y variations could be slightly different because absolute numbers have been rounded off to ₹1 billion in the table.

[5] The SLR for UCBs was brought down from 21.5 per cent of their net demand and time liabilities (NDTL) to 21.25 per cent in April 2016 and further to 21 per cent in July 2016. UCBs were required to maintain SLR of 20.75 per cent effective from October 1, 2016 and 20.50 per cent effective from January 7, 2017.

Chart VI.14: Distribution of Number and Business of UCBs - by Rating Categories



Note: Banking Business: Deposits *plus* Advances

Soundness

VI.14 The financial strength of an UCB is adjudged by the CAMELS rating assigned to it.[6] The share of UCBs in the lowest CAMELS rating category 'D' has consistently come down since 2013-14. The distribution of UCBs in rating categories other than 'D' did not show any perceptible change between March 2016 and March 2017 (Chart VI.14 and Table VI.5).

Table VI.5: Rating-wise Distribution of UCBs
(End-March 2017)

(Amount in ₹ billion)

Ratings	Number		Deposits		Advances	
	Banks	% Share in Total	Amount	% Share in Total	Amount	% Share in Total
1	2	3	4	5	6	7
A	397	25.4	1,443	32.5	824	31.6
B	828	53.0	2,356	53.1	1,411	54.0
C	274	17.6	528	12.0	319	12.1
D	63	4.0	108	2.4	59	2.3
Total	**1,562**	**100.0**	**4,435**	**100.0**	**2,613**	**100.0**

Notes: 1. Data are provisional.
2. Components may not add up to the total due to rounding off.
3. Ratings are based on the inspections conducted during the financial years 2015-16 and 2016-17.

Capital Adequacy

VI.15 Capital is a critical criterion for determining the business model of the UCBs given their permissible activities. It is also an important parameter in the CAMELS rating. Against the statutory minimum requirement of CRAR for UCBs at 9 per cent, 82 per cent of the non-scheduled UCBs maintained CRAR above 12 per cent in 2016-17 (Table VI.6).

VI.16 Non-scheduled UCBs (NSUCBs) that are characterised by a smaller business size, have had stronger capital positions than scheduled UCBs (SUCBs). In 2016-17, SUCBs' capital position exhibited remarkable improvement as reflected in the increase in the share of SUCBs with CRAR above 9 per cent (Chart VI.15). While 90 per cent of the SUCBs met the minimum CRAR stipulation, four registered negative capital adequacy ratios in 2016-17. The growth in net worth (capital plus reserves) of non-scheduled UCBs led to higher growth in assets in 2016-17 (Chart VI.16).

Asset Quality

VI.17 Since 2015-16, the NPA ratio of the UCBs has fallen below that of SCBs (Chart VI.17). The

Table VI.6: CRAR-wise Distribution of UCBs
(End-March 2017)

CRAR (in Per cent)	Scheduled UCBs	Non-scheduled UCBs	All UCBs
1	2	3	4
CRAR < 3	4	110	114
3 <= CRAR < 6	0	9	9
6 <= CRAR < 9	1	8	9
9 <= CRAR < 12	4	150	154
12 <= CRAR	45	1,231	1,276
Total	**54**	**1,508**	**1,562**

Note: Data are provisional.

[6] The CAMELS (capital adequacy, asset quality, management, earnings, liquidity, and systems and control) rating model in its present form became applicable to UCBs from April 2008. The model gives a composite rating of A/B/C/D (in decreasing order of performance) to a bank, based on the weighted average rating of the individual components of CAMELS.

Chart VI.15: UCBs with CRAR above 9 Per cent

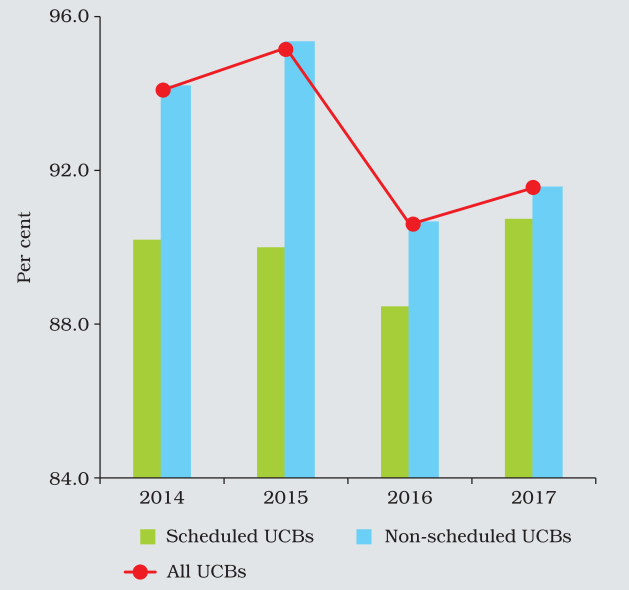


Chart VI.17: Non-performing Assets: UCBs *versus* SCBs

reason for this divergence could be that large infrastructure and industrial projects that have traditionally been catered to by SCBs were afflicted by impairments unlike the retail and small business segment which the UCBs cater to.

VI.18 The provision coverage ratio (PCR) for UCBs declined during the year. The movement of gross non-performing assets (GNPAs) and PCR in recent years reflects a lagged response by the UCBs in building up buffers against the increase in non-performing assets (Chart VI.18).

VI.19 This suggests that the increase in the GNPA ratio in 2016-17 may require higher provisioning in the future (Table VI.7).

VI.20 Higher provisioning is also expected in view of the worsening of the solvency position of UCBs

Chart VI.16: Growth in Net Worth and Assets

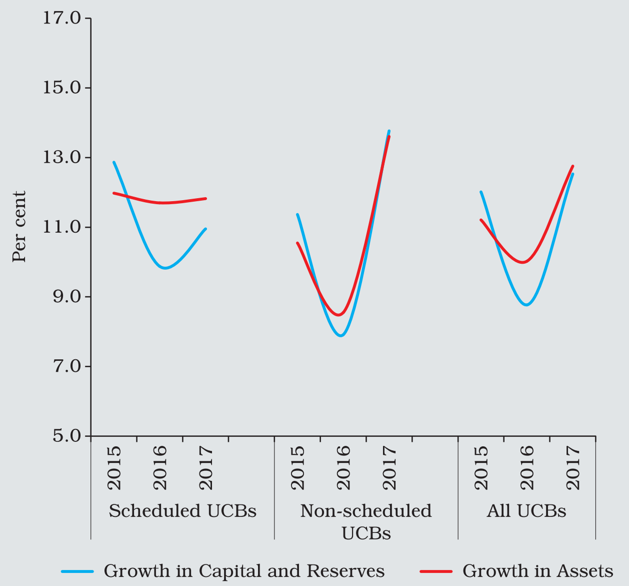


Chart VI.18: NPAs and PCR - UCBs

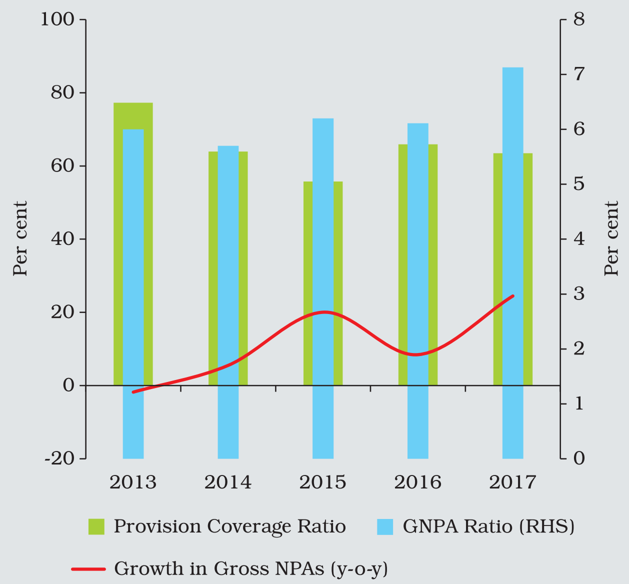


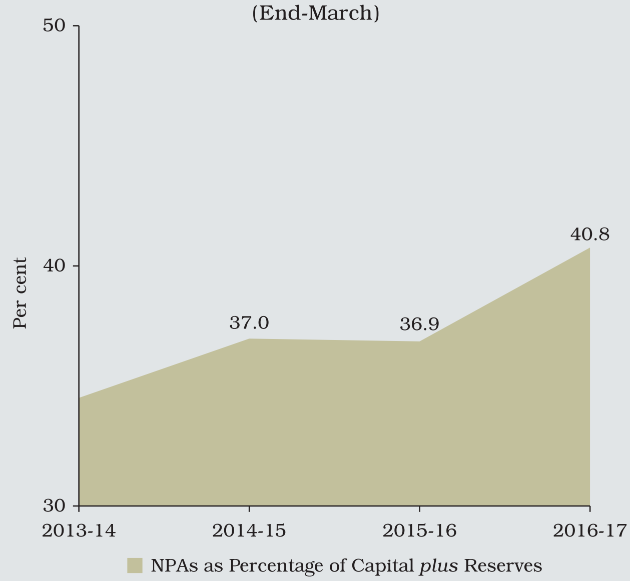
Table VI.7: Non-Performing Assets of UCBs
(End-March)

(Amount in ₹ billion)

Item	2016	2017
1	2	3
1. Gross NPAs	150	186
2. Net NPAs	51	68
3. Gross NPA Ratio (%)	6.1	7.1
4. Net NPA Ratio (%)	2.2	2.7
5. Provisioning (1-2)	99	118
6. Provisioning Coverage Ratio (Per cent) (5/1)	65.9	63.5

Note: Data for 2017 are provisional.

Chart VI.19: NPAs to Net Worth Ratio for UCBs
(End-March)



– measured in terms of the proportion of non-performing assets covered by total capital plus reserves on the banks' balance sheets (Chart VI.19).

Financial Performance and Profitability

VI.21 UCBs recorded accelerated growth in net profits in 2016-17, reflecting growth in both interest and non-interest incomes. While the slowdown in loans and advances led to some deceleration in interest income, non-interest income increased sharply due to the diversification by UCBs into a host of fee-earning activities to compensate for the slack in lending activity (Table VI.8).

Table VI.8: Financial Performance of Scheduled and Non-scheduled Urban Co-operative Banks

(Amount in ₹ billion)

Item	Scheduled UCBs		Non-scheduled UCBs		All UCBs		Variation (%)	
	2015-16	2016-17	2015-16	2016-17	2015-16	2016-17	2015-16	2016-17
1	2	3	4	5	7	8	9	10
A. Total Income [i+ii]	**212 (100.0)**	**231 (100.0)**	**266 (100.0)**	**294 (100.0)**	**478 (100.0)**	**525 (100.0)**	**8.7**	**9.8**
i. Interest Income	192 (90.7)	202 (87.6)	253 (94.8)	273 (92.8)	445 (93.0)	475 (90.5)	9.4	6.9
ii. Non-interest Income	20 (9.3)	29 (12.4)	14 (5.2)	21 (7.2)	34 (7.0)	50 (9.5)	-0.2	48.6
B. Total Expenditure [i+ii]	**182 (100.0)**	**194 (100.0)**	**229 (100.0)**	**253 (100.0)**	**412 (100.0)**	**447 (100.0)**	**9.8**	**8.6**
i. Interest Expenditure	137 (75.0)	143 (73.8)	172 (75.2)	190 (75.0)	309 (75.1)	333 (74.5)	9.4	7.8
ii. Non-interest Expenditure	46 (25.0)	51 (26.2)	57 (24.8)	63 (25.0)	103 (24.9)	114 (25.5)	11.0	9.9
of which: Staff Expenses	22	24	31	34	53	58	8.0	9.9
C. Profits								
i. Amount of Operating Profits	29	37	37	42	67	78	2.3	17.0
ii. Provision, Contingencies	9	14	8	11	17	25	1.2	49.5
iii. Provision for Taxes	6	6	7	7	13	14	-2.4	3.7
iv. Amount of Net Profit before Taxes	20	22	30	31	50	53	2.7	6.0
v. Amount of Net Profit after Taxes	14	16	23	24	37	39	4.6	6.8

Notes: 1. Figures in parentheses are share in total income/expenditure.
2. Y-o-y variations could be slightly different because absolute numbers have been rounded off to ₹1 billion in the table.
3. Components may not add up to the total due to rounding off.
4. Data for 2016-17 are provisional.

Chart VI.20: Non-interest Income Share of UCBs

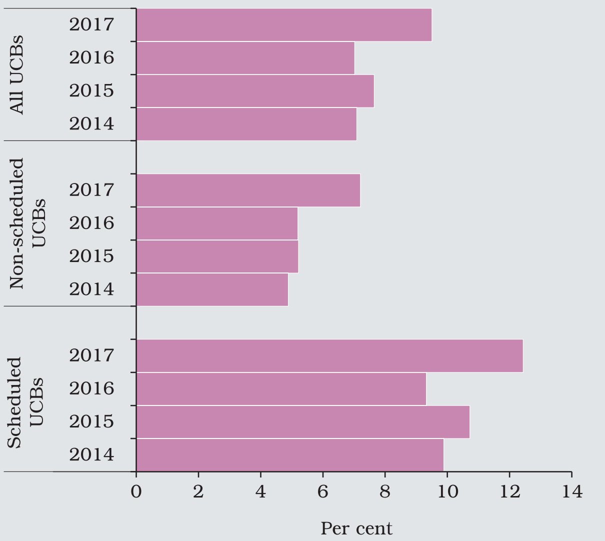


Chart VI.21: Share of Non-interest Income *versus* Capital Buffer - Scheduled UCBs

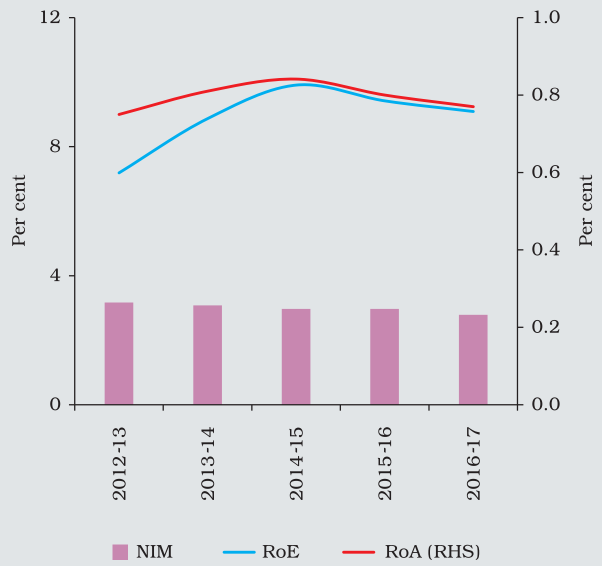
VI.22 During 2016-17, the share of non-interest income in total income showed a pronounced increase for UCBs, signifying a shift from traditional intermediation and a diversification of their income structure to offset declining interest margins (Chart VI.20). A shift towards activities generating non-interest income entails higher capital buffers due to higher volatility of non-interest income.

VI.23 An analysis of SUCBs shows that the diversification of UCBs, as reflected in a higher share of non-interest income in total income was not complemented by the maintenance of higher capital buffers (Chart VI.21).[7]

VI.24 Both return on assets (RoA) and return on equity (RoE) of UCBs moderated in 2016-17 (Chart VI.22). But within the UCBs, the profitability indicators of the scheduled UCBs improved *vis-à-vis* that of the non-scheduled UCBs (Chart VI.23).

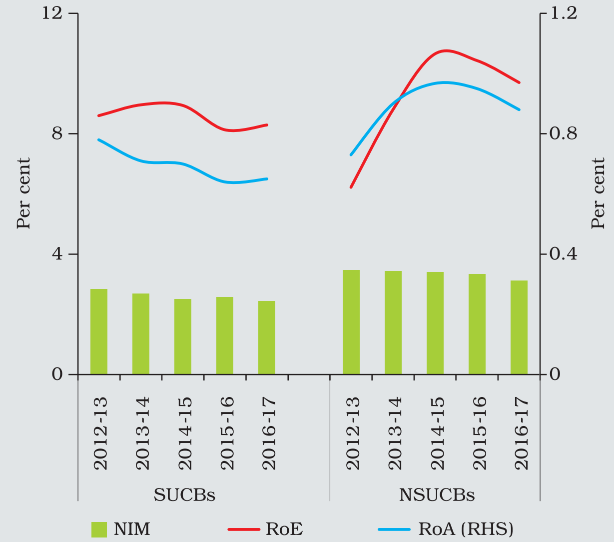
VI.25 Scheduled UCBs not only registered marginally higher profitability in 2016-17 but also showed an improvement in efficiency as their net interest margins (NIMs) decreased, indicating a decline in the cost of financial intermediation.

Chart VI.22: Profitability Indicators - UCBs



[7] Four scheduled UCBs with negative capital adequacy ratios have been excluded from this analysis.

Chart VI.23: Profitability Indicators - SUCBs *versus* NSUCBs



Profitability indicators of non-scheduled UCBs remained higher but more variable than those of scheduled UCBs (Table VI.9).

Table VI.9: Select Indicators of Profitability of UCBs

(per cent)

Indicators	Scheduled UCBs		Non-scheduled UCBs		All UCBs	
	2015-16	2016-17	2015-16	2016-17	2015-16	2016-17
1	2	3	4	5	6	7
Return on Assets	0.64	0.65	0.95	0.88	0.80	0.77
Return on Equity	8.13	8.29	10.43	9.70	9.42	9.09
Net Interest Margin	2.57	2.43	3.33	3.11	2.97	2.79

Note: Data for 2016-17 are provisional.

VI.26 At a disaggregated level, profitability indicators for the scheduled and non-scheduled UCBs have showed different movements. A Du Pont analysis of the drivers of profitability of these two UCB groups during different phases of consolidation and reforms points to differences in efficient utilisation of assets and prudent cost management (Box VI.1).

Box VI.1: What Drives the Profitability of Scheduled and Non-scheduled UCBs?: A Du Pont Analysis

A multi-layered strategy outlined in the Vision Document of 2005 for the revival of UCBs has been pursued actively. This has borne results in the form of the emergence of a strong and viable urban co-operative banking sector with improved financials. An analysis of this phase of revival of UCBs divulges several interesting features. Consolidation in the sector through mergers and amalgamations and exit of unviable entities formed the fulcrum of this strategy till 2009-10. Since 2012-13, the focus has shifted to making the UCBs operationally more efficient. Two phases of consolidation, 2006-09 – (the early phase) and 2012-17 – (the late phase), can thus be identified. The profitability indicators during these two phases reflect improvement in the financial performance of the UCB sector over time (Charts 1.A and 1.B).

A Du Pont analysis decomposes the drivers of profitability between efficiency and increased leverage. The profitability metric of return on equity (RoE) is a composite of the return on assets (RoA) (also a qualifier of financial performance)

Chart 1.A: Profitability Statistics - Early and Late Phase of Consolidation

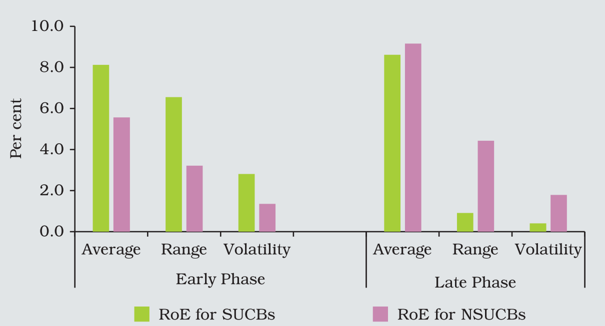
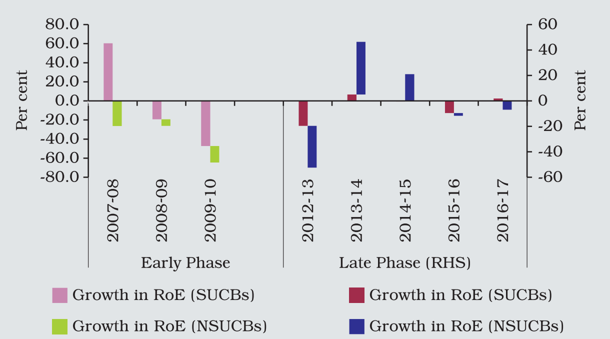


Chart 1.B: Growth (y-o-y) in RoE - Early and Late Phase of Consolidation



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and an indicator of the debt-equity composition in the banks' funding structure – leverage ratio or the equity multiplier. RoA, in turn, is the sum total of the quality of asset utilisation and cost management by the banks. These two form the basis of the Du Pont identity.

Du Pont identity:

$$Return\ on\ Equity \equiv Return\ on\ Assets * Leverage$$

Decomposition 1:

$$\frac{Net\ Profit}{Average\ Equity} = \left(\frac{Net\ Profit}{Average\ Assets}\right) * \left(\frac{Average\ Assets}{Average\ Equity}\right)$$

Decomposition 2:

$$\frac{Net\ Profit}{Average\ Assets} = \frac{Net\ Income - Provisions\ and\ Contingencies}{Average\ Assets} - \frac{Operating\ Expenses}{Average\ Assets}$$

The first and the second terms in decomposition 2 stand for effective asset utilisation and cost management, respectively. To understand the individual contribution of each of the components of RoE, the product form in decomposition 1 is log transformed into a sum of its components and the growth rates of the components are compared with the growth rate of the whole to complete the analysis. A similar analysis is carried out for the second decomposition but without the log transformation.

If higher RoE is driven by substitution of equity capital with lower cost long-term debt, then it is an indication of a build-up of stress in the future. For instance, between 2013 and 2015, NSUCBs experienced growth in their profitability where an increase in RoE was driven by a build-up in the leverage even though RoA fell (Chart 1.C). During this phase, there was an excessive proliferation of assets driven by borrowed rather than internal funds.

In 2016-17, leverage played a much larger role than RoA in improving the RoE of the SUCBs. While asset growth of SUCBs has remained at the average level, growth in borrowings has doubled (refer to Table VI.3). Despite the facilities given for raising capital from the market, the SUCBs seem to have substituted costlier equity with cheaper debt.[8] Leverage for NSUCBs too increased in 2016-17 though by a much lower rate, but the high growth in assets could not yield high returns (Chart 1.D).

Chart 1.C: Decomposition of Growth in Profitability of Non-Scheduled UCBs (2013-15)

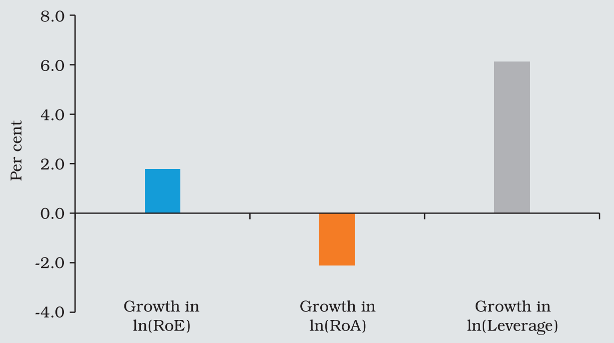
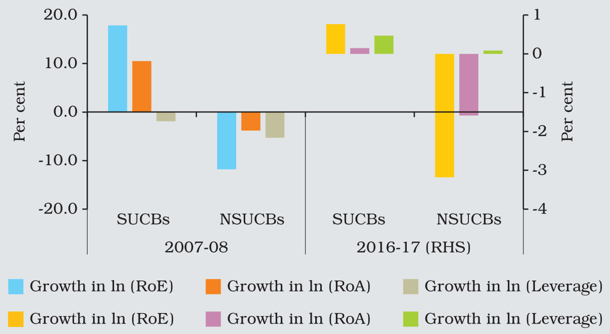
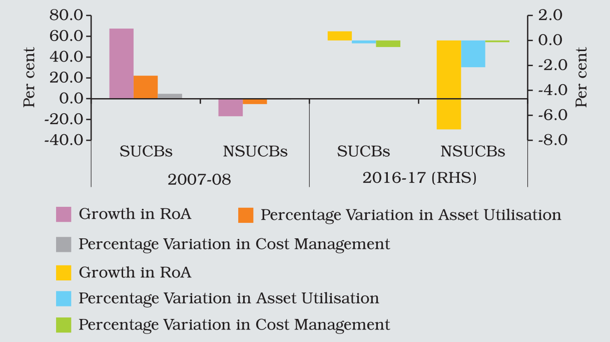


Chart 1.D: Decomposition of Growth in RoE: A Comparison Between Two Time Points



In 2016-17, the increased return on assets of the SUCBs came about because of better cost management due to increased emphasis on adopting technologies like the core banking solution (CBS) instead of better asset utilisation. In 2016-17, NSUCBs suffered from poor asset utilisation (Chart 1.E).

Chart 1.E: Decomposition of Growth in RoA: A Comparison Between Two Time Points



To sum up, the increase in profitability of SUCBs during the early phase of consolidation was due to higher income from their assets alone while during the latter phase, their increase in profitability stemmed from better cost management as the expansion in assets from a higher leverage could not yield enough returns. The profitability of NSUCBs, on the other hand, has been beleaguered by poor asset utilisation irrespective of the phase of consolidation.

[8] In July 2008, UCBs were allowed to raise capital through Perpetual Non-Cumulative Preference Shares (PNCPS) and long-term (sub-ordinated) deposits (LTD). In July 2016, financially sound UCBs were exempted from seeking the Reserve Bank's approval for raising a certain amount of capital through LTDs. Therefore, for the UCBs to be able to successfully raise capital, the profitability metric that matters the most is the Return on Equity (RoE).

Priority Sector Advances

VI.27 Priority sector lending must constitute at least 40 per cent of the adjusted net bank credit (ANBC) of UCBs.[9] Given their urban focus, unlike SCBs, UCBs do not have a mandate for agricultural lending. Credit to micro and small enterprises, housing, micro-credit and the 'others' components form a major part of their priority sector advances (Table VI.10). [10,11]

Table VI.10: Composition of Credit to Priority Sectors by UCBs
(End-March 2017)

(Amount in ₹ billion)

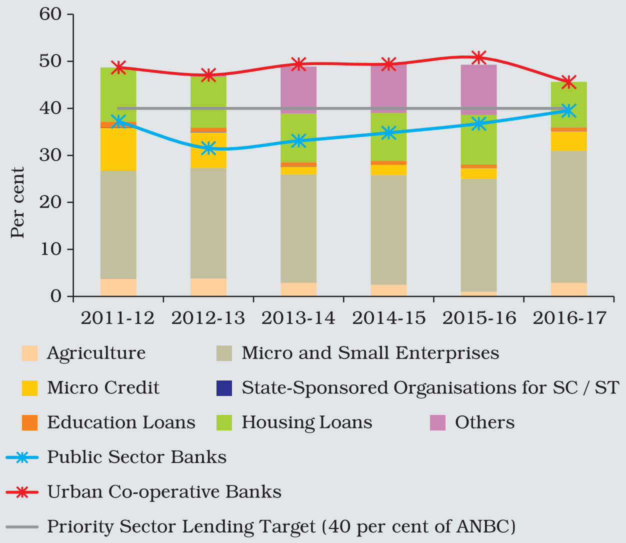
Item	Priority Sector Advances	
	Amount	Share in Total Advances (%)
1	2	3
1. Agriculture Credit	**76**	**3.0**
1.1 Direct Agricultural Credit	32	1.2
1.2 Indirect Agricultural Credit	44	1.7
2. Micro and Small Enterprises	**732**	**28.0**
2.1 Direct Credit to Small and Micro Enterprises	576	22.1
2.2 Indirect Credit to Small and Micro Enterprises	156	6.0
3. Micro Credit	**108**	**4.1**
4. State-Sponsored Organisations for SCs / STs	**2**	**0.1**
5. Education Loans	**22**	**0.8**
6. Housing Loans	**253**	**9.7**
7. Total (1 to 6)	**1192**	**45.6**
of which, **Advances to Weaker Sections**	**271**	**10.4**

Notes: 1. Data for 2017 are provisional.
2. Percentages are with respect to total credit of UCBs.
3. Components may not add up to total due to rounding off.

VI.28 Historically, lending to the priority sector by UCBs has been higher than by PSBs, but in 2016-17, UCBs recorded a dip in the share of priority sector advances in total advances. Within the priority sectors, credit to micro and small enterprises, micro-credit and agriculture increased while lending to other sectors dropped sharply (Chart VI.24).

VI.29 Given the mandate for UCBs to advance a part of their priority sector corpus towards the weaker sections such that it forms at least 10 per cent of their ANBC[12], on an average, 26 per cent

Chart VI.24: Priority Sector Lending - UCBs
(Share in Total Advances)



[9] Adjusted net bank credit (ANBC) (total loans and advances minus bills rediscounted with the Reserve Bank and other approved financial institutions plus investments made after August 30, 2007 in non-SLR bonds under the held-to-maturity (HTM) category).

[10] Provision of credit and other financial services and products of amounts not exceeding ₹50,000 per borrower or the maximum permissible limit on unsecured advances, whichever is lower.

[11] "Others" component comprises of – loans, not exceeding ₹50,000 per borrower provided directly by banks to individuals; loans to distressed persons [other than farmers-already included under the "Agriculture" category] not exceeding ₹ 50,000 per borrower to prepay their debt to non-institutional lenders. Loans to self-help groups (SHGs) / joint liability groups (JLGs) for agricultural and allied activities would be considered as priority sector advances. Further, other loans to SHGs / JLGs up to ₹50,000 would be considered as micro-credit and hence would be treated as priority sector advances. Loans sanctioned to state sponsored organisations for scheduled castes / scheduled tribes for the specific purpose of purchase and supply of inputs to and / or the marketing of the outputs of the beneficiaries of these organisations.

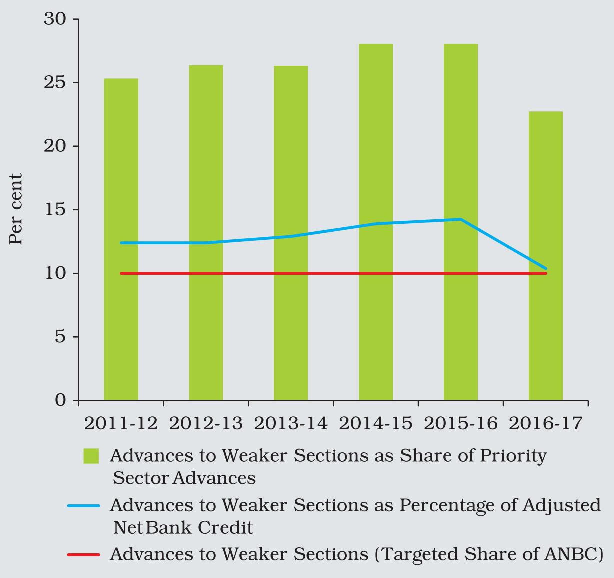
[12] Priority sector loans to the following borrowers will be considered under 'weaker sections': small and marginal farmers; artisans, village and cottage industries where individual credit limits do not exceed ₹50,000; women; scheduled castes and scheduled tribes; persons with disabilities; education loans to persons having monthly income not exceeding ₹5000; loans to SHGs; loans to distressed farmers indebted to non-institutional lenders; loans to distressed persons other than farmers not exceeding ₹50,000 per borrower to prepay their debt to non-institutional lenders; and persons from minority communities as may be notified by the Government of India from time to time.

of their priority sector lending has been typically allocated to the weaker sections. This share declined in 2016-17 (Chart VI.25).

VI.30 Since April 2016, "financially sound" UCBs[13] with priority sector loan portfolio not less than 90 per cent of their gross loans have been allowed to grant unsecured advances to the extent of 35 per cent of their total assets (beyond the extant ceiling of 10 per cent of total assets as per audited balance sheets as on March 31 of the previous financial year) to provide further impetus to financial inclusion. The condition is that the entire unsecured loan portfolio in excess of the normally permitted 10 per cent comprises of priority sector loans and the exposure to any individual borrower does not exceed ₹40,000.

VI.31 To sum up, the ongoing consolidation efforts were reflected in various performance indicators of UCBs during the year. Growing deposits and higher investments led to a robust increase in the balance sheet size of UCBs. In tandem, UCBs exhibited better performance in terms of profitability, partly due to the diversification strategies facilitated by improving capital positions. But their asset quality witnessed some deterioration partly due to temporary problems in repayments faced by small borrowers following the immediate impact of demonetisation.

Chart VI.25: Advances to Weaker Sections by UCBs



III. Rural Co-operatives[14]

VI.32 Rural co-operative credit institutions in India consist of two distinct sets – short-term and long-term institutions – each with specific objectives. Short-term co-operatives primarily provide short-term[15] crop loans and working capital loans to farmers and rural artisans, while long-term co-operatives typically provide medium to long-term loans for making investments in agriculture, including land development, farm mechanisation and minor irrigations; rural industries; and lately, housing. A profile of rural co-operatives is presented in Table VI.11.

VI.33 The share of rural co-operatives in total institutional credit to agriculture fell from 64 per cent in 1992-93 to 17 per cent in 2015-16. In consonance, the share of credit from long-term rural credit co-operatives in agricultural gross capital formation, also declined (Table VI.12).

VI.34 To improve the functioning and performance of short-term rural co-operative structure, the Reserve Bank and the NABARD have taken several

[13] 'Financially sound' refers to UCBs meeting the following criteria as per the latest inspection report and audited financial statements: (a) CRAR of not less than 9 per cent; and (b) gross NPAs of not more than 7 per cent.

[14] The section is based on data for the year 2015-16 given lagged availability of data for rural co-operatives.

[15] Over time, they have also diversified to provide medium-term loans for investments in agriculture and for the rural sector in general, often with refinance support from the NABARD.

Table VI.11: A Profile of Rural Co-operatives
(As at end-March 2016)

(Amount in ₹ billion)

Item	Short-term			Long-term	
	StCBs	DCCBs	PACS	SCARDBs	PCARDBs
1	2	3	4	5	6
A. Number of Co-operatives	33#	370	93367	13	601
B. Balance Sheet Indicators					
i Owned Funds (Capital + Reserves)	151	340	244	50	36
ii. Deposits	1,093	2,982	1,011	24	14
iii. Borrowings	688	836	1,127	146	143
iv. Loans and Advances	1,229	2,427	1,808	204	127
v. Total Liabilities/Assets	2,067	4,582	2,013*	275	241
C. Financial Performance					
i. Institutions in Profit					
a. Number	28	319	45,241	9	306
b. Amount of Profit	7	17	41	0.98	0.18
ii. Institutions in Loss					
a. Number	5	51	36,695	4	295
b. Amount of Loss	1	6	65	0.95	3.63
iii. Overall Profits (+)/ Loss (-)	6	11	-24	0.03	-3.45
D. Non-performing Assets					
i. Amount	56	227	299**	34	47
ii. Share in Loans Outstanding (Per cent)	4.5	9.3	18.9	16.6	37.0
E. Recovery of Loans to Demand Ratio* (Per cent)**	91.7	79.6	82.4	63.6	51.5

Notes: StCBs: State Co-operative Banks; DCCBs: District Central Co-operative Banks; PACS: Primary Agriculture Credit Societies; SCARDBs: State Co-operative Agriculture and Rural Development Banks; PCARDBs: Primary Co-operative Agriculture and Rural Development Banks.
#: Consequent to the bifurcation of the state of Andhra Pradesh under the Andhra Pradesh Reorganisation Act, 2014, the Andhra Pradesh State Co-operative Bank was bifurcated into the Andhra Pradesh State Co-operative Bank and the Telangana State Co-operative Apex Bank.
*: Working Capital; **: Total Overdues; ***: This ratio captures the share of outstanding non-performing loan amounts that have been recovered.
Source: NABARD and NAFSCOB.[16]

measures based on the recommendations of various expert committees over the last decade[17]. These measures largely addressed the deficiencies in the short-term credit structure.

Table VI.12: Share in Credit Flow – Rural Co-operatives

(Figures in Per cent)

	Share in Credit Flow to Agriculture		Share of Credit from Long-Term Rural Credit Co-operatives in Agricultural Gross Capital Formation
	Co-operative Banks	Regional Rural Banks	
2012-13	18.0	11.0	12.5
2013-14	17.0	12.0	12.0
2014-15	17.0	12.0	13.0
2015-16	17.0	13.0	12.6

Source: NABARD.

[16] NABARD: National Bank for Agriculture and Rural Development; NAFSCOB: National Federation of State Co-operative Banks Ltd.

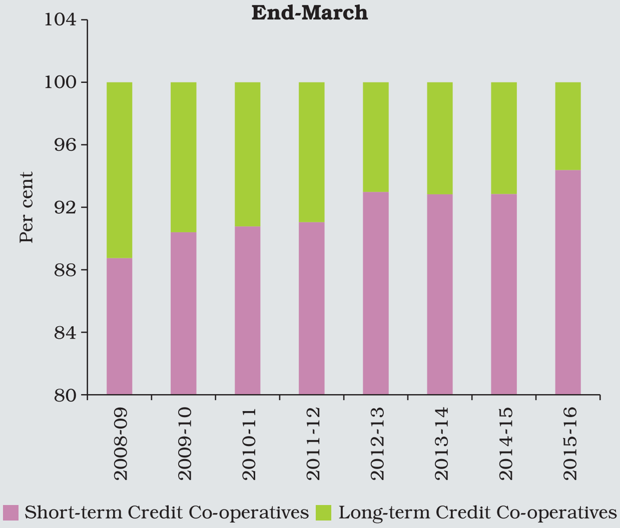
[17] Task Force on Revival of Co-operative Credit Structure, 2004 (Chairman : Shri A. Vaidyanathan); Task Force on Revival of Rural Co-operative Credit Institutions (Long Term), 2006 (Chairman : Shri A. Vaidyanathan); Committee on Financial Sector Assessment 2009 (Chairman : Dr. Rakesh Mohan); Expert Committee to Examine Three-Tier Short-Term Co-operative Credit Structure (ST CCS), 2013 (Chairman : Shri Prakash Bakshi).

VI.35 Short-term co-operative credit institutions continue to occupy a significant position in institutional credit flows to agriculture and remain a potent instrument for furthering the financial inclusion agenda, even after the advent and spread of commercial and regional rural banks.[18] As of March 2016, short-term co-operatives had between themselves a branch network of 108,776 branches as against 110,361 branches of PSBs, local area banks (LABs) and regional rural banks (RRBs) taken together.[19]

VI.36 A number of measures aimed at the revival of these short-term credit institutions has resulted in an improvement in their financial health over time. At the end of March 2016, short-term credit co-operatives comprising StCBs, DCCBs and PACS, accounted for 94.4 per cent of the total assets of the rural co-operative credit structure, up from 92.8 per cent at end-March 2015.[20] At the same time, their numbers also increased with the increase in the number of PACS across regions.

VI.37 These short-term credit co-operatives need to play a much larger role in fulfilling the requirements of agricultural credit. Nonetheless, their overall profitability turned negative in 2015-16, driven down by increased loss incurred by PACS. However, over time, the performance of short-term co-operatives has improved, on the whole, which could be attributed, *inter alia,* to mandatory licensing, prescription of minimum capital requirements in a phased manner, consolidation, increasing adoption of technology and efforts to improve governance.[21]

Chart VI.26: Share of Short-term *versus* Long-term Co-operatives in Total Assets of Rural Co-operatives: End-March



Source: NABARD.

VI.38 Recommendations for reforming the long-term co-operative credit structure remain to be implemented and its share in total assets of all rural co-operatives has been dwindling steadily (Chart VI.26).

VI.39 The number of long-term institutions – SCARDBs and PCARDBs – continued to decline as well (Chart VI.27). Low outreach, limited range

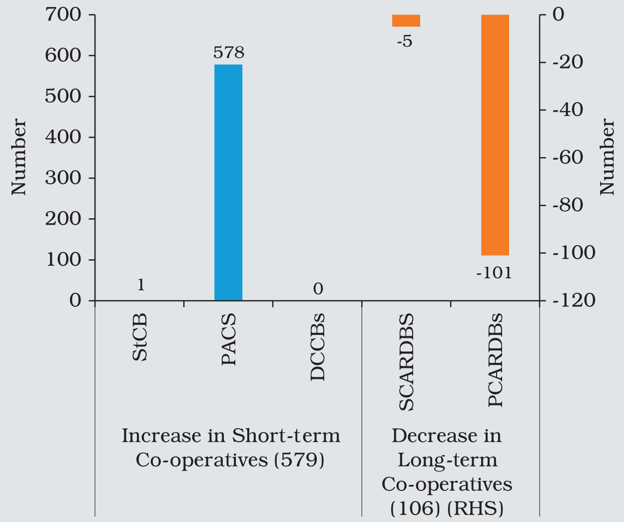
[18] Short-term rural credit co-operatives comprise of state co-operative banks (StCBs) at the state level, district central co-operative banks (DCCBs) at the district level and primary agricultural credit societies (PACS) at the village level. By March 2017, a 3-tier short-term co-operative credit structure, comprising StCBs, DCCBs and PACS existed in 20 states, while in 16 states, including the north-eastern states, 2-tier short-term co-operative credit structure was in operation.

[19] StCBs – 1,168; DCCBs – 14,241; PACS – 93,367.

[20] StCBs/DCCBs are registered under the provisions of the State Co-operative Societies Act of the state concerned and are regulated by the Reserve Bank. Powers have been delegated to the NABARD under Sec 35A of the Banking Regulation Act (as applicable to co-operative societies) to conduct inspection of state and central co-operative banks. PACS and long-term credit co-operatives are outside the purview of the Banking Regulation Act, 1949 and are hence not regulated by the Reserve Bank. The NABARD conducts voluntary inspection of SCARDBs, apex-level co-operative societies and federations.

[21] As per the NABARD's Annual Report 2016-17, CBS has been implemented in three banks in Maharashtra and one in West Bengal during 2015-16; remaining 16 DCCBs in Uttar Pradesh are in the process of adopting CBS. 16 DCCBs in Uttar Pradesh and three DCCBs in Maharashtra have put in place corporate governance framework.

Chart VI.27: Change in Number of Rural Co-operatives Between March 2015 and March 2016



Source: NABARD.

of credit products and resource constraints had adverse implications on the performance of these institutions. Moreover, the inherent deficiencies associated with their design – non-resource based specialised term-lending institutions – severely restrict their ability to fulfil their role adequately.

Short-term Rural Credit Co-operatives

VI.40 Short-term rural credit co-operatives operate in most of the states in a three-tier structure with StCBs at the apex level and DCCBs as its principal members, DCCBs as the intermediate structure with PACS as principal affiliated members, and PACS at the base (village) level with farmers as their members. In principle, PACS are expected to mobilise deposits from farmer members and use them for providing crop loans to members. When deposits are not enough to meet the loan requirements of borrowing members, PACS draw support from higher tier institutions, DCCBs/StCBs. DCCBs were constituted as small banks in small towns to mobilise deposits from the public and support the credit needs of PACS and their members.

State Co-operative Banks

VI.41 StCBs, the apex institutions in the short-term rural co-operative structure, mobilise deposits and thus provide the required liquidity and technical assistance/ guidance to both DCCBs and PACS to help them fulfill their obligations towards their farmer members. StCBs are also expected to mobilise liquidity and refinance support from higher refinancing institutions like the NABARD for supporting the crop loan needs of affiliated DCCBs and PACS. With refinance support from NABARD, over time, StCBs have diversified their operations towards providing medium-term loans for investments in agriculture and for the rural sector, in general.

Balance Sheet Operations

VI.42 The balance sheet of the StCBs, the apex institutions in the short-term co-operative credit structure, expanded moderately in 2015-16. On the liabilities side, deposits turned around from a contraction in 2014-15[22] and on the assets side, loans and advances grew at a lower rate due to two consecutive years of poor agricultural growth. Agricultural loans account for more than 60 per cent of their loan portfolios (Table VI.13).

VI.43 Information on scheduled StCBs (17 out of the 33 total StCBs) available from Section 42(2) returns for 2016-17 suggests that their deposit growth could be even higher. Notwithstanding the liberalisation of norms for co-operative banks which allow them access to non-SLR instruments, StCBs' SLR investments increased faster in 2016-17 than in the preceding year (Table VI.14).

[22] The contraction in 2014-15 was on account of implementation of the guidelines issued in July 2014 whereby DCCBs were required to park five per cent of their deposits in Government securities by March 31, 2015.

Table VI.13: Liabilities and Assets of State Co-operative Banks

(Amount in ₹ billion)

Item	As at end-March		Variation (%)	
	2015	2016	2014-15	2015-16
1	2	3	4	5
Liabilities				
1. Capital	54 (2.7)	56 (2.73)	45.1	5.0
2. Reserves	88 (4.4)	94 (4.6)	-5.2	7.1
3. Deposits	1,028 (51.7)	1,093 (52.9)	-1.5	6.3
4. Borrowings	687 (34.6)	688 (33.3)	12.7	0.1
5. Other Liabilities	131 (6.6)	136 (6.58)	9.1	3.5
Assets				
1. Cash and Bank Balances	66 (3.3)	64 (3.1)	-50.6	-3.8
2. Investments	699 (35.2)	690 (33.4)	5.1	-1.2
3. Loans and Advances	1,145 (57.6)	1,229 (59.4)	11.1	7.3
4. Other Assets	78 (3.9)	85 (4.1)	5.0	8.5
Total Liabilities/Assets	**1,989 (100)**	**2,067 (100)**	**4.4**	**4.0**

Notes: 1. Figures in parentheses are percentages to total liabilities/ assets.
2. Y-o-y variations could be slightly different because absolute numbers have been rounded off to ₹1 billion in the table.
3. Components may not add up to the total due to rounding off.

Source: NABARD.

Profitability

VI.44 StCBs' net profits declined by 44.5 per cent in 2015-16 on account of higher growth in expenditure relative to income. Although the interest component of expenditure moderated with a reduction in interest rate on refinance from 7.85 per cent to 6.20 per cent following two successive rounds of revision, a sharp increase in provisions and contingencies pushed up non-interest expenditure sharply. Slower growth in credit, coupled with a decline in investments, resulted in muted growth in interest income that forms almost 95 per cent of the total income of StCBs (Table VI.15).

Table VI.14: Select Banking Indicators of Scheduled State Co-operative Banks

(Amount in ₹ billion. Growth Rates in Per cent)

Item	2013-14	2014-15	2015-16	2016-17
1	2	3	4	5
Deposits	777 (8.7)	772 (-0.6)	796 (3.0)	903 (13.5)
Credit	939 (10.0)	1038 (10.6)	1074 (3.4)	1109 (3.3)
SLR Investments	240 (7.0)	233 (-3.1)	242 (4.0)	262 (8.3)
Credit plus SLR Investments	1179 (9.4)	1271 (7.8)	1316 (3.5)	1371 (4.2)

Note: Figures in brackets are growth rates in per cent over previous year.
Source: Form B under Section 42 of RBI Act.

Table VI.15: Financial Performance of State Co-operative Banks

(Amount in ₹ billion)

Item	As during		Variation (%)	
	2014-15	2015-16	2014-15	2015-16
1	2	3	4	5
A. Income (i+ii)	**149 (100.0)**	**153 (100.0)**	**5.6**	**2.6**
i. Interest Income	143 (95.9)	145 (95)	6.3	1.6
ii. Other Income	6 (4.1)	8 (5.0)	-6.9	27
B. Expenditure (i+ii+iii)	**139 (100.0)**	**147 (100.0)**	**4.1**	**6.3**
i. Interest Expended	116 (83.4)	119 (80.8)	5.4	3
ii. Provisions and Contingencies	7 (5.2)	12 (8.0)	-19.9	61.8
iii. Operating Expenses	16 (11.3)	16 (11.2)	9.3	4.8
of which : Wage Bill	10 (6.9)	11 (7.3)	1.5	11.6
C. Profits				
i. Operating Profits	18	18	**4**	**-1.8**
ii. Net Profits	11	6	**29.9**	**-44.5**

Notes: 1. Figures in parentheses are proportion to total income/ expenditure in per cent.
2. Y-o-y variations could be slightly different because absolute numbers have been rounded off to ₹1 billion in the table.
3. Components may not add up to the total due to rounding off.

Source: NABARD.

Asset Quality

VI.45 During 2015-16, the NABARD's increased focus on monitoring of accumulated losses and NPA management of the StCBs led to a reduction in NPAs of StCBs both in absolute terms and as a proportion of loans and advances (Table VI.16 and Chart VI.28).

Table VI.16: Soundness Indicators of State Co-operative Banks

(Amount in ₹ billion)

Item	As at end-March		Variation (%)	
	2015	2016	2014-15	2015-16
1	2	3	4	5
A. Total NPAs (i+ii+iii)	57	56	0.4	-2.8
i. Sub-standard	21	19	0.5	-9.1
	(36.3)	(33.9)		
ii. Doubtful	25	25	-5.4	0.9
	(43.2)	(44.9)		
iii. Loss	12	12	15.0	0.6
	(20.5)	(21.2)		
B. NPAs to Total Loans Ratio (%)	**5.0**	**4.5**	-	-
C. Recovery to Demand Ratio (%)	**94.9**	**91.7**	-	-

Notes: 1. Figures in parentheses are shares in total NPAs (%).
2. Y-o-y variations could be slightly different because absolute numbers have been rounded off to ₹1 billion in the table.
3. Components may not add up to the total due to rounding off.

Source: NABARD.

VI.46 The eligibility of the StCBs for drawing refinance from the NABARD and for deciding on the quantum of refinance, has for some time now, been linked to various financial parameters. Net NPAs is one of them. This has perhaps nudged these institutions to make improvements in their asset quality.

VI.47 The improvement in the NPA ratio has been steadily occurring over the recent years with the central region being the only aberration. In the northern, central, western and southern regions, the recovery ratio has remained more or less stable at a higher level. On the other hand, in the eastern region, it has remained volatile ranging between 90 and 55 per cent in the last four years despite an improvement in the asset quality. Recoveries have increased in the north-eastern region. (Chart VI.29).

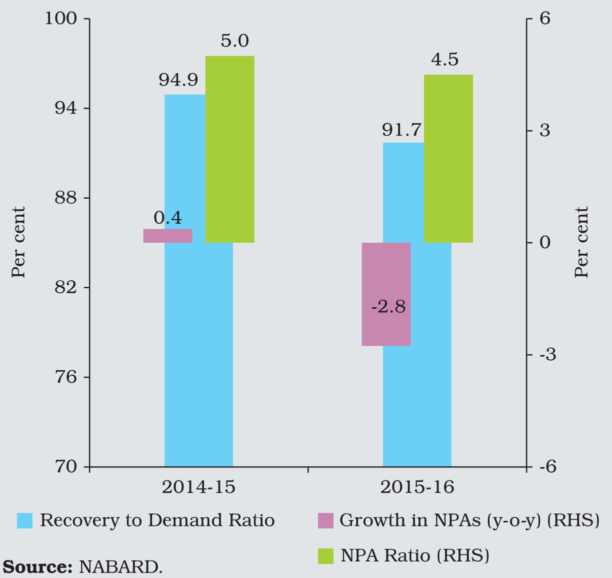
VI.48 There has always been a disparity in the financial health of the StCBs across different regions. Over time, however, the difference between the highest and the lowest NPA ratios across regions has decreased (Chart VI.30).

VI.49 At end-March 2016, NPAs still ranged between 13.1 per cent in the north-eastern region to 1.7 per cent in the northern region (Table VI.17).

District Central Co-operative Banks

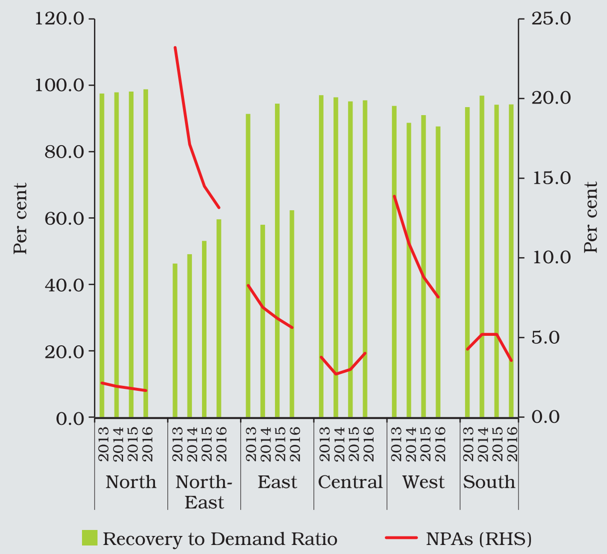
VI.50 The DCCBs form the second tier of the three-tiered short-term rural co-operative

Chart VI.28: Soundness Indicators of StCBs



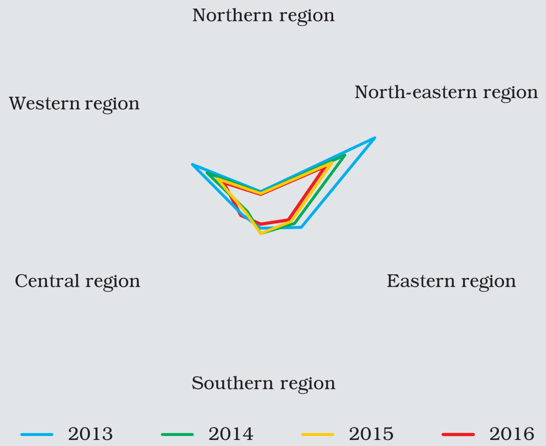
Source: NABARD.

Chart VI.29: Regional Trends in NPAs and Recovery



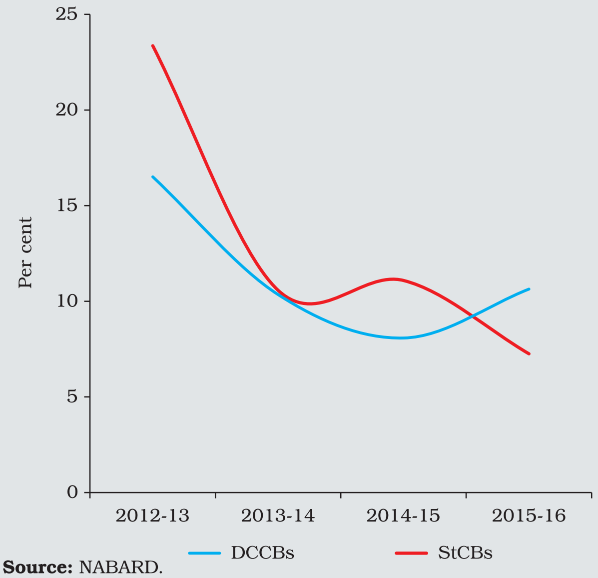
Source: NABARD.

Chart VI.30: Regional Disparity in Financial Health of StCBs



Note: Contraction of the ring indicates decline in regional disparity in the financial health of the StCBs. Financial health is represented by NPA ratio.
Source: NABARD.

Chart VI.31: Growth in Loans - StCBs *versus* DCCBs



Source: NABARD.

structure. The resource base of DCCBs comprised of deposits (65.1 per cent) and borrowings (18.2 per cent) as at end-March 2016. Out of total borrowings, 98 per cent were in the form of loans from StCBs and the NABARD. Consequently, the growth in loans and advances of the DCCBs move closely with that of the StCBs (Chart VI.31). Even with higher credit disbursal than StCBs in absolute terms, DCCBs typically had a lower credit-to-deposit ratio than StCBs due to a broadening of their deposit base. (Chart VI.32).

Balance Sheet Operations

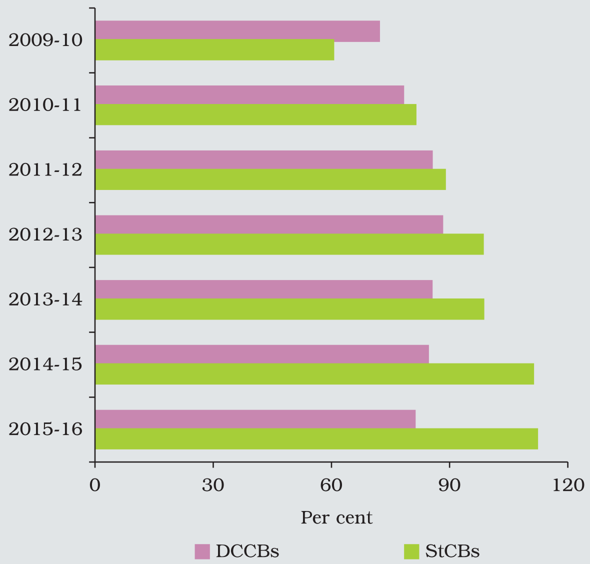
VI.51 During 2015-16, the balance sheet of the DCCBs expanded at a higher rate than in the preceding year. Accelerated growth in deposits, capital and reserves on the liability side was matched by an increase in investments and accelerated increase in growth of loans and advances on the asset side (Table VI.18). DCCBs typically hold a high share of their medium-term loan portfolio in the form of non-agricultural loans. Consequently, their credit expansion was not impacted by the slowdown in the agricultural sector during 2014-15 and 2015-16 as much as

Table VI.17: Regional Disparity in Financial Health of StCBs

	Highest NPA Ratio	Lowest NPA Ratio	Range
2012-13	23.2	2.1	21.1
2013-14	17.1	1.9	15.2
2014-15	14.5	1.8	12.7
2015-16	13.1	1.7	11.4

Source: NABARD.

Chart VI.32: Credit-Deposit Ratio



Source: NABARD.

Table VI.18: Liabilities and Assets of District Central Co-operative Banks

(Amount in ₹ billion)

Item	As at end-March		Variation (%)	
	2015	2016	2014-15	2015-16
1	2	3	4	5
Liabilities				
1. Capital	131 (3.2)	165 (3.6)	14.2	25.6
2. Reserves	163 (4.0)	175 (3.8)	2.3	7.9
3. Deposits	2,588 (63.5)	2,982 (65.1)	9.3	15.2
4. Borrowings	800 (19.6)	836 (18.2)	10.1	4.5
5. Other Liabilities	395 (9.7)	424 (9.3)	8.2	7.3
Assets				
1. Cash and Bank Balances	220 (5.4)	233 (5.1)	9.5	5.7
2. Investments	1,385 (34.0)	1,615 (35.3)	-33.3	16.7
3. Loans and Advances	2,194 (53.8)	2,427 (53.0)	8.1	10.6
4. Other Assets	278 (6.8)	307 (6.7)	9.3	10.5
Total Liabilities/Assets	**4,077** **(100.0)**	**4,582** **(100.0)**	**9.2**	**12.4**

Notes: 1. Figures in parentheses are percentages to total liabilities/assets.
2. Y-o-y variations could be slightly different because absolute numbers have been rounded off to ₹1 billion in the table.
3. Components may not add up to the total due to rounding off.

Source: NABARD.

Table VI.19: Financial Performance of District Central Co-operative Banks

(Amount in ₹ billion)

Item	As during		Variation (%)	
	2014-15	2015-16	2014-15	2015-16
1	2	3	4	5
A. Income (i+ii)	**338** **(100.0)**	**367** **(100.0)**	**9.3**	**8.4**
i. Interest Income	323 (95.4)	347 (94.8)	9.5	7.7
ii. Other Income	16 (4.6)	19 (5.2)	4.0	23.2
B. Expenditure (i+ii+iii)	**331** **(100.0)**	**355** **(100.0)**	**12.2**	**7.3**
i. Interest Expended	230 (69.4)	250 (70.4)	11.8	8.8
ii. Provisions and Contingencies	30 (9.1)	29 (8.1)	26.8	-4.0
iii. Operating Expenses	71 (21.5)	76 (21.5)	7.4	6.9
of which : Wage Bill	43 (13.1)	48 (13.5)	4.6	10.7
C. Profits				
i. Operating Profits	37	40	-1.4	8.4
ii. Net Profits	7	11	-49.9	62.5

Notes: 1. Figures in parentheses are percentages to total income/expenditure.
2. Y-o-y variations could be slightly different because absolute numbers have been rounded off to ₹1 billion in the table.
3. Components may not add up to the total due to rounding off.

Source: NABARD.

it was in the case of StCBs. Stable fixed deposits form a large proportion of the sources of funds of DCCBs, reflecting efforts aimed at mobilising resources through deposits to meet higher credit demand.

Profitability

VI.52 The net profits of DCCBs increased sharply in 2015-16 as against a decline during 2014-15. This improvement could be attributed to a lower growth in expenditure on account of an absolute fall in the level of provisions and contingencies as well as to a lower growth in interest and operating expenses, despite higher wage bill. On the income side, as with the StCBs, other income recorded higher growth, while interest income decelerated (Table VI.19).

Asset Quality

VI.53 The asset quality of DCCBs improved marginally during 2015-16 as reflected in the decline in their NPA ratios, despite an accumulation of assets in the sub-standard and doubtful categories (Table VI.20).

VI.54 Post a dip in 2014-15, the recovery-to-demand ratio improved during 2015-16, although it remained significantly lower than that of StCBs (Chart VI.33).

VI.55 Weak performance of a lower tier institution can eventually pose risks to the apex institutions. Reforms in the rural co-operative sector have focused on all tiers of the co-operative structure. In short-term credit institutions, the focus has been on improving the asset quality of both the StCBs and DCCBs.

Table VI.20: Soundness Indicators of District Central Co-operative Banks

(Amount in ₹ billion)

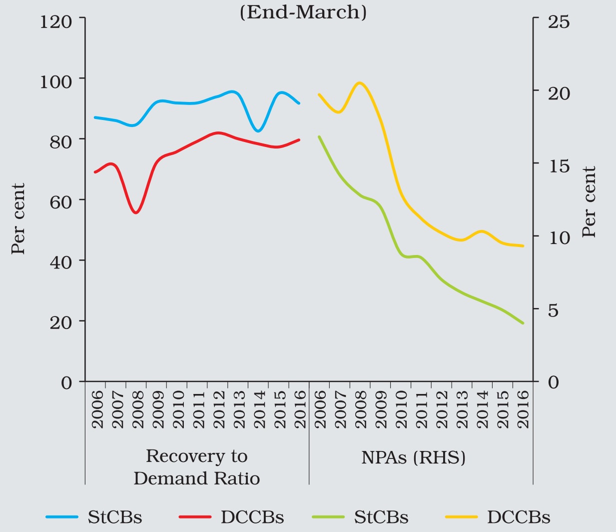
Item	As at end-March		Variation (%)	
	2015	2016	2014-15	2015-16
1	2	3	4	5
A. Total NPAs (i+ii+iii)	208	227	-0.5	9.0
i. Sub-standard	93	95	-7.0	1.6
	(44.8)	(41.7)		
ii. Doubtful	91	109	4.8	19.6
	(43.8)	(48.1)		
iii. Loss	24	23	8.3	-2.2
	(11.4)	(10.2)		
B. NPAs to Loans Ratio (%)	**9.5**	**9.3**	-	-
C. Recovery to Demand Ratio (%)	**77.3**	**79.6**	-	-

Notes: 1. Figures in parentheses are percentages to total NPAs.
2. Y-o-y variations could be slightly different because absolute numbers have been rounded off to ₹1 billion in the table.
3. Components may not add up to the total due to rounding off.

Source: NABARD.

Chart VI.34: NPAs and Recovery - StCBs *versus* DCCBs

(End-March)

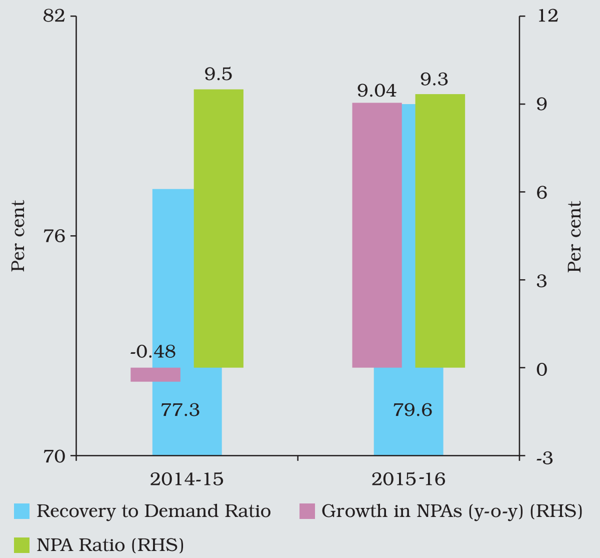


Source: NABARD.

However, since the DCCBs are directly affected by geographical and seasonal risks associated with agricultural yields, they have persistently shown higher NPAs and lower recovery to demand ratios than StCBs (Chart VI.34).

Operating expenses on staff and other heads also elevated the share of operating expenses in the total expenditure of DCCBs as compared to the StCBs due to their large district-level set-up and lagged adoption of technology (Chart VI.35).[23]

Chart VI.33: Soundness Indicators of DCCBs



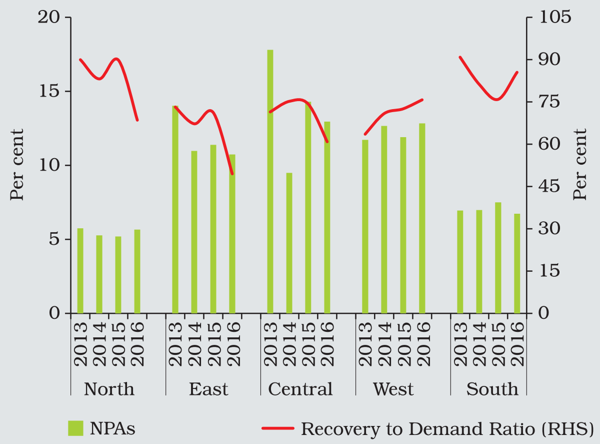
Source: NABARD.

Chart VI.35: Share of Operating Expenses in Total Expenses

Source: NABARD.

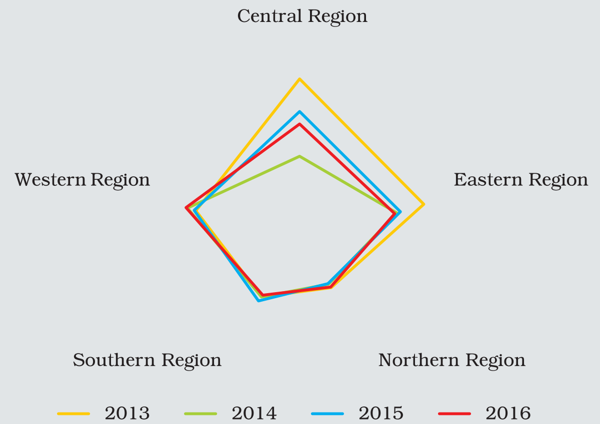
[23] With a view to bringing down costs for ultimate borrowers, seven DCCBs in Jharkhand have been amalgamated with Jharkhand State Co-operative Bank (JStCB) from April 1, 2017 thus creating a 2-tier rural co-operative credit structure in the state instead of the existing 3-tier structure of rural co-operative banks. This brings the number of DCCBs down to 364 as on date.

Chart VI.36: Regional Trends in NPAs and Recovery - DCCBs



Note: DCCBs are not present in the north-eastern region on account of a two-tier short-term co-operative credit structure comprising StCBs and PACS; hence, they are not shown in the Chart.
Source: Calculated from NABARD data.

Chart VI.37: Regional Disparity in Financial Health of DCCBs



Note: Contraction of the ring indicates decline in regional disparity in the financial health of the DCCBs. Financial health is represented by NPA Ratio.
Source: NABARD.

Moreover, StCBs have more assured sources of liquidity than DCCBs.[24]

VI.56 The overall recovery-to-demand ratio at an all-India level improved for DCCBs during 2015-16, mainly due to a turnaround in recovery in the southern region coupled with a steady increase in the western region. District-level performance of the co-operatives in both northern and western regions deteriorated and their NPA ratios increased in 2015-16 (Chart VI.36).

VI.57 Nonetheless, regional disparity has diminished over the period (Chart VI.37 and Table VI.21).

Table VI.21: Regional Disparity in Financial Health of DCCBs

(Per cent)

	Highest NPA Ratio	Lowest NPA Ratio	Range
2013	17.8	5.7	12.1
2014	12.7	5.3	7.4
2015	14.3	5.2	9.1
2016	12.9	5.6	7.3

Source: NABARD.

Primary Agricultural Credit Societies (PACS)

VI.58 PACS form the grass-root level tier of the short-term co-operative credit structure that directly interfaces with individual borrowers to provide them short and medium-term credit. Reflecting co-operative culture, PACS advances loans only to their members.[25] Borrowings from higher tier co-operative credit institutions constitute the majority of funds for the PACS, which cater to a variety of other associated activities. They arrange for the supply of agricultural inputs, distribution of consumer articles and marketing of produce for their members through co-operative marketing societies.

Balance Sheet Operations

VI.59 PACS witnessed a slowdown in credit growth in 2015-16 in relation to the preceding year (Table VI.22 and Chart VI.38). PACS largely cater to agricultural borrowers. Subdued demand conditions due to muted growth in the agricultural sector resulted in their low credit growth.

[24] Apart from the NABARD, StCBs can borrow from SCBs and the Reserve Bank.
[25] In co-operatives, members are the shareholders.

Table VI.22: Primary Agricultural Credit Societies – Select Balance Sheet Indicators

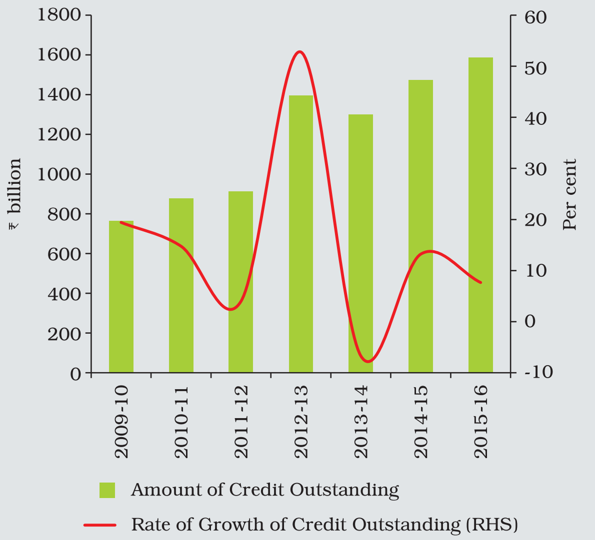
(Amount in ₹ billion)

Item	As at end-March		Variation (%)	
	2015	2016	2014-15	2015-16
1	2	3	4	5
A. Liabilities				
1. Total Resources (2+3+4)	2,063	2,382	4.9	15.5
2. Owned Funds (a+b)	217	244	14.7	12.8
a. Paid-up Capital	111	123	12.9	11.0
Of which, Government Contribution	8	8	19.1	-4.3
b. Total Reserves	106	122	16.5	14.7
3. Deposits	846	1,011	3.3	19.4
4. Borrowings	1,000	1,127	4.4	12.7
5. Working Capital	2,237	2,013	5.3	-10.0
B. Assets				
1. Total Loans Outstanding (a+b)	1,472	1,585	13.2	7.7
a) Short-Term	1,036	1,171	7.3	13.0
b) Medium-Term	437	414	30.0	-5.1

Note: Y-o-y variations could be slightly different because absolute numbers have been rounded off to ₹1 billion in the table.
Source: NAFSCOB.

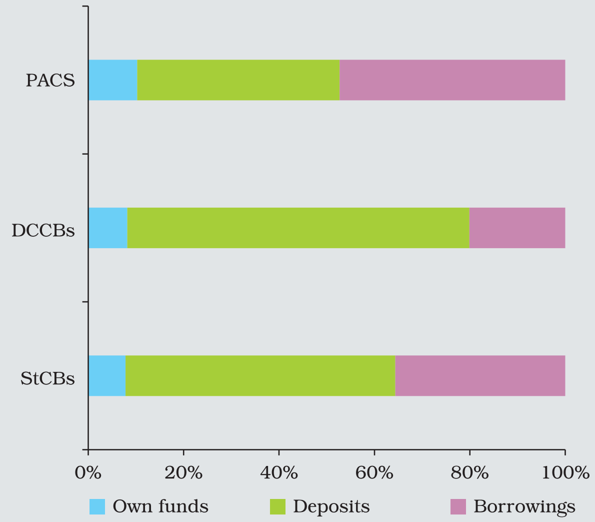
VI.60 Among the three short-term rural credit institutions, PACS are the most dependent on borrowed resources and own funds (capital and reserves) while DCCBs rely primarily on stable deposits as their chief funding source (Chart VI.39). This, in turn, reflects on their performance.

Chart VI.38: Growth in Outstanding Credit of PACS



Source: NAFSCOB.

Chart VI.39: Resource Composition - Short-term Co-operatives



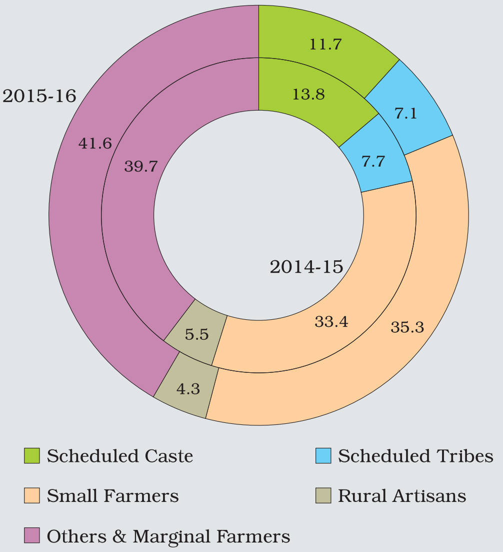
Source: NABARD and NAFSCOB.

Credit Deployment

VI.61 PACS extend credit only to their members. Therefore, a useful indicator for both access to and demand for credit from PACS is the borrower-to-member ratio. This ratio has generally remained below 50 per cent, suggesting that less than half the members of PACS access credit from the institutions themselves. Marginal farmers, followed by small farmers, form the majority of PACS' members and their shares in membership increased during 2015-16, while that of the scheduled castes / scheduled tribes and the rural artisans group declined (Chart VI.40). The borrower to member ratio fell across all categories, resulting in an overall decline in the borrower-member ratio (Chart VI.41).

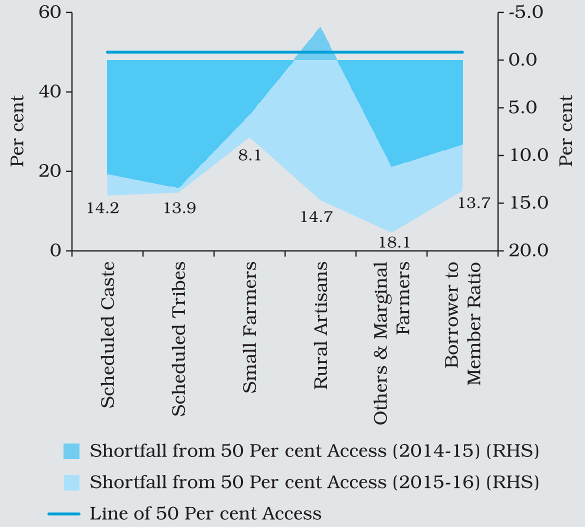
VI.62 An analysis of the extent of shortfall of the access to credit from an aspired level of 50 per cent reveals that the shortfall in credit off-take during 2015-16 was the highest for rural artisans and small and marginal farmers (Chart VI.42).

Chart VI.40: Member Share by Category



Source: NAFSCOB.

Chart VI.42: Borrower to Member Ratio - Shortfall from 50 Per cent Access



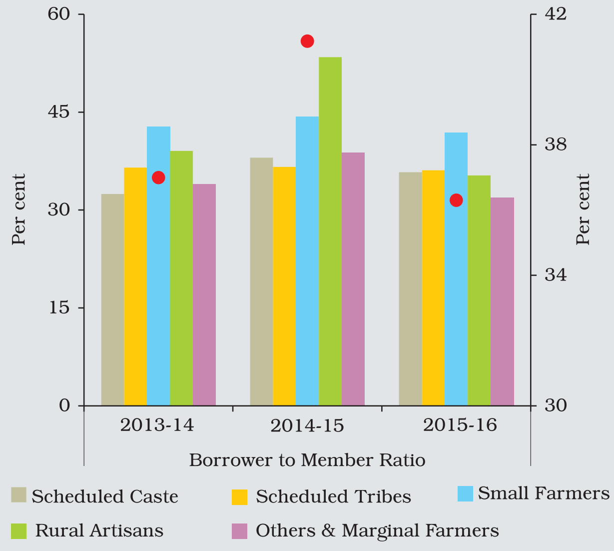
Source: NAFSCOB.

Hence, despite the increase in the membership share of the major groups, overall credit growth slowed down for PACS in 2015-16.

VI.63 Notwithstanding the fact that the main objective of PACS is the delivery of agricultural credit, their share of non-agricultural loans has increased consistently at the cost of agricultural loans since 2010. The share of agricultural loans has, however, stabilised in the recent period and disbursal of short-term loans, that form a core function of PACS, has picked up (Chart VI.43).

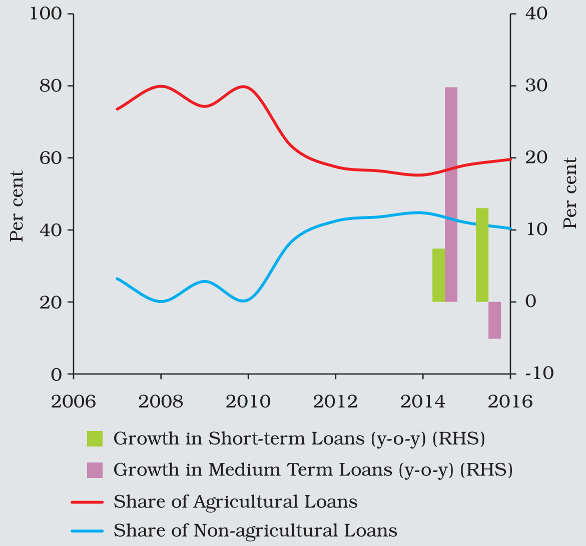
VI.64 A distinct pattern is observed in the financial performance of PACS. In contrast with a steady increase in the share of profit-making PACS, the decline in share of loss-making PACS has been sticky in recent years. At end-March

Chart VI.41: Borrower to Member Ratio by Category



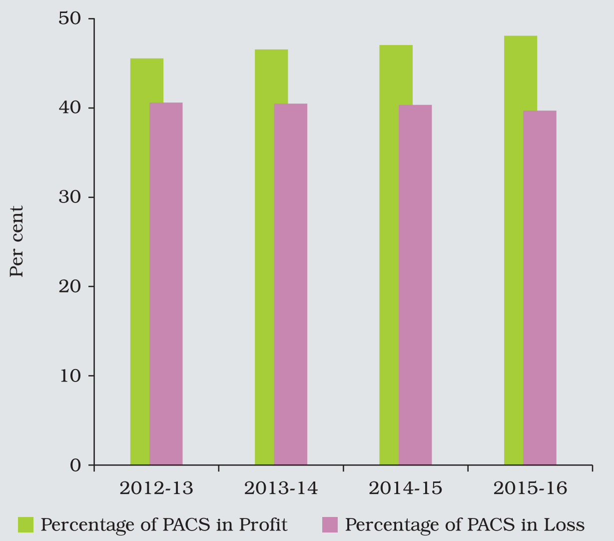
Source: NAFSCOB.

Chart VI.43: Growth in Loans Disbursed by PACS



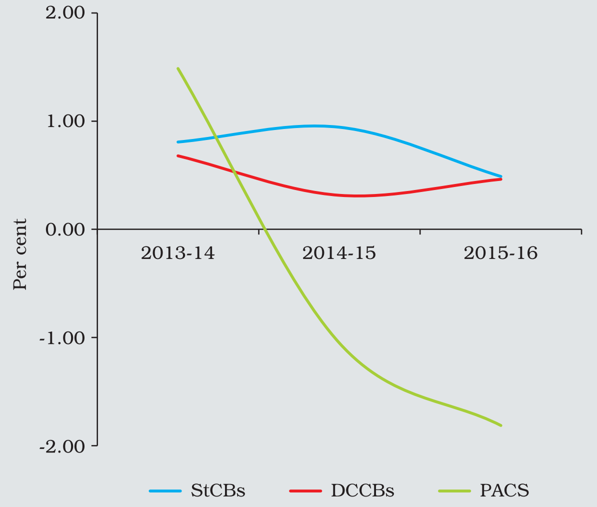
Source: NAFSCOB.

Chart VI.44: Percentage of PACS in Profit and Loss



Source: NAFSCOB.

Chart VI.45: Net Profit to Loans and Advances Ratio of the Short-term Credit Institutions

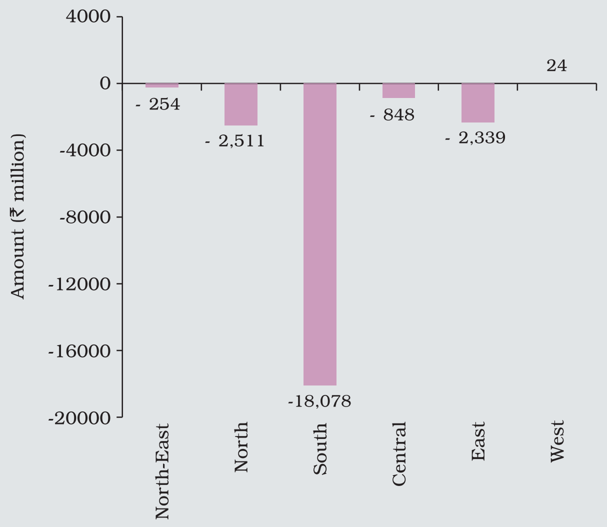


Source: NABARD and NAFSCOB.

2016, the proportion of loss-making PACS stood at 39.7 per cent (marginally down from 40.6 per cent in 2012-13), while those in profit accounted for 48.1 per cent of the total number of PACS, up from 45.6 per cent in 2012-13 (Chart VI.44).[26] As compared with higher tier short-term credit institutions, the profitability of the PACS has, however, worsened in the last three years (Chart VI.45).

VI.65 From a regional perspective also, the proportion of profit-making PACS has been higher than that of loss-making ones in most of the regions, but net profits in absolute term have been negative across the board barring the western region (Chart VI.46). This suggests that it is mostly the larger sized credit societies in these regions that are performing poorly. On the other hand, the share of loss-making PACS exceeded that of the profit-making ones in the eastern and north-eastern regions (Chart VI.47). The rural economy in both the regions has been lagging behind due to topographical constraints and inadequate infrastructure resulting in volatile agricultural productivity. In addition, the co-operative structure not being a development indigenous to these regions, lack of awareness among the people

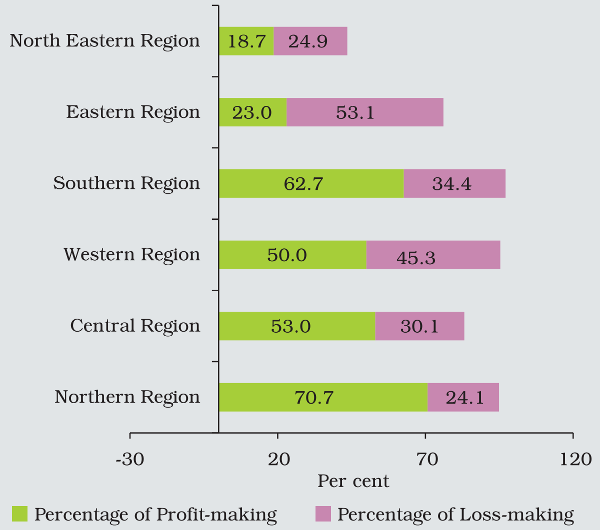
Chart VI.46: Net Profit of PACS by Region



Source: NAFSCOB.

[26] As regards the remaining PACS, either they broke even, reporting neither profit nor loss, or there was no information available on their financial health.

Chart VI.47: Percentage of PACS in Profit and Loss - Regional Level (End-March 2016)



Source: NAFSCOB.

in these regions about the advantages of the co-operative credit system and lack of technical know-how and training among the co-operative personnel, over the years have led to organisationally and financially weak base level institutions in these regions.

Status of Licensing of Short-term Rural Co-operatives

VI.66 Two issues pertaining to the co-operative banking sector that the Committee on Financial Sector Assessment, 2009 (Chairman: Rakesh Mohan) had identified were capital adequacy and licensing of co-operative institutions. The Committee noted that even though Section 7 of the Banking Regulation Act, 1949 (AACS) prohibits the use of the words 'bank', 'banker' or 'banking' by any co-operative society other than a co-operative bank as part of its name, this provision does not apply to a PACS or a primary credit society (PCS). As per the Act, a primary credit society can automatically convert to a co-operative bank if it has banking as one of its main activities. It is required to apply to the Reserve Bank within three months of attaining capital plus reserves of ₹1 lakh for a license under Section 22 of the Banking Regulation Act (AACS), 1949 but it can carry on with the banking business unless the license application is refused. At one time, this led to the presence of a large number of unlicensed banks. The continued existence of such unlicensed co-operative institutions poses a risk to depositors' interests and moreover, these institutions could resort to activities that are not very clearly defined. It was hence recommended that a roadmap be drawn up whereby banks, which failed to obtain a license by March 2012 would not be allowed to operate. This was to expedite the process of consolidation and the weeding out of non-viable entities from the co-operative space. As of April 16, 2016, all StCBs had been issued licenses. In comparison, the licensing of DCCBs, has been a slower process. Of the 371 DCCBs, 221 were licensed as of March 2011. To protect the interests of the depositors, the Reserve Bank prohibited the DCCBs that remained unlicensed beyond March 2012 from accepting fresh deposits. As of date, three DCCBs remain unlicensed (Chart VI.48).[27]

VI.67 Keeping in view the need to improve the banks' preparedness for facing risks in an increasingly competitive business environment, the Reserve Bank stipulated that the banks maintain a minimum CRAR of 4 per cent for being eligible for a license. Further, in January 2014, StCBs and DCCBs were advised to achieve and maintain on an ongoing basis a CRAR of 7 per cent from March 31, 2015 and 9 per cent from March 31, 2017 as part of the harmonisation of capital regulations across all co-operative banks.

[27] The number of DCCBs here stands at 371 as it also includes the Tamil Nadu Industrial Co-operative Bank Ltd. (TAICO Bank).

Chart VI.48: DCCB Licensing Waterfall

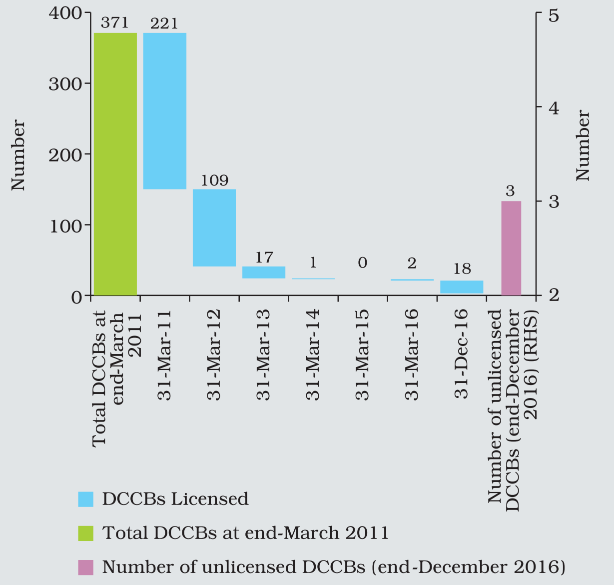
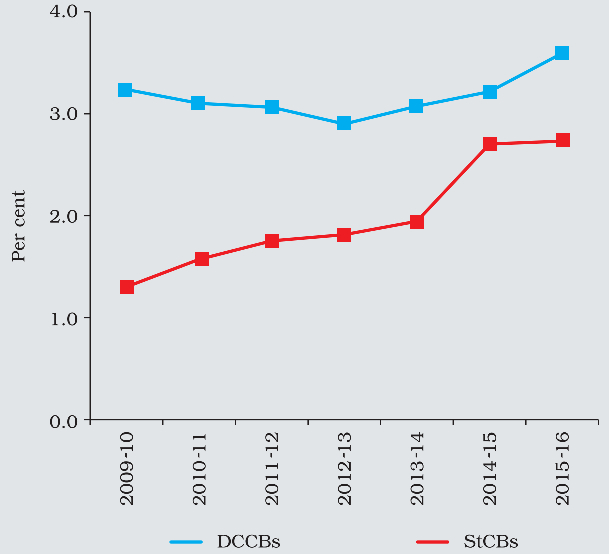


Chart VI.49: Capital-to-Assets Ratio



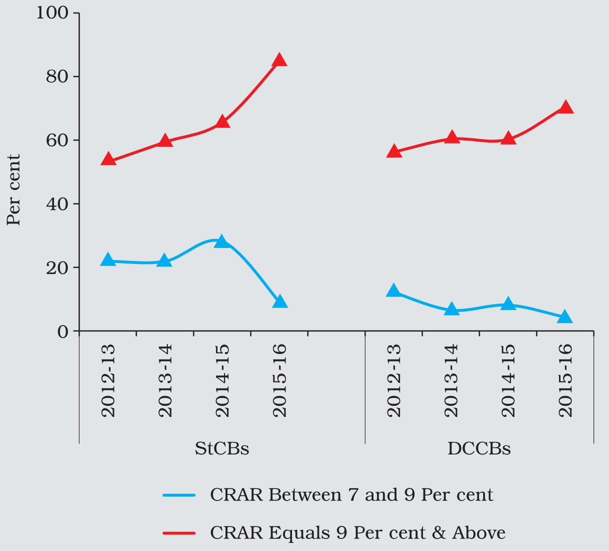
Source: NABARD.

The leverage (capital to assets) ratio for the DCCBs improved after capital infusions from state governments in 2012-13.[28] The capital-to-assets ratios of both the StCBs and DCCBs were given an impetus in January 2014, when the Reserve Bank allowed them to issue Long-Term (Subordinated) Deposits (LTD) and Innovative Perpetual Debt Instruments (IPDI) to facilitate raising of capital funds (Tier I and Tier II) for the purpose of compliance with the prescribed CRAR norms (Chart VI.49). Consequently, the share of StCBs with CRAR above 9 per cent increased sharply in 2015-16. DCCBs exhibited similar but more subdued movements across the CRAR buckets (Chart VI.50).

Long-term Rural Co-operatives

VI.68 Long-term rural co-operatives include State Co-operative Agriculture and Rural Development Banks (SCARDBs) operating at the state-level and Primary Co-operative Agriculture and Rural Development Banks (PCARDBs) operating at the district/block level. Notwithstanding the deterioration in their financial health over time, Agricultural and Rural Development Banks (ARDBs) have historically played a very important role in improving the productivity of land through

Chart VI.50: CRAR: StCBs and DCCBs



Source: NABARD.

[28] To enable StCBs/ DCCBs to achieve the mandated CRAR, several state governments continue to provide funds to banks as per their requirements.

development of minor irrigation and facilitating farm mechanisation, promoting capital formation in agriculture and financing rural non-farm sector projects.

State Co-operative Agriculture and Rural Development Banks

VI.69 In most north-eastern states, except Assam and Tripura, there is no separate structure of long-term rural co-operatives. In Assam and Tripura, as also in Bihar, Uttar Pradesh, Jammu and Kashmir and Gujarat, there is a unitary structure, with SCARDBs operating through their branches at the district-level, there being no separate entity of PCARDBs. By contrast, in other states except Himachal Pradesh and West Bengal, there is a federal structure, with SCARDBs operating through PCARDBs. In Himachal Pradesh and West Bengal, there is a mixed structure, with SCARDBs operating through PCARDBs as well as through their branches.

Balance Sheet Operations

VI.70 The consolidated balance sheet of SCARDBs contracted in 2015-16 as almost all components except deposits on the liability side and cash and bank balances on the asset side fell. (Table VI.23).[29]

VI.71 On the asset side, credit disbursement contracted in 2015-16 constrained by the shrinking of internal resources, *i.e.*, capital and reserves (broadly defined as net worth here) (Chart VI.51). Contraction in all major components of balance-sheet of SCARDBs during the year was mainly on account of liquidation of loss-making SCARDBs.

Table VI.23: Liabilities and Assets of State Co-operative Agriculture and Rural Development Banks

(Amount in ₹ billion)

Item	As at end-March		Variation (%)	
	2015	2016	2014-15	2015-16
1	2	3	4	5
Liabilities				
1. Capital	10 (2.9)	9 (3.3)	4.8	-6.8
2. Reserves	65 (19.5)	41 (14.9)	6.3	-37
3. Deposits	18 (5.5)	24 (8.7)	18.4	29.8
4. Borrowings	161 (48.4)	146 (53)	5.3	-9.5
5. Other Liabilities	79 (23.6)	55 (20.2)	11.6	-29.5
Assets				
1. Cash and Bank Balances	4.3 (1.3)	4.4 (1.6)	43.4	4
2. Investments	30 (9.0)	29.6 (10.8)	9.9	-1.3
3. Loans and Advances	212 (63.7)	204 (74.2)	5.2	-3.7
4. Other Assets	87 (26.0)	37 (13.4)	11.5	-57.3
Total Liabilities/Assets	**333** **(100)**	**275** **(100)**	**7.6**	**-17.3**

Notes: 1. Figures in parentheses are percentages to total liabilities/assets.
2. Y-o-y variations could be slightly different because absolute numbers have been rounded off to ₹1 billion in the table.
3. Components may not add up to the total due to rounding off.

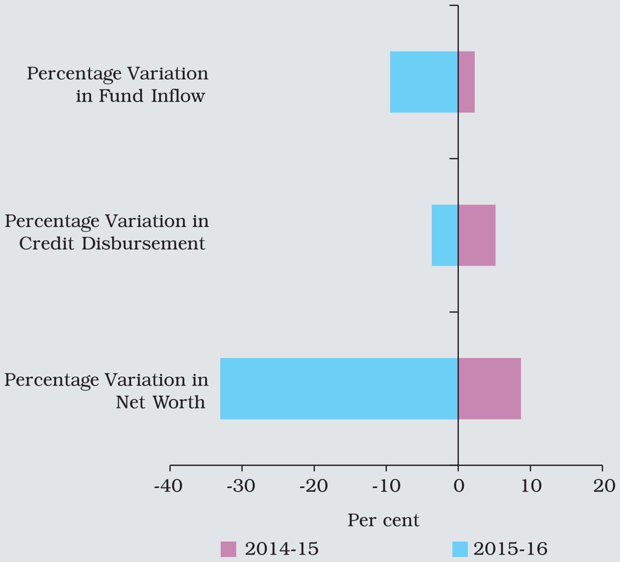
Source: NABARD.

Profitability

VI.72 The financial performance of SCARDBs remained weak, reflecting a sharp fall in income from other sources coupled with a decline in interest income by 11.4 per cent. However, a reduction in expenditure, due to a decline in provisions and contingencies and interest expenses resulted in a turnaround in profits of these institutions (Table VI.24).

[29] The long-term credit co-operatives are primarily designed as non-resource based specialised term-lending agencies. These institutions are not given licenses to function as banks coming under the purview of Banking Regulations Act. Hence, they are not allowed to take deposits from the public. As a result, they are dependent heavily on borrowed funds for advancing loans. They can, however, mobilise deposits from their members as per deposit schemes approved by the boards of management of the respective banks. SCARDBs are also allowed to mobilise deposits from the public who are not members of the bank as per the guidelines issued by NABARD in 1997 subject to certain conditions.

Chart VI.51: Balance Sheet Insights - SCARDBs



Source: NABARD.

Asset Quality

VI.73 The asset quality of SCARDBs has witnessed noteworthy improvement since 2012-13 as reflected in the consistent decline in their NPAs and an increase in the recovery-to-demand ratio since 2013-14 (Chart VI.52 and Table VI.25).

VI.74 Concerted policy efforts are responsible for this decline. In 2015, the Board of Management of the National Co-operative Agriculture and Rural Development Banks Federation Limited launched an accelerated recovery and NPA management drive to revamp the existing repayment and recovery systems and improve the financial health of the SCARDBs. The drive aimed at reducing gross NPAs below the 10 per cent level in two years.

Table VI.24: Financial Performance of State Co-operative Agriculture and Rural Development Banks

(Amount in ₹ billion)

Item	As during		Variation (%)	
	2015	2016	2014-15	2015-16
1	2	3	4	5
A. Income (i+ii)	**25 (100.0)**	**22 (100.0)**	**-0.2**	**-12.1**
i. Interest Income	24 (96.4)	22 (97.2)	-1.2	-11.4
ii. Other Income	0.9 (3.6)	0.6 (2.8)	42.2	-30.8
B. Expenditure (i+ii+iii)	**29 (100.0)**	**22 (100.0)**	**-0.9**	**-23.9**
i. Interest Expended	18 (62.0)	14 (63.9)	5.3	-21.6
ii. Provisions and Contingencies	6 (21.1)	4 (17.3)	-28.9	-37.7
iii. Operating Expenses	5 (16.9)	4 (18.8)	36.7	-15.5
C. Profits				
i. Operating Profits	2	4	-50.2	71.1
ii. Net Profits	-3.88	0.03	-5.4	100.8

Notes: 1. Figures in parentheses are percentages to total income/expenditure.
2. Y-o-y variations could be slightly different because absolute numbers have been rounded off to ₹1 billion in the table.
3. Components may not add up to the total due to rounding off.

Source: NABARD.

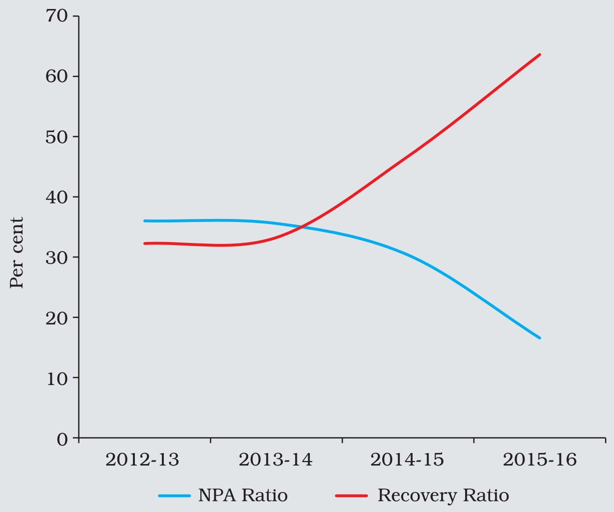
VI.75 Moreover, in November 2014, a new fund, the "Long Term Rural Credit Fund (LTRCF)", was set up in the NABARD for providing refinance support to co-operative banks and RRBs for their agricultural term-loan operations.[30] The refinance facility is provided with a repayment period of five years at a concessional rate such that the banks pass on this benefit to the borrowing farmers (The NABARD revises this from time to time).[31] In 2015-16, the number of fully functional SCARDBs came down to 13 from 18 in the previous year.[32] SCARDBs that contributed the most to the accumulated losses are under

[30] The Fund had an initial corpus of ₹5,000 crore during 2014-15, contributed out of shortfalls in achievement of priority sector lending (PSL) targets by SCBs. Allocations to this fund were increased by ₹15,000 crore each in 2015-16 and 2016-17.

[31] The interest rate on refinance was fixed at 7.85 per cent for 2014-15. The interest rate on refinance was revised downwards to 5.15 per cent per annum w.e.f. December 23, 2016. The banks are supposed to pass on this benefit to borrowing farmers.

[32] The 18 SCARDBs were situated in the states of Haryana, Himachal Pradesh, Jammu & Kashmir, Punjab, Rajasthan, Assam, Tripura, Bihar, Odisha, West Bengal, Madhya Pradesh, Uttar Pradesh, Gujarat, Maharashtra, Karnataka, Kerala, Tamil Nadu and Puducherry. Out of these 18, SCARDBs in Assam, Bihar, Odisha, Madhya Pradesh and Maharashtra are no longer functional.

Chart VI.52: NPAs and Recovery - SCARDBs



Source: NABARD and previous issues of Report on Trend and Progress of Banking in India.

liquidation and hence are no longer functioning (NABARD Annual Report, 2016-17). These developments fructified in the form of a decline in the NPA ratio from 35.6 per cent in 2013-14 to 16.6 per cent in 2015-16, while the recovery-to-demand ratio witnessed steady improvements from 33.3 per cent to 63.6 per cent over the same period. A comparison of SCARDBs with StCBs and UCBs puts into perspective how much of an impact these developments have had in uplifting the quality of assets of SCARDBs. The decline in NPAs of StCBs that operate under almost identical economic circumstances seems barely perceptible in comparison to that of the SCARDBs (Chart VI.53).

Table VI.25: Asset Quality of State Co-operative Agriculture and Rural Development Banks

(Amount in ₹ billion)

Item	As at end-March		Variation (%)	
	2015	2016	2014-15	2015-16
1	2	3	4	5
A. Total NPAs (i+ii+iii)	64	34	-11.3	-47.3
i. Sub-standard	25	19	-20.9	-22.2
	(38.1)	(56.4)		
ii. Doubtful	39	15	-5.2	-62.5
	(60.9)	(43.4)		
iii. Loss	0.6	0.1	445.5	-86.7
	(0.93)	(0.24)		
B. NPAs to Loans Ratio (%)	**30.3**	**16.6**	-	-
C. Recovery to Demand Ratio (%)	**46.7**	**63.6**	-	-

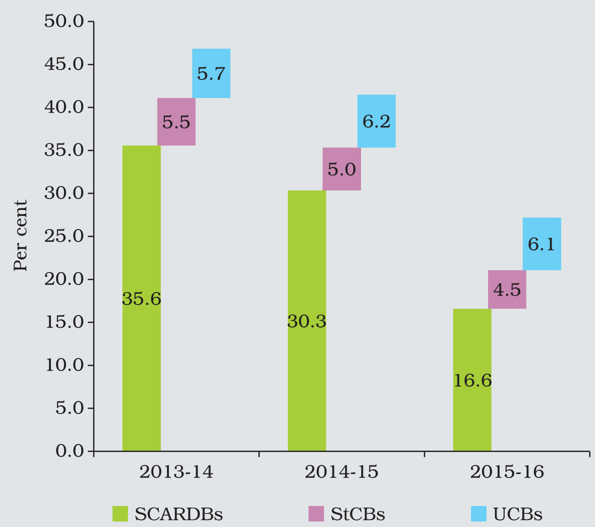
Notes: 1. Figures in parentheses are percentages to total NPAs.
2. Y-o-y variations could be slightly different because absolute numbers have been rounded off to ₹1 billion in the table.
3. Components may not add up to the total due to rounding off.

Source: NABARD.

Asset Quality of SCARDBs: A Regional Perspective

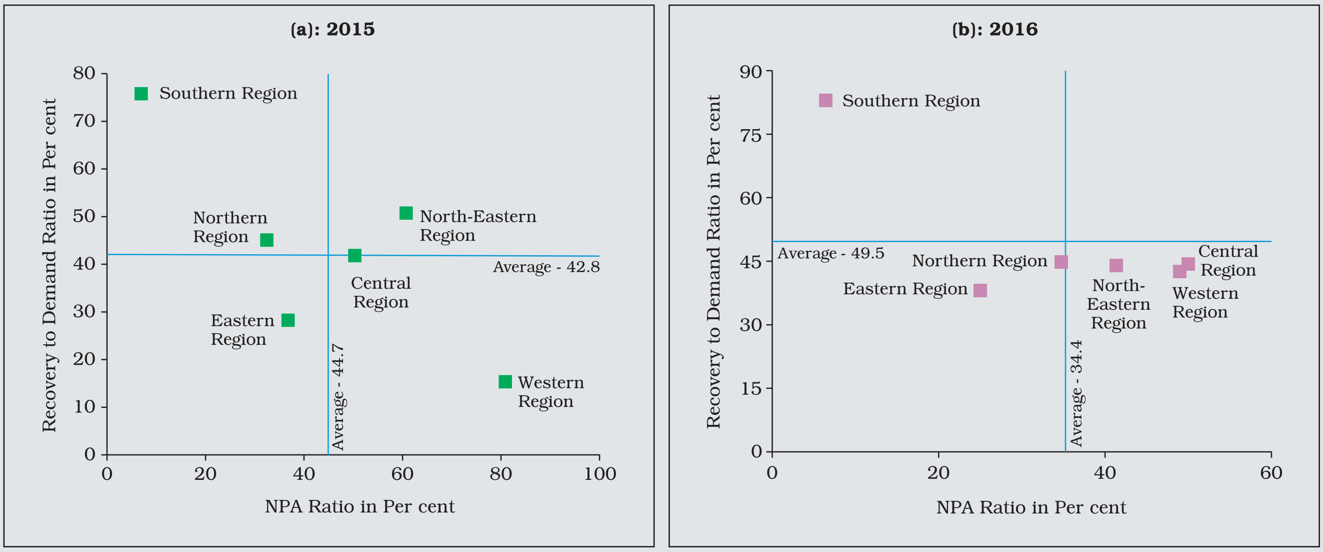
VI.76 From a regional perspective, the financial health of SCARDBs became more skewed during 2015-16. At end-March 2015, the northern and southern regions had high recovery to demand ratios and low (relative to the all-India average) NPA ratios, thus figuring in the quadrangle of the strongest financial health. Only two regions – central and western – figured in the quadrangle of the weakest financial health with high NPA ratios and low recovery to demand ratios (relative to the all-India average) (Chart VI.54 (a)). At end-March 2016, however, only the southern region remained in the sound performing (relative to all-India average) quadrangle while four regions (north; north-east; central; and western) feature in the quadrangle of weakest financial

Chart VI.53: NPA Ratios : A Comparison



Source: NABARD and RBI Supervisory Returns.

Chart VI.54: Region-wise Position of Financial Health of SCARDBs



Source: Calculated based on data from NABARD.

health. Within the weakest quadrangle, the financial health of the western region has improved while the financial health of SCARDBs in the central region deteriorated further, paralleling the poor performance of StCBs in the region (Chart VI.54 (b)).

Primary Co-operative Agriculture and Rural Development Banks

VI.77 PCARDBs are the lowest layer of long-term credit co-operatives. PCARDBs operate in close contact with their borrowers – farmers, artisans, craftsmen and other qualified persons – to sustainably develop their economic conditions. As in the case of SCARDBs, PCARDBs primarily draw on borrowings for lending purposes.

Balance Sheet Operations

VI.78 The consolidated balance sheet of PCARDBs also witnessed substantial contraction in 2015-16. All components of uses of funds, including the major components of loans and advances and other assets, declined from their levels in 2014-15. Sources of funds also recorded a decline from their levels in 2014-15, with deposits being the only exception (Table VI.26).

Table VI.26: Liabilities and Assets of Primary Co-operative Agriculture and Rural Development Banks

(Amount in ₹ billion)

Item	As at end-March		Variation (%)	
	2015	2016	2014-15	2015-16
1	2	3	4	5
Liabilities				
1. Capital	13 (4.3)	11 (4.5)	3.7	-17.8
2. Reserves	40 (13.1)	25 (10.3)	-0.5	-38.4
3. Deposits	10 (3.3)	14 (5.6)	15.9	33.2
4. Borrowings	164 (53.3)	143 (59.3)	5.6	-12.8
5. Other Liabilities	79 (25.9)	49 (20.2)	4.4	-38.7
Assets				
1. Cash and Bank Balances	3.9 (1.3)	3.6 (1.5)	10.4	-9.4
2. Investments	20 (6.6)	15 (6.2)	-1.3	-25.9
3. Loans and Advances	148 (48.3)	127 (52.7)	7.2	-14.4
4. Other Assets	135 (43.9)	95 (39.6)	2.8	-29.2
Total Liabilities/Assets	**307 (100.0)**	**241 (100.0)**	**4.7**	**-21.6**

Notes: 1. Figures in parentheses are percentages to total liabilities/ assets.
2. Y-o-y variations could be slightly different because absolute numbers have been rounded off to ₹1 billion in the table.
3. Components may not add up to the total due to rounding off.

Source: NABARD.

Profitability

VI.79 PCARDBs reported net losses in 2015-16 but of a lower order than in 2014-15, reflecting an increase in the proportion of profit-making PCARDBs (Table VI.27 and Chart VI.55).

Financial Health of PCARDBs versus Financial Health of SCARDBs

VI.80 The apex-level long-term co-operative structure showed some sign of revival during 2015-16. The financial health of PCARDBs deteriorated slightly during 2015-16, although the absolute level of NPAs of PCARDBs fell as the institutions contributing the most to their losses were liquidated (Table VI.28).

Table VI.27: Financial Performance of Primary Co-operative Agriculture and Rural Development Banks

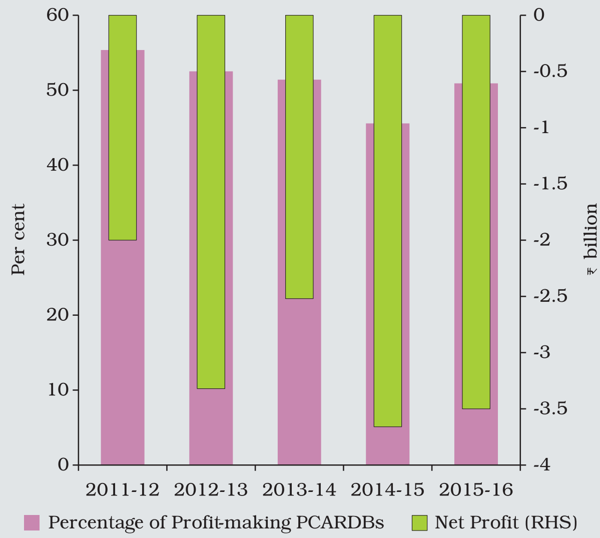
(Amount in ₹ billion)

Item	As during		Variation (%)	
	2015	2016	2014-15	2015-16
1	2	3	4	5
A. Income (i+ii)	**24 (100.0)**	**21 (100.0)**	**3.8**	**-13.4**
i. Interest Income	20 (79.9)	18 (83.7)	2.4	-9.3
ii. Other Income	5 (20.1)	3 (16.3)	9.8	-29.9
B. Expenditure (i+ii+iii)	**28 (100.0)**	**25 (100.0)**	**7.8**	**-12.4**
i. Interest Expended	17 (60.2)	15 (60.9)	8.3	-11.4
ii. Provisions and Contingencies	6 (21.3)	5 (18.5)	9.9	-23.9
iii. Operating Expenses	5.2 (18.5)	5.1 (20.6)	4.0	-2.5
C. Profits				
i. Operating Profits	2	1	-20.5	-52.4
ii. Net Profits	-3.66	-3.45	-45.2	-5.7

Notes: 1. Figures in parentheses are percentages to total income/ expenditure.
2. Y-o-y variations could be slightly different because absolute numbers have been rounded off to ₹1 billion in the table.
3. Components may not add up to the total due to rounding off.

Source: NABARD.

Chart VI.55: Profitability Indicators of PCARDBs



Source: NABARD.

VI.81 The NPA ratio of the PCARDBs continued to remain much higher than that of the SCARDBs, while their recovery ratio remained below that of the SCARDBs in 2015-16 (Chart VI.56).

Table VI.28: Asset Quality of Primary Co-operative Agriculture and Rural Development Banks

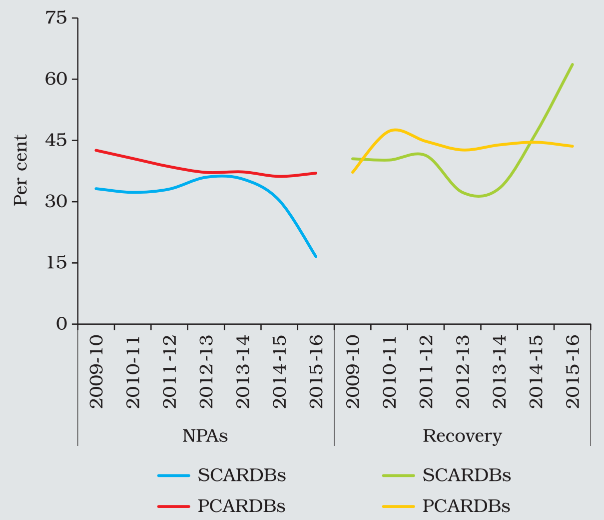
(Amount in ₹ billion)

Item	As at end-March		Variation (%)	
	2015	2016	2014-15	2015-16
1	2	3	4	5
A. Total NPAs (i+ii+iii)	54	47	11.5	-12.4
i. Sub-standard	27 (50.9)	25 (52.8)	23.6	-9.3
ii. Doubtful	26 (48.5)	22 (46.6)	1.4	-15.7
iii. Loss	0.32 (0.60)	0.29 (0.62)	-13.5	-9.4
B. NPAs to Loans Ratio (%)	**36.2**	**37.0**	-	-
C. Recovery to Demand Ratio (%)	**44.6**	**43.6**	-	-

Notes: 1. Figures in parentheses are percentages to total NPAs.
2. Y-o-y variations could be slightly different because absolute numbers have been rounded off to ₹1 billion in the table.
3. Components may not add up to the total due to rounding off.

Source: NABARD.

Chart VI.56: Financial Health of PCARDBs *vis-a-vis* SCARDBs



Source: NABARD.

IV. A Comparative Assessment of Short-term and Long-term Rural Credit Co-operatives

VI.82 The turnaround in the financial performance of the long-term rural co-operative credit institutions in 2015-16 augurs well as these institutions cater to the long-term financial needs of the rural economy. A comparison of the apex-level institutions of short-term and long-term co-operatives, StCBs and SCARDBs, brings out the dwindling asset and credit sizes and weakening capital positions of long-term *vis-à-vis* short-term credit institutions. A consistent fall in the relative asset size/credit/capital of SCARDBs for every ₹100 of total assets/credit/capital of StCBs over the past few years reflects the extent of the problems faced by these long-term credit institutions (Table VI.29).

VI.83 With the ongoing liquidation of unviable institutions, the number of long-term credit institutions has been on a decline for some time now. In addition, as mentioned before, in January 2014, StCBs/DCCBs were also permitted to issue LTDs and IPDIs to facilitate raising of capital funds (Tier I and Tier II) for the purpose of compliance with the prescribed CRAR. Consequently, the capital base of the StCBs expanded by a larger extent than that of SCARDBs since 2014-15. In July 2016, urban and short-term rural co-operative banks were given more freedom for raising capital. Co-operative banks fulfilling certain financial soundness criteria were permitted to raise LTDs without prior approval of the Reserve Bank, subject to the condition that the outstanding amount of LTDs, which is eligible to be reckoned as Tier II capital, is limited to 50 per cent of Tier I capital.

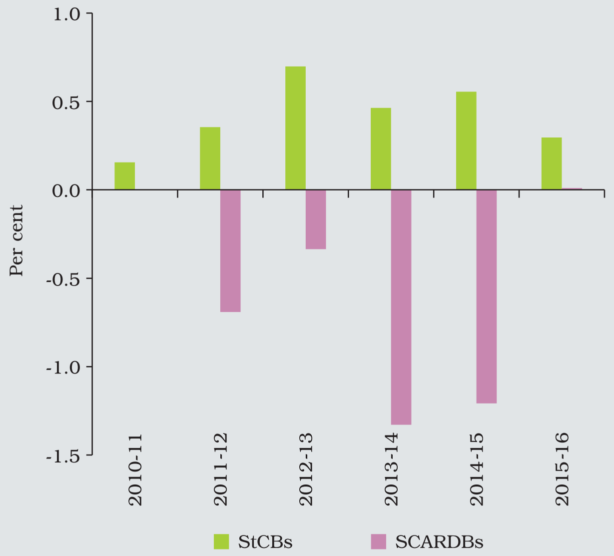
Table VI.29: Comparison of Assets, Credit and Capital Size of SCARDBs and StCBs

Year	Amount of Assets of SCARDBs per ₹100 of Assets of StCBs	Amount of Credit of SCARDBs per ₹100 of Credit of StCBs	Amount of Capital of SCARDBs per ₹100 of Capital of StCBs
2012-13	18.3	20.1	29.0
2013-14	16.3	19.5	25.1
2014-15	16.7	18.5	18.2
2015-16	13.3	16.6	16.1

Source: NABARD.

VI.84 There exists a wide gap between StCBs and SCARDBs in terms of various other performance indicators. The former remained profitable (*albeit* with some moderation in profits in 2015-16) coupled with the lowest NPA ratios and the highest recovery ratios among the co-operatives, in contrast to SCARDBs, which had for long incurred losses and had impaired asset quality. SCARDBs' RoA, however, turned around in 2015-16 as against negative returns recorded in the previous four years, while StCBs continued to record positive RoAs (Chart VI.57). The relatively better performance of StCBs reflects the concerted efforts made by the Central and State Governments along with the Reserve Bank and the NABARD in implementing various reforms aimed at strengthening the short-term credit institutions.

Chart VI.57: StCBs versus SCARDBs - By RoA



Source: NABARD.

VI.85 From a business perspective, while the StCBs exhibited slower growth in credit in 2015-16, credit growth for DCCBs picked up in 2015-16. The NABARD had introduced a norm of linking the refinance eligibility of the StCBs with their CRAR for better accountability in 2012-13. Consequently, StCBs improved their capital positions considerably in 2014-15 and the refinance disbursed to them by the NABARD increased by 12.15 per cent. This may have provided a boost to growth in loans and advances of StCBs in 2014-15 which, in turn, led to a higher growth in DCCBs' loans and advances in 2015-16. Credit off-take of PACS also grew at a slower pace, despite an increase in their numbers.

VI.86 While refinancing through the Long Term Rural Credit Fund and active liquidation of unviable institutions may have played a role in improving the financial health of the long-term credit co-operatives, the general improvement in the NPA ratio and recovery performance of the short-term co-operatives could also be attributed to thorough monitoring by the NABARD. In addition, an incentive of additional rebate of 3 per cent given to farmers for prompt repayment of crop loans as part of the on-going interest subvention scheme for short-term crop loans could have played a role as well.[33]

VI.87 The capital position of both the StCBs and DCCBs have improved in 2015-16. The Reserve Bank will pursue the process of recapitalisation and licensing of the remaining three DCCBs in Jammu and Kashmir under the rehabilitation scheme approved by the government to create an environment where only licensed rural co-operative banks operate in the banking space. Keeping in view the need to improve the preparedness of the banks for facing risks in an increasingly competitive business environment, the NABARD has issued a guidance note on strengthening capital funds and improving CRAR of co-operative banks in 2015-16 and has conducted a workshop to facilitate the process. During the past few years, initiatives to train co-operative banks personnel have gained ground. It is hoped that with more streamlined training, there will be more efficient delivery of banking and financial services by the co-operatives which will, in turn, improve their operating efficiency across the tiers.

V. Overall Assessment

VI.88 The balance sheet of UCBs expanded in 2016-17, driven by demonetisation-induced growth in deposits, which got channelled into

[33] A study of StCBs and DCCBs in two states – Uttar Pradesh and Haryana – reported by Bankers' Institute of Rural Development (BIRD) in May 2015 reveals that the credit flow increased significantly in these two states post the introduction of the scheme and in particular the introduction of the additional incentive for prompt repayment.

higher investments rather than credit. Reflecting continuing efforts at the consolidation of UCBs, their performance lifted in terms of their incremental credit-to-deposit ratio and profitability though their asset quality was affected by subdued economic conditions.

VI.89 The Government and the Reserve Bank are undertaking several initiatives to further improve the financial health of the UCBs. The proposals of the Union Budget 2017-18 to shift from an accrual basis to an actual receipt basis for taxation of interest income on UCBs' non-performing assets, as is the case for SCBs, and increasing the limit for tax deduction with respect to provisions on bad debt for all banks to 8.5 per cent from the earlier 7.5 per cent are important. The High-Powered Committee on Urban Co-operative Banks has suggested a way forward for UCBs by considering their conversion into SCBs and other differentiated banking institutions with the aim of subjecting them to harmonised regulations. At the same time, the Reserve Bank has relaxed the exposure limits on unsecured advances, subject to higher lending to the priority sectors, to incentivise UCBs to compete successfully with small finance banks that operate with similar loan portfolios but under more stringent regulatory norms. In 2016-17, the Reserve Bank also permitted all salary earners' banks to grant advances against term deposits of non-members. Alongside, the Reserve Bank also plans to review the supervisory action framework for UCBs framed in 2014, such that the banks concerned can be engaged at an early stage for corrective action. Moving ahead, increased competition from other segments may necessitate efforts on the part of UCBs to adjust to the dynamic competitive environment on the one hand and continuing of regulatory reforms, on the other.

VI.90 The expansion in size and improved capital position due to consolidation has facilitated the diversification of businesses by UCBs into non-traditional areas. Even as the phase of consolidation continues, efforts are being made to improve their operational efficiency. Proactive steps by the Reserve Bank in the form of providing financial assistance to UCBs for implementation of core banking solutions (CBS) and permitting them to offer all their products and services through ATM channels combined with allowing all co-operatives in May 2017 to deploy point of sale (POS) terminals and issue prepaid instruments will promote digitisation.

VI.91 The short-term credit structure of rural co-operatives continued to show consistent improvements due to various regulatory reforms undertaken in recent years. On the contrary, the lowest tier, PACS, continued to be afflicted by structural deficiencies resulting in their weak performance. In this regard, while some of the recommendations of the Vaidyanathan Committee (2004) have been implemented, the recommendations that address governance issues and insuring deposits of PACS to protect the interests of member depositors will be beneficial in the long-term. NABARD in 2016-17 opened new lines of credit, *viz.* Additional Short Term (Seasonal Agricultural Operations) [ST-SAO] to help the rural co-operatives tide over their liquidity problems. The ST-SAO, for instance, is provided to SCBs for financing the PACS in such areas where the DCCBs are financially weak or are unable to finance PACS adequately so as to ensure credit flow to farmers. On the asset side as well, the NABARD has extended financial support to StCBs/DCCBs/PACS to develop PACS as multi service centres (MSCs) so that they can increase their business portfolios and avenues of earning revenue and become self-sustainable entities. Union Budget 2017-18 has made an allocation of ₹1,900 crore over three years for bringing digital banking to

PACS. This will link 63,000 societies with CBS of DCCBs allowing new generation banking services to be made available to the small and marginalised farmers who are members of these co-operative societies for the first time. All these measures are expected to improve the performance of the PACS going forward.

VI.92 Despite the recent turnaround, the long-term rural co-operative credit structure continues to under-perform due to its inherent weaknesses. In this regard, the recommendations of the Task Force on the Revival of Rural Co-operative Credit Institutions (Long Term), 2006 (Chairman: Shri A. Vaidyanathan) regarding expanding the deposit, capital and product bases of these institutions merits consideration. A build-up of internal resources can help the long-term credit co-operatives to improve their credit disbursements, going forward. Given their significance in meeting the investment needs of the agricultural sector, it is critical that the long-term rural co-operative credit institutions be revived through concerted policy efforts.

Chapter VII

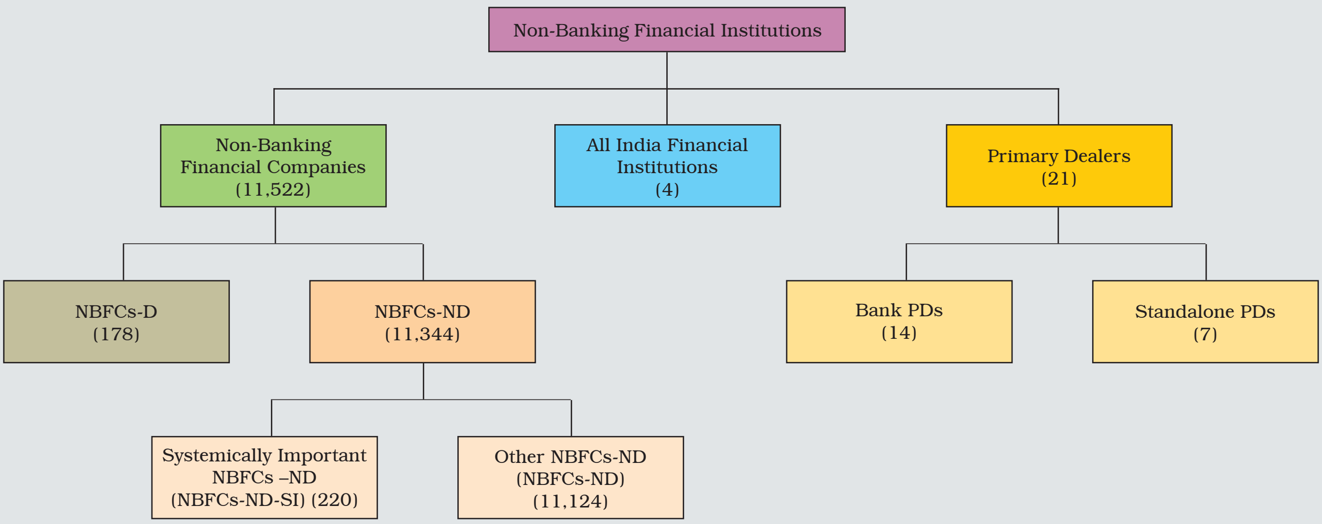
Non-Banking Financial Institutions

Non-banking financial institutions (NBFIs) are an important alternative channel of finance for the commercial sector in India's bank dominated financial sector. Their role in promoting financial inclusion and catering to the needs of small businesses and specialised segments is an additional dimension of their relevance in the Indian context. Regulations relating to governing non-banking financial companies (NBFCs) are being increasingly harmonised with those of banks to forge the right balance for financial stability while encouraging them to focus on specialised areas.

I. Introduction

VII.1 Non-banking financial institutions (NBFIs) have been intermediating a growing share of the resource flows to the commercial sector. NBFIs regulated by the Reserve Bank are all-India financial institutions (AIFIs), non-banking financial companies (NBFCs) and primary dealers (PDs) (Chart VII.1). AIFIs, largely an outcome of development planning in India, were created as apex public entities for providing long-term financing / refinancing to specific sectors. NBFCs, on the other hand, are mostly private sector institutions that specialise in meeting the credit needs and a variety of financial services of niche areas which, *inter alia*, include financing of physical assets, commercial vehicles and infrastructure loans. PDs, which came into existence in 1995, play an important role in both the primary and secondary markets for government securities. In terms of balance sheet size, AIFIs constitute 23 per cent of NBFIs' total assets, while NBFCs represent 76 per cent and standalone PDs constitute 1 per cent.

Chart VII.1: Non-Banking Financial Institutions Regulated by the Reserve Bank of India



Note: Figures in parentheses are the number of institutions.
Source: RBI.

VII.2 Against this background, this chapter presents an analysis of the financial performance of each of these NBFIs in 2016-17. The chapter is organised into seven sections. Section 2 provides an aggregated view of the NBFC sector – both deposit-taking NBFCs (NBFCs-D) and non-deposit taking systemically important NBFCs (NBFCs-ND-SI). Section 3 discusses the financial performance of payments banks – a newly created form of differentiated banks. The finances of AIFIs are analysed in Section 4, followed by an evaluation of the role of primary dealers in Section 5. Section 6 sets out the latest developments and Section 7 concludes with an overall assessment.

II. Non-Banking Financial Companies

VII.3 NBFCs are classified on the basis of their liability structures, the type of activities they undertake and their systemic importance. In terms of liability structure, NBFCs are classified into two categories – deposit-taking NBFCs or NBFCs-D, which accept and hold public deposits and non-deposit taking NBFCs or NBFCs-ND, which do not accept public deposits. Among NBFCs-ND, those with an asset size of ₹5 billion or more are classified as non-deposit taking systemically important NBFCs (NBFCs-ND-SI). For the purpose of issuing certificates of registration (CoRs), NBFCs were categorised as Type I and Type II companies in June 2016. The applications for Type I NBFCs, which do not have / intend to accept public funds and do not have / intend to have customer interface, are considered on a fast-track basis. NBFCs are also categorised on the basis of the activities undertaken by them with a view to meeting sector-specific requirements, entailing appropriate modulation of the regulatory regime. With addition of new categories over time, there were 12 types of NBFCs as of date under this categorisation (Table VII.1).

VII.4 At end-March 2017, there were 11,522 NBFCs registered with the Reserve Bank, of which 178 were NBFCs-D and 220 were NBFCs-ND-SI. The number of NBFCs has been declining over time with cancellations of registrations exceeding new registrations on account of voluntary surrender or cancellation of CoR due to non-compliance of revised criteria of net owned fund (NOF) (Chart VII.2).

Table VII.1: Classification of NBFCs Based on Activity

Type of NBFC	Activity
1. Asset Finance Company (AFC)	Financing of physical assets supporting productive / economic activities, including automobiles, tractors and generators.
2. Loan Company	Providing of finance whether by making loans or advances or otherwise for any activity other than its own but does not include an asset finance company.
3. Investment Company	Acquiring securities for purpose of selling.
4. NBFC- Infrastructure Finance Company (NBFC-IFC)	Providing infrastructure loans.
5. NBFC-Systemically Important Core Investment Company (CIC-ND-SI)	Acquiring shares and securities for investment mainly in equity market.
6. Infrastructure Debt Fund-NBFC (IDF-NBFC)	For facilitating flow of long-term debt into infrastructure projects.
7. NBFC-Micro Finance Institution (NBFC-MFI)	Extending credit to economically disadvantaged groups.
8. NBFC-Factor	Undertaking the business of acquiring receivables of an assignor or extending loans against the security interest of the receivables at a discount.
9. NBFC- Non-Operative Financial Holding Company (NOFHC)	For permitting promoters / promoter groups to set up a new bank.
10. Mortgage Guarantee Company (MGC)	Undertaking mortgage guarantee business.
11. NBFC-Account Aggregator (NBFC-AA)	Collecting and providing information about a customer's financial assets in a consolidated, organised and retrievable manner to the customer or others as specified by the customer.
12. NBFC-Peer to Peer Lending Platform (NBFC-P2P)	Providing an online platform to bring lenders and borrowers together to help mobilise funds.

Source: RBI.

Chart VII.2: Number of Registrations and Cancellations of CoR of NBFCs

Source: RBI.

Balance Sheet

VII.5 Double-digit growth in credit extended by NBFCs has improved resilience and stability of the economy by filling up the financing gap opened up by the muted bank credit growth from 2014-15. NBFCs' consolidated balance sheet[1] turned around and expanded during 2016-17 from a marginal decline in the previous year. Borrowings by NBFCs from various sources, which accounted for 70 per cent of their total liabilities, increased by 12.1 per cent in 2016-17 mainly through market-based instruments such as commercial paper (CPs) and debentures even as borrowings from banks contracted. Growth in public deposits decelerated which is, however, attributable to the revised regulatory guidelines issued in November 2014 mandating that only rated NBFCs-D can accept and maintain public deposits. Unrated companies were required to get rated by March 31, 2016 to be able to renew existing deposits / accept fresh deposits or else return deposits to the public. Further, the limit on acceptance of deposits for rated asset finance companies (AFCs) was reduced from 4 times to 1.5 times of their NOF as part of harmonisation across the sector. Loans and advances, constituting three-fourth of total assets, picked up sharply as space opened up with the reduced pace of bank credit growth. Investments too reversed from contraction in the previous year and rose strongly during 2016-17 reflecting higher investments in equity shares in the wake of ebullient market (Table VII.2).

Table VII.2: Consolidated Balance Sheet of NBFCs
(End-March)

(Amount in ₹ billion)

Items	2014	2015	2016	2017	Percentage variation	
					2015-16	2016-17
1	2	3	4	5	6	7
1. Share capital	737	851	761	921	-10.6	21.0
2. Reserves and surplus	2,723	3,117	3,033	3,538	-2.7	16.7
3. Public deposits	131	205	271	306	32.2	12.9
4. Bank borrowings	2,910	3,106	3,376	3,141	8.7	-7.0
5. Debentures	4,596	5,740	5,394	6,462	-6.0	19.8
6. Commercial paper	462	630	852	1,267	35.2	48.7
7. Other borrowings	2,175	2,761	2,639	2,878	-4.4	9.1
8. Other liabilities	766	875	904	1,158	3.3	28.1
Total liabilities/assets	**14,499**	**17,284**	**17,231**	**19,671**	**-0.3**	**14.2**
1. Loans and advances	10,782	11,864	13,169	14,846	11.0	12.7
2. Investments	2,159	2,603	2,253	2,673	-13.4	18.6
3. Other assets	1,558	2,817	1,810	2,152	-35.7	18.9

Source: RBI Supervisory Returns.

[1] Analysis is based on the consolidated balance sheet of NBFCs-D and NBFCs-ND-SI.

Sectoral Credit of NBFCs

VII.6 NBFCs specialise in catering to sector-specific financial needs covering retail; consumer and vehicle loans; micro, small and medium enterprises (MSMEs); large industry / infrastructure; and micro finance among others. A significant growth in credit to retail and services segments also underlines their increasing role in financial inclusion. Industry receives about 60 per cent of total credit by NBFCs, followed by retail, services and agriculture.

VII.7 Within the sectoral deployment, retail credit increased at the highest pace on account of consumer durables and credit card receivables; this was followed by services and industry. On the other hand, credit to agriculture and allied activities contracted perhaps on account of transitory disruptions in cash-intensive value chains due to demonetisation (Table VII.3). Credit

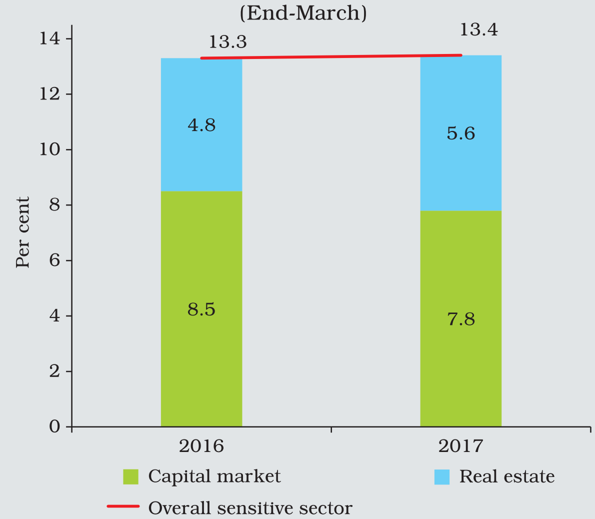
Table VII.3: Credit to Select Sectors by NBFCs
(End-March)

(Amount in ₹ billion)

Items	2016	2017	Share in gross advances in 2017 (Per cent)	Percentage variation
1	2	3	4	5
I. Gross advances	13,169	14,846	-	12.7
II. Non-food credit (1 to 5)	13,167	14,846	100.0	12.8
1. Agriculture and allied activities	392	346	2.3	-11.7
2. Industry (2.1 to 2.4)	8,063	8,940	60.2	10.9
2.1 Micro and small	326	508	3.4	55.8
2.2 Medium	154	172	1.2	11.7
2.3 Large	3,726	4,375	29.5	17.4
2.4 Others	3,857	3,885	26.2	0.7
3. Services	1,865	2,224	15.0	19.2
4. Retail loans	2,047	2,490	16.8	21.6
4.1 Vehicle/auto loans	1,150	1,035	7.0	-10.0
5. Other non-food credit	801	847	5.7	5.7

Note: Food credit was approximately ₹1 billion in 2015-16 and nil in 2016-17.
Source: RBI Supervisory Returns.

Chart VII.3: Exposure to Sensitive Sectors as a per cent of Total Assets
(End-March)



Source: RBI Supervisory Returns.

to the micro and small segments in both industry and services sectors displayed robust growth while vehicle loans declined during 2016-17 reflecting the transient impact of demonetisation (Appendix Table VII.1).

Exposure to Sensitive Sectors

VII.8 The Reserve Bank defines the capital market, real estate and commodities as sensitive sectors in view of the risks associated with fluctuations in prices of such assets. NBFCs' exposure to real estate increased during 2016-17 reflecting search for higher yields (Chart VII.3).

Financial Performance of NBFCs

VII.9 NBFCs' profitability declined during 2016-17 due to increased provisioning requirements (Table VII.4). Their cost to income ratio increased reflecting deterioration in operational efficiency.

VII.10 Reflecting the slowdown in net profits, NBFCs' return on equity (RoE) and return on assets (RoA) – the two major profitability

Table VII.4: Financial Parameters of the NBFC Sector
(End-March)

(Amount in ₹ billion)

Items	2014	2015	2016	2017
1	2	3	4	5
A. Income	1,713	2,009	2,142	2,310
B. Expenditure	1,279	1,495	1,628	1,822
C. Net profit	313	365	367	314
D. Total assets	14,499	17,284	17,231	19,671
E. Financial ratios (as per cent of total assets)				
(i) Income	11.8	11.6	12.4	11.7
(ii) Expenditure	8.8	8.6	9.4	9.3
(iii) Net profit	2.2	2.1	2.1	1.6
F. Cost to income ratio	74.6	74.4	76.0	78.9

Source: RBI Supervisory Returns.

indicators – were lower during 2016-17 than a year ago (Chart VII.4).

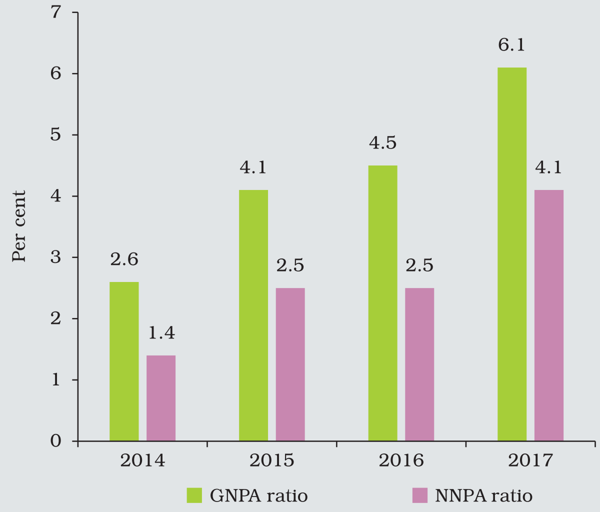
Asset Quality

VII.11 During the year, NBFCs faced some deterioration in their asset quality mainly on account of the sluggishness in industrial activity.

Chart VII.4: Profitability Ratios of NBFCs
(End-March)

Source: RBI Supervisory Returns.

Chart VII.5: Asset Quality of NBFCs
(End-March)



Source: RBI Supervisory Returns.

Both their gross non-performing assets (GNPAs) ratio and net non-performing assets (NNPAs) ratio increased during 2016-17. The recent spike in these ratios also reflects the revision in the recognition norms of NPAs being implemented in a phased manner beginning 2015-16[2] (Chart VII.5).

VII.12 Deterioration of asset quality was also evident in the increased share of doubtful assets denoting the aging of NPAs in the sector (Table VII.5).

Table VII.5: Classification of NBFCs' Assets

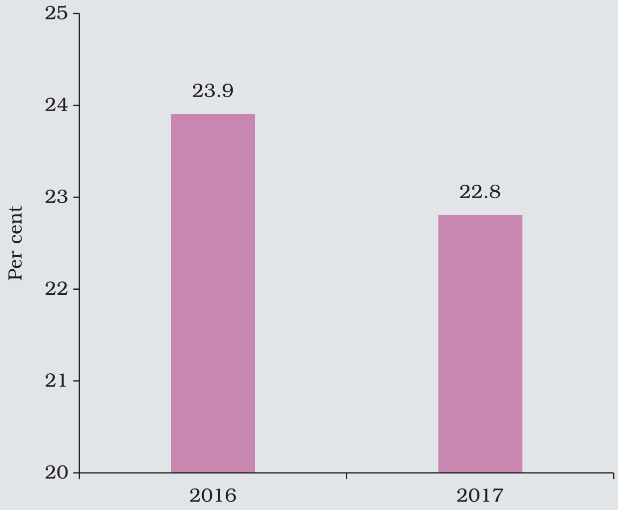
(Per cent)

Items	2013-14	2014-15	2015-16	2016-17
1	2	3	4	5
Standard assets	95.7	95.8	95.5	95.0
Sub-standard assets	2.6	2.8	2.6	2.6
Doubtful assets	1.2	1.1	1.6	2.1
Loss assets	0.5	0.3	0.3	0.3
Total	100.0	100.0	100.0	100.0

Source: RBI Supervisory Returns.

[2] Time period for classification as NPAs for assets other than hire purchase was progressively reduced to 5 months for the year ending March 2016, 4 months for the year ending March 2017 and 3 months for the year ending March 2018.

Chart VII.6: Capital Adequacy of NBFC Sector
(End-March)



Source: RBI Supervisory Returns.

Capital Adequacy

VII.13 With a moderate deterioration in asset quality and expansion in the credit portfolio, NBFC sector's capital to risk-weighted assets ratio (CRAR) declined in 2016-17 (Chart VII.6). Nevertheless, it remained well above the stipulated norm of 15 per cent.

Non-Deposit taking Systemically Important NBFCs

VII.14 NBFCs-ND-SI constitute 86 per cent of the total assets of the NBFC sector. The number of these companies declined by more than half in 2015-16 in view of the revised regulatory framework for NBFCs, which raised threshold asset size for NBFCs-ND-SI to ₹5 billion or more from ₹1 billion. Accordingly, many of the NBFCs-ND-SI were reclassified as NBFC-ND in view of the changed definition. In terms of ownership, non-government NBFCs-ND-SI held 62.9 per cent of the total assets of NBFCs-ND-SI (Table VII.6).

Balance Sheet

VII.15 The consolidated balance sheet of NBFCs-ND-SI expanded strongly in 2016-17 due to growth in credit, which has improved the resilience and stability of the economy by filling up the financing gap opened up by the muted bank credit growth (Box VII.1).

VII.16 The accretion to liabilities was mainly on account of share capital, debentures and CPs; on the other hand, borrowings from both banks and the government declined during the year. Although loans and advances of NBFCs-ND-SI increased during the year, investments grew at a faster pace reflecting a preference to park funds in high yield instruments such as debentures, corporate bonds, equity shares and mutual fund units (Table VII.7).

VII.17 Category-wise, loan companies (LCs) contributed the most to the increase in the consolidated balance sheet of NBFCs-ND-SI during 2016-17, supported by a healthy growth

Table VII.6: Ownership Pattern of NBFCs-ND-SI
(End-March)

(Amount in ₹ billion)

Ownership	2014		2015		2016		2017	
	Number	Asset size	Number	Asset size	Number	Asset size	Number	Asset size
1	2	3	4	5	6	7	8	9
A. Government companies	15	4,181	15	5,337	15	5,765	15	6,280
B. Non-government companies (1+2)	478	8,561	456	9,895	205	9,068	205	10,637
1. Public ltd. companies	252	1,705	243	2,120	105	2,026	105	8,268
2. Private ltd. companies	226	6,856	213	7,775	100	7,041	100	2,369
Total (A+B)	**493**	**12,742**	**471**	**15,232**	**220**	**14,832**	**220**	**16,917**

Source: RBI Supervisory Returns.

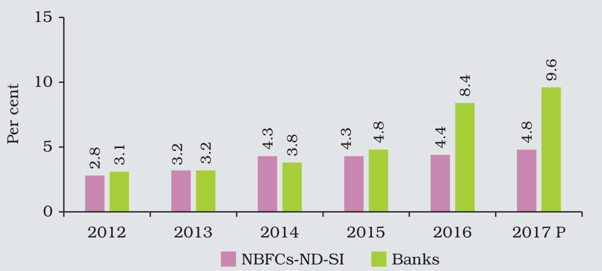
Box VII.1: Factors Influencing NBFCs' Credit Growth

Credit is considered as a vital ingredient in economic growth process. Levine, *et al.* (1998) found a strong positive link between financial development and economic growth. Empirical analysis also shows that a combination of stronger economic growth, loose monetary conditions and sound health of banking sector leads to higher credit growth while high inflation is detrimental to it (Guo and Stepanyan, 2011). In India, bank credit has decelerated sharply in recent years, while NBFCs' credit continued in productive sectors such as infrastructure, retail loans and services sector. The share of NBFCs in total credit extended by banks and NBFCs together increased from 9.5 per cent in March 2008 to 15.5 per cent in March 2017. NBFCs credit intensity, *i.e.*, credit as per cent of GDP, has also increased at a steady pace, reaching 8 per cent at end-March 2017. Against this backdrop, this box attempts an empirical examination of the factors influencing credit of NBFCs using descriptive anaysis and vector autoregression.

Along with decline in bank credit growth in recent years due to asset quality concerns, the asset quality of NBFCs has also deteriorated mainly due to the changed asset classification norms (Chart 1). NBFCs' credit to infrastructure sector, however, has shown a robust growth, especially credit by NBFCs-infrastructure finance companies (NBFCs-IFC). NBFCs-IFC have to deploy at least 75 per cent of their total assets in infrastructure loans and they constitute nearly two-fifth of credit extended by NBFCs-ND-SI. Similarly, NBFCs' lending to retail and services segments have also increased significantly as reflected by the share of loan companies (LCs) and asset finance companies (AFCs), the main categories which lend to these sectors (Chart 2).

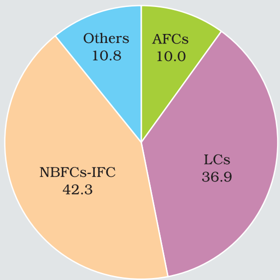
In order to further examine the factors influencing the NBFCs' credit, a vector autoregression (VAR) approach was adopted using quarterly data from June 2007 to June 2017 on GDP (non-agricultural, at factor cost), banks' restructured assets, 91-days treasury bills rates and capacity utilisation (CU) of industrial sector. The GDP and credit series were deseasonalised and found to be first difference stationary, while CU was found to be stationary on the level. A dummy for financial crisis of 2008 was included as an exogenous variable. Lag of four quarters was found appropriate as per AIC lag length criterion. The impulse

Chart 1: NPA Ratio of NBFCs-ND-SI and Banks
(End-March)



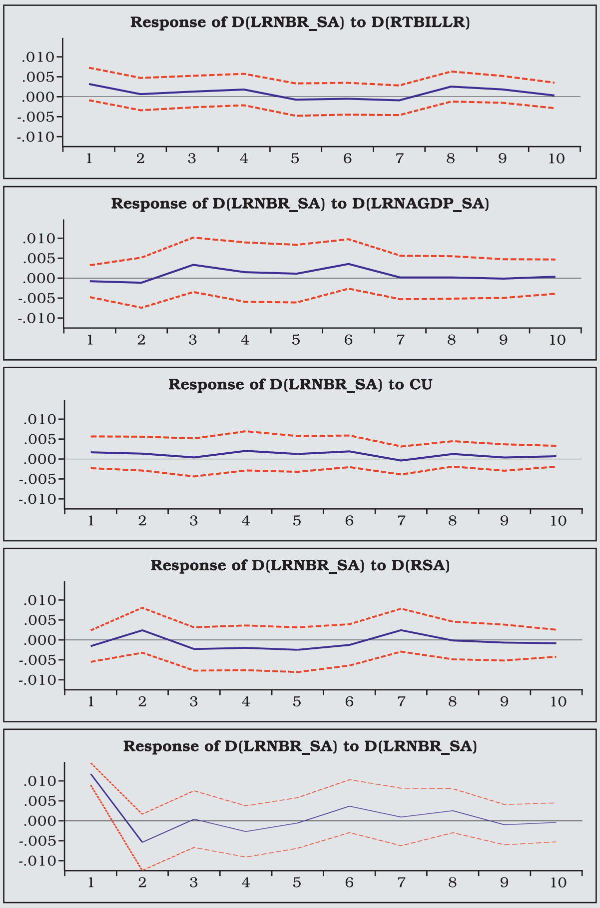
Sources: 1. Statistical Tables Relating to Banks in India, various issues.
2. Report on Trend and Progress of Banking in India, various issues.
3. Financial Stability Report, various issues.

Chart 2: Share of Major Categories of NBFCs-ND-SI in Total Credit Deployment
(End-June 2017) (Per cent)



Source: RBI Supervisory Returns.

Response to Cholesky One S.D. (d.f. adjusted) Innovations ± 2 S.E.



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response mostly showed the expected direction of change in NBFCs' credit in response to all the variables included in VAR. A one standard error increase in treasury bills rate initially leads to an increase in NBFCs' credit, which declines subsequently. An increase in GDP and capacity utilisation generate positive shocks to NBFCs' credit, which persist for seven quarters. A deterioration in asset quality of banks (increase in restructured assets) initially leads to an increase in NBFCs' credit reflecting substitution impact whereby banks' aversion to lend creates avenue for lending by NBFCs. Gradually, however, the banks' asset quality concerns perhaps start affecting the overall economic environment, which leads to a decline in NBFCs' credit.

References:

Guo K. and V. Stepanyan (2011), 'Determinants of Bank Credit in Emerging Market Economies', IMF Working Paper WP/11/51.

Levine R. and S. Zervos (1998), 'Stock Markets, Banks, and Economic Growth', *The American Economic Review*, 88 (3): 537-558.

in the retail segment, especially in consumer durables. The balance sheet of infrastructure finance companies (NBFCs-IFC), the other major category of NBFCs-ND-SI, was subdued by risk aversion due to asset quality concerns in the sector. The balance sheet of AFCs was almost unchanged, reflecting postponement of decisions to purchase assets after demonetisation. The subdued growth of the NBFCs-micro finance institution (NBFCs-MFI) balance sheet was partially due to the conversion of a few large NBFCs-MFI into small finance banks (Table VII.8). Balance sheet of investment companies expanded moderately; while loans and advances increased, their investments declined.

Table VII.7: Consolidated Balance Sheet of NBFCs-ND-SI
(End-March)

(Amount in ₹ billion)

Items	2014	2015	2016	2017	Percentage variation	
					2015-16	2016-17
1	2	3	4	5	6	7
1. Share capital	699	812	726	922	-10.6	27.0
2. Reserves and surplus	2,469	2,818	2,699	3,124	-4.2	15.7
3. Borrowings	8,916	10,853	10,661	11,917	-1.8	11.8
4. Current liabilities	286	294	291	339	-1.0	16.5
5. Provisions	371	455	455	615	0.0	35.2
Total liabilities/ assets	**12,742**	**15,232**	**14,832**	**16,917**	**-2.6**	**14.1**
1. Loans and advances	9,367	10,145	11,039	12,396	8.8	12.3
2. Investments	2,081	2,503	2,172	2,555	-13.2	17.6
3. Cash and bank balances	382	535	485	698	-9.3	43.9
4. Other current assets	730	1,850	952	1,020	-48.5	7.1
5. Other assets	183	199	223	264	12.1	18.4

Source: RBI Supervisory Returns.

Resource Mobilisation

VII.18 NBFCs-ND-SI increased resources raised through debentures and CPs while their borrowings from banks and government declined during the year (Table VII.9).

Financial Performance

VII.19 The net profits of NBFCs-ND-SI declined in 2016-17 due to increased expenditure and tax provisions (Table VII.10). Their cost-to-income ratio increased during the year.

Soundness Indicators

VII.20 Gross NPAs of NBFCs-ND-SI increased further during 2016-17, partly reflecting the progressive harmonisation of the NPA norms *vis-à-vis* banks. All categories of NBFCs-ND-SI, except AFCs, reported deterioration in asset quality with it being more pronounced in the case of NBFCs-MFI reflecting transient disruption in cash flows due to demonetisation (Chart VII.7A). Net NPAs broadly followed the pattern of gross NPAs (Chart VII.7B).

Table VII.8: Major Components of Liabilities and Assets of NBFCs-ND-SI by Classification of NBFCs
(End-March)

(Amount in ₹ billion)

Category / Liability	2016			2017			Percentage variation of total liabilities
	Borrowings	Other liabilities	Total liabilities	Borrowings	Other liabilities	Total liabilities	
1	2	3	4	5	6	7	8
Asset finance company	1,189	380	1,569	1,167	410	1,576	0.4
IDF-NBFC	49	17	67	98	22	120	79.1
NBFC-IFC	4,593	973	5,566	4,668	1,157	5,825	4.7
Investment company	1,025	1,029	2,054	1,039	1,154	2,193	6.8
NBFC-MFI	413	156	569	400	204	604	6.2
Loan company	3,402	1,605	5,007	4,545	2,053	6,598	31.8
Total	**10,671**	**4,160**	**14,832**	**11,917**	**5,000**	**16,917**	**14.1**
Category / Asset	Loans & advances	Investments	Total assets	Loans & advances	Investments	Total assets	Percentage variation of total assets
Asset finance company	1,390	44	1,569	1,325	104	1,576	0.4
IDF-NBFC	36	28	67	81	33	120	79.1
NBFC-IFC	5,167	114	5,566	5,287	132	5,825	4.7
Investment company	365	1,302	2,054	532	1,262	2,193	6.8
NBFC-MFI	422	27	569	400	61	604	6.2
Loan company	3,660	657	5,007	4,771	963	6,599	31.8
Total	**11,039**	**2,172**	**14,832**	**12,396**	**2,555**	**16,917**	**14.1**

Source: RBI Supervisory Returns.

VII.21 The CRAR of NBFCs-ND-SI was well above the stipulated norm for the sector across all categories as of March 2017. The overall CRAR, however, showed a marginal decline from

Table VII.9: Sources of Borrowings of NBFCs-ND-SI
(End-March)

(Amount in ₹ billion)

Items	2014	2015	2016	2017	Percentage variation	
					2015-16	2016-17
1	2	3	4	5	6	7
1. Debentures	4,212	5,287	4,855	5,795	-8.2	19.4
2. Bank borrowings	2,377	2,541	2,716	2,527	6.9	-7.0
3. Borrowings from FIs	145	144	159	263	10.4	65.4
4. Inter-corporate borrowings	253	279	356	404	27.6	13.5
5. Commercial paper	417	549	786	1,119	43.2	42.4
6. Borrowings from government	100	185	195	193	5.4	-0.9
7. Subordinated debts	233	273	304	333	11.4	9.5
8. Other borrowings	1,178	1,593	1,299	1,283	-18.5	-1.2
9. Total borrowings	**8,916**	**10,853**	**10,671**	**11,917**	**-1.7**	**11.7**

Source: RBI Supervisory Returns.

Table VII.10: Financial Performance of NBFCs-ND-SI

(Amount in ₹ billion)

Items	2013-14	2014-15	2015-16	2016-17
1	2	3	4	5
A. Income (i+ii)	**1,443**	**1,702**	**1,785**	**1,909**
(i) Fund-based	1,409	1,662	1,736	1,847
(ii) Fee-based	34	40	49	61
B. Expenditure (i+ii+iii)	**1,071**	**1,257**	**1,343**	**1,498**
(i) Financial	775	900	913	958
Of which Interest payment	327	374	387	441
(ii) Operating	155	182	232	280
(iii) Others	142	175	199	260
C. Tax provisions	**101**	**128**	**124**	**147**
D. Operating profit	**371**	**446**	**441**	**410**
E. Net profit	**270**	**318**	**318**	**263**
F. Total assets	**12,742**	**15,232**	**14,832**	**16,917**
G. Financial ratios (as per cent to total assets)				
(i) Income	11.3	11.2	12.0	11.3
(ii) Fund income	11.1	10.9	11.7	10.9
(iii) Fee income	0.3	0.3	0.3	0.4
(iv) Expenditure	8.4	8.3	9.1	8.9
(v) Financial expenditure	6.1	5.9	6.2	5.7
(vi) Operating expenditure	1.2	1.2	1.6	1.7
(vii) Tax provision	0.8	0.8	0.8	0.9
(viii) Net profit	2.1	2.1	2.1	1.6
H. Cost to income ratio	**74.3**	**77.8**	**75.3**	**78.5**

Source: RBI Supervisory Returns.

Chart VII.7A: Gross NPAs as a percentage of Gross Advances of NBFCs-ND-SI
(End-March)

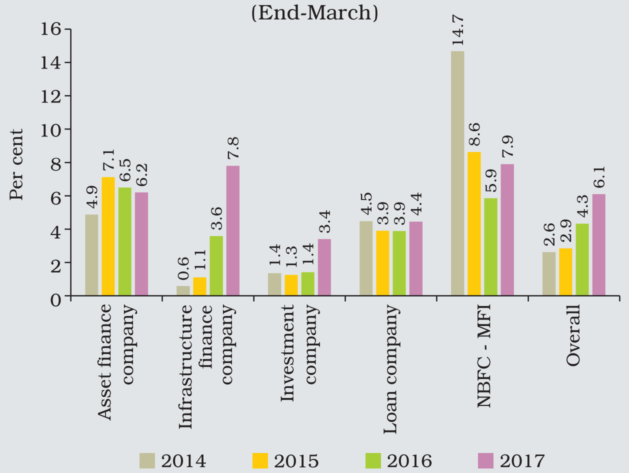
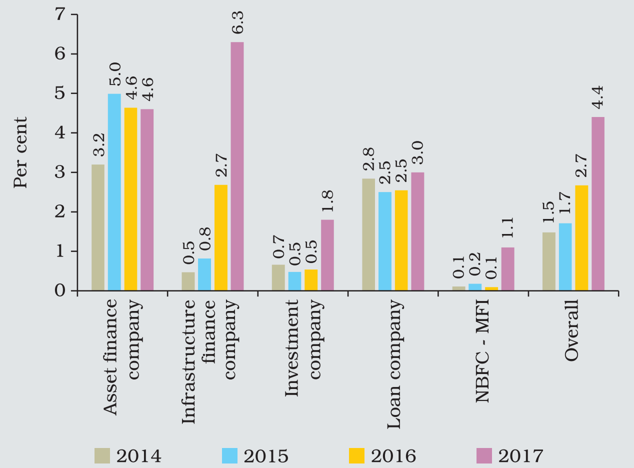


Chart VII.7B: Net NPAs of NBFCs-ND-SI
(End-March)



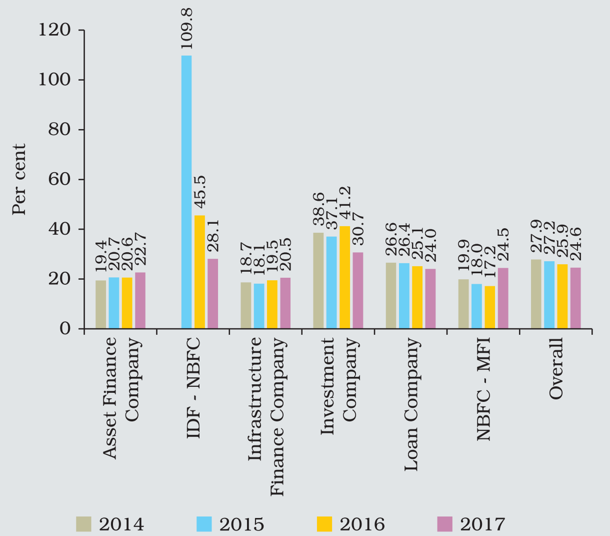
Note: IDF-NBFCs reported nil NPAs.
Source: RBI Supervisory Returns.

the previous year's level with infrastructure debt fund – NBFCs (IDF-NBFCs), Investment Companies (ICs) and LCs having expanded their loan portfolios considerably during the year (Chart VII.8).

Banks' Exposure to NBFCs-ND-SI

VII.22 Borrowings from banks accounted for 21 per cent of NBFCs-ND-SI borrowings. Group-wise, new private banks emerged as the largest lender to NBFCs-ND-SI replacing nationalised banks. NBFCs-ND-SI borrow from banks primarily in the form of term loans and debentures. Traditional lenders, nationalised banks, largely lent in the form of term loans, while new private banks lent through debentures indicating their expectations of capital gains in the monetary easing phase (Table VII.11).

Chart VII.8: Category-wise CRAR of NBFCs-ND-SI
(End-March)



Source: RBI Supervisory Returns.

Table VII.11: Bank Exposure to NBFCs-ND-SI Sector
(End-March 2017)

(₹ billion)

Bank group	Term loans	Working capital loans	Deben-tures	Com-mercial paper	Others	Total
1	2	3	4	5	6	7
A. Nationalised banks	936	10	415	157	147	1,665
B. The State Bank Group	330	521	3	179	1	1,034
C. Old private banks	281	31	2	0	0	313
D. New private banks	447	103	954	204	106	1,814
E. Foreign banks	67	3	6	92	3	170
All banks	**2,060**	**668**	**1,381**	**631**	**257**	**4,996**

Source: RBI Supervisory Returns.

Table VII.12: Ownership Pattern of NBFCs-D
(End-March)

(Amount in ₹ billion)

Type	2014		2015		2016		2017 P	
	Number	Asset size	Number	Asset size	Number	Asset size	Number	Asset size
1	2	3	4	5	6	7	8	9
A. Government companies	5	251	5	271	5	285	2	273
B. Non-government companies (1+2)	210	1,506	195	1,781	169	2,114	123	2,482
1. Public ltd. companies	5	1	4	0.2	3	0.2	2	0.2
2. Private ltd. companies	205	1,505	191	1,781	166	2,114	121	2,482
Total (A+B)	**215**	**1,757**	**200**	**2,052**	**174**	**2,399**	**125**	**2,755**

P: Provisional.
Source: RBI Supervisory Returns.

Deposit-taking NBFCs

VII.23 NBFCs-D accounted for 14.0 per cent of total assets and 16.2 per cent of the total credit deployed by NBFCs at the end of March 2017. NBFCs-D are allowed to accept fixed deposits from the public for a tenure of 12 to 60 months. Deposits constituted 11.1 per cent of NBFCs-D funds as of end-March 2017; however, borrowings (debentures, bank borrowings and CPs) remained the largest source of funds with a share of 66.7 per cent in total funds. The assets of non-government-owned NBFCs increased in 2016-17 while those of government-owned NBFCs contracted (Table VII.12).

Balance Sheet

VII.24 The consolidated balance sheet of NBFCs-D expanded in 2016-17 on the back of robust credit growth as well as strong investments as NBFCs searched for yields (Table VII.13). Credit was mainly extended to transport operators, consumer durables, and medium and large industries sectors. Among liabilities, the expansion was mainly in debentures, public deposits and CPs. There was a gradual decline in bank borrowings as NBFCs-D diversified their sources of funds in favour of market-based instruments. Debentures emerged as the largest source of funding for NBFCs-D.

Category-wise Key Indicators of NBFCs-D

VII.25 There are three categories of NBFCs-D – AFCs, LCs and ICs, the last one being negligible in terms of balance sheet size. Category-wise, deposits of AFCs shrank during the year reflecting both a decline in the number of companies under this category as well as a reduction in the limit for

Table VII.13: Consolidated Balance Sheet of NBFCs-D
(End-March)

(Amount in ₹ billion)

Items	2016	2017	Percentage variation
1	2	3	4
1. Share capital	35	33	-5.7
2. Reserves and surplus	343	380	10.8
3. Public deposits	271	306	12.9
4. Debentures	539	668	23.9
5. Bank borrowings	660	614	-7.0
6. Borrowings from FIs	23	31	34.8
7. Inter-corporate borrowings	6	14	133.8
8. Commercial paper	66	148	124.4
9. Borrowings from government	30	0	-100.0
10. Subordinated debts	88	119	35.2
11. Other borrowings	179	246	37.4
12. Current liabilities	79	95	20.3
13. Provisions	79	103	30.4
Total liabilities/assets	**2,399**	**2,755**	**14.8**
1. Loans and advances	2,073	2,405	16.0
2. Hire purchase and lease assets	45	44	-2.2
3. Investments	92	125	35.9
4. Cash and bank balances	100	88	-12.0
5. Other assets	90	92	2.2

P: Provisional.
Source: RBI Supervisory Returns.

Table VII.14: Major Components of Liabilities and Assets of NBFCs-D by Classification of NBFCs
(End-March)

(Amount in ₹ billion)

Items	Asset finance companies				Loan companies				Total			
	2014	2015	2016	2017 P	2014	2015	2016	2017 P	2014	2015	2016	2017 P
1	2	3	4	5	6	7	8	9	10	11	12	13
No. of companies	166	159	137	90	49	41	37	25	215	200	174	115
Deposits	24	60	68	58	107	145	203	248	131	205	271	306
Borrowings	759	841	932	1,059	464	536	660	780	1,223	1,378	1,592	1,838
Total liabilities / assets	**1,020**	**1,172**	**1,313**	**1,471**	**714**	**847**	**1,077**	**1,283**	**1,734**	**2,019**	**2,390**	**2,754**
Total advances	796	961	1,136	1,256	576	720	938	1,149	1,372	1,681	2,073	2,405
Investments	52	59	49	56	18	25	36	69	70	85	86	125

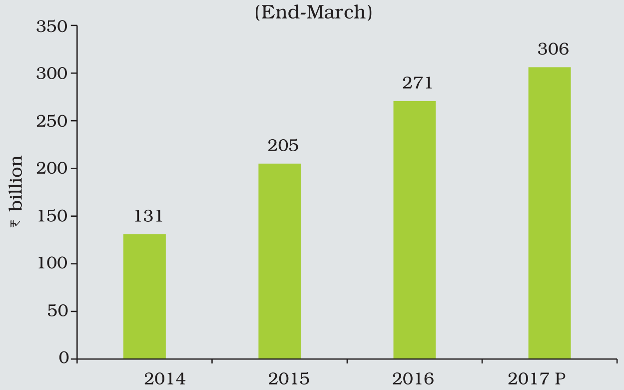
P: Provisional.
Note: Excluding investment companies.
Source: RBI Supervisory Returns.

acceptance of deposits for rated AFCs from 4 times to 1.5 times of NOF as part of harmonisation of limits across all NBFC-D. The growth in LCs' deposits decelerated to 22.2 per cent in 2016-17 while borrowings increased at a faster pace to finance credit. In terms of assets, credit constituting 87.3 per cent of total assets showed strong growth, *albeit* some deceleration was seen over the previous year (Table VII.14).

NBFCs-D Deposits

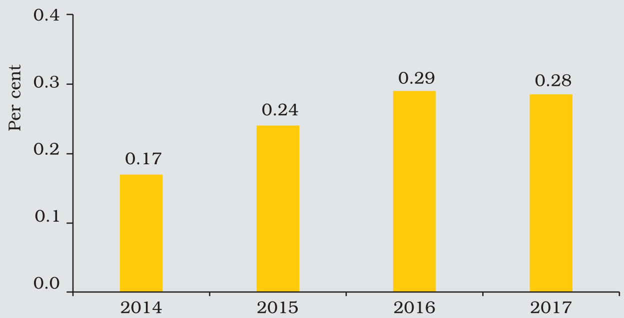
VII.26 The Reserve Bank has not issued any new CoR for NBFC-D since 1997. It has also mandated a minimum investment grade rating for NBFCs-D from March 2016 to ensure that only sound and well-managed entities can accept public deposits. Consequently, the number of NBFCs-D declined with many of them converting to non-deposit taking NBFCs. As a result, their deposit growth decelerated from 32.2 per cent in 2015-16 to 12.9 per cent in 2016-17 (Chart VII.9A). Accordingly, the ratio of NBFCs' public deposits to aggregate deposits of scheduled commercial banks (SCBs) declined marginally in 2016-17, after witnessing increases in the previous three years (Chart VII.9B).

Chart VII.9A: Public Deposits of NBFCs-D
(End-March)



P: Provisional.
Source: RBI Supervisory Returns.

Chart VII.9B: Ratio of Public Deposits of NBFCs-D to SCBs' Aggregate Deposits
(End-March)



P: Provisional.
Sources: 1. RBI Supervisory Returns.
2. Handbook of Statistics on the Indian Economy, RBI.

Financial Performance

VII.27 NBFCs-D income increased by 12.3 per cent in 2016-17 whereas their expenditure grew at a higher pace of 13.7 per cent on account of both operating expenses and interest payments. As a result, the growth in the net profits of NBFCs-D moderated during the year (Chart VII.10).

VII.28 The cost to income ratio of NBFCs-D has been rising from 2013-14, reflecting a decline in operational efficiency. Their RoA has also declined in recent years in the wake of slowdown in revenue growth in a competitive lending rate environment, coupled with downward trend in interest rates (Table VII.15).

Table VII.15: Financial Ratios of NBFCs-D
(End-March)

(Per cent to total assets)#

Items	2014	2015	2016	2017 P
1	2	3	4	5
1. Income	15.4	14.9	14.9	14.6
2. Fund income	15.3	14.8	14.7	14.4
3. Fee income	0.1	0.2	0.1	0.1
4. Expenditure	11.8	11.6	11.9	11.8
5. Financial expenditure	7.5	7.2	6.9	6.7
6. Operating expenditure	3.2	3.1	3.3	3.3
7. Tax provision	1.1	1.0	0.9	1.0
8. Net profit	2.5	2.3	2.0	1.8
9. Return on assets	2.5	2.3	2.1	1.9
10. Cost to income ratio	76.6	77.9	79.8	80.7

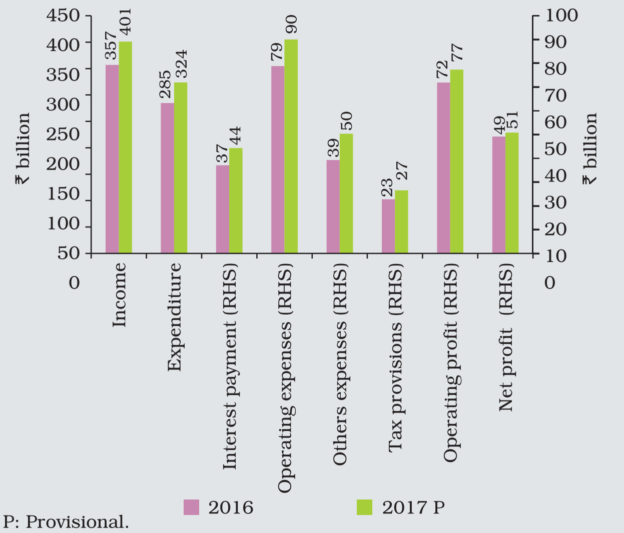
P: Provisional.
#: For items 1 to 9.
Note: Numbers may not add up due to rounding-off.
Source: RBI Supervisory Returns.

Soundness Indicators

VII.29 GNPAs of NBFCs-D have shown a rising trend since 2010-11, reflecting a combination of factors including the slowdown in economic activity and sector-specific developments such as deterioration of asset quality with respect to transport operators and construction sectors. The recent increase may partly be attributed to the progressive harmonisation of NPA norms *vis-à-vis* banks (Chart VII.11).

VII.30 Accretion to NPAs was reported under commercial vehicle and tractor loans. Category-wise, the deterioration was more pronounced in respect of AFCs, which have the maximum exposure to vehicle and tractor loans (Chart VII.12).

Chart VII.10: Select Financial Parameters of NBFCs-D
(End-March)

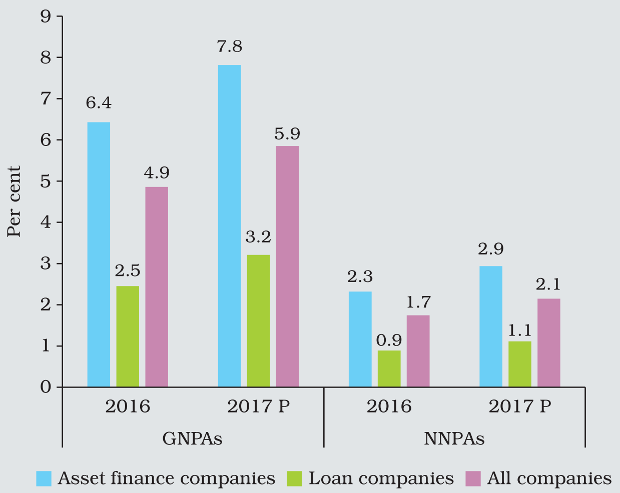


P: Provisional.
Source: RBI Supervisory Returns.

Chart VII.11: Gross NPA Ratio of NBFCs-D
(End-March)

P: Provisional.
Source: RBI Supervisory Returns.

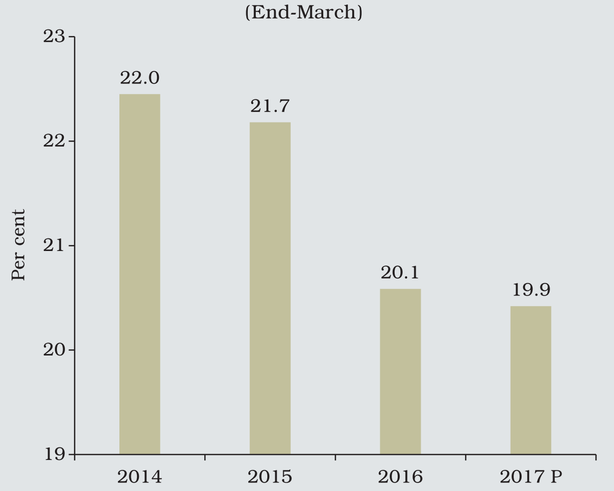
Chart VII.12: Gross and Net NPA Ratio of NBFCs-D
(End-March)



P: Provisional.
Source: RBI Supervisory Returns.

VII.31 The CRAR of NBFCs-D has been declining since 2013-14 with the expansion of their credit portfolios as well as deterioration in asset quality (Chart VII.13). Nevertheless, the CRAR of NBFCs-D was comfortably above the stipulated norm of 15 per cent.

Chart VII.13: Capital to Risk (Weighted) Assets Ratio of NBFCs-D
(End-March)



P: Provisional.
Source: RBI Supervisory Returns.

Residuary Non-Banking Companies

VII.32 The principal business of Residuary Non-Banking Companies (RNBCs) is collecting deposits and deploying them as specified by the Reserve Bank. As of March 2015, only two RNBCs were registered with the Reserve Bank. In September 2015, the registration of Sahara India Financial Corporation Limited was cancelled. Both the RNBCs have stopped accepting deposits and are in the process of repaying old deposits.

VII.33 Overall, the NBFC sector's balance sheet expanded on strong credit growth as it filled the financing gap due to a slowdown in bank credit. Credit to commercial real estate, micro and small-scale enterprises, and consumer durables increased significantly during the year. Deposit mobilisation decelerated in response to regulatory initiatives. There was some deterioration in asset quality, which was mainly due to harmonisation of regulations *vis-à-vis* the banking system and the transitory impact of demonetisation. NBFCs' capital position remained above the regulatory minimum in 2016-17 although there was a modest depletion relative to a year ago on account of enhanced provisions for asset impairment.

III. Payments Banks

VII.34 Payments banks (PBs) were set up in India on the recommendations of the Committee on Comprehensive Financial Services for Small Businesses and Low Income Households (Chairman: Shri Nachiket Mor, 2014) with the aim of expanding financial inclusion by providing (i) small savings accounts, and (ii) payments/ remittance services using the digital medium to to migrant labour, small businesses, low income households and other entities in the unorganised sector. PBs are allowed to accept demand deposits up to ₹ one lakh per customer; they are prohibited from issuing credit cards or accepting

Table VII.16: Brief Profile of Payments Banks

Stage	Airtel PB	India Post PB	Paytm PB	Fino PB	Aditya Birla Idea PB	NSDL PB	Jio PB
1	2	3	4	5	6	7	8
Date of issuing license	11-04-2016	20-01-2017	03-01-2017	30-03-2017	03-04-2017	30-03-2017	27-01-2017
Date of start of operations	23-11-2016	30-01-2017	23-05-2017	30-06-2017	Yet to start operations		

Source: RBI.

deposits from non-resident Indians or undertaking lending activities. These banks are covered by deposit insurance from the Deposit Insurance and Credit Guarantee Corporation (DICGC).

VII.35 The Reserve Bank began issuing PB licenses in 2015-16. So far, seven licenses have been issued out of which two banks – Airtel Payments Bank and India Post Payments Bank – had commenced operations before March 31, 2017 and two others – Paytm and Fino – had started operations by the quarter ending-June 2017 (Table VII.16).

Balance Sheet

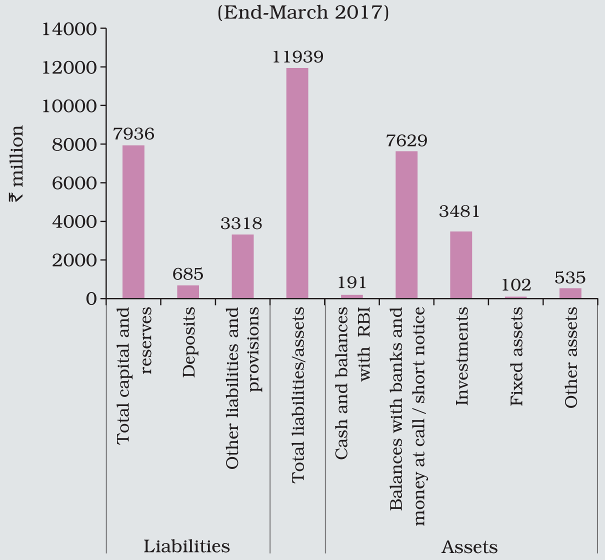
VII.36 At end-March 2017, the capital and reserves of the two PBs in operation were the major liabilities with their deposits being only 5.7 per cent. Balances with banks and money at call / short notice constituted two-third of their assets while investments constituted the remaining one-third. The asset composition reflects the nature of their operations as they are not permitted to undertake lending activities (Chart VII.14).

Financial Performance

VII.37 PBs' profit after tax and earning before provisions and taxes (EBPT) were negative in 2016-17 mainly due to large expenses on creating new infrastructure in the initial stages of their operations (Table VII.17).

VII.38 The impact of the starting-up expenditure was reflected in the negative readings of RoA and RoE, notwithstanding a positive net interest margin (Table VII.18).

Chart VII.14: Balance Sheet of Payments Banks
(End-March 2017)



Source: RBI Supervisory Returns.

VII.39 A more realistic assessment of PBs' financial and operational performance will be possible once more data are available and as these banks expand their operations.

Table VII.17: Select Financial Parameters of Payments Banks
(End-March 2017)

(₹ million)

Items	Amount
1	2
1. Interest income	314
2. Interest expenses	7
3. Net interest income (1-2)	307
4. Non-interest income	1,086
5. Operating expenses	3,800
6. Earnings before provisions and taxes (3+4-5)	-2,407
7. Risk provisions	4
8. Tax provisions	11
9. Profit after tax (6-7-8)	-2,422

Source: RBI Supervisory Returns.

Table VII.18: Select Financial Ratios of Payments Banks
(End-March 2017)

(Per cent)

Items	Return on assets	Return on equity	Investments to total assets	Net interest margin	Efficiency (cost income ratio)	Operating profit to working funds	Profit margin
1	2	3	4	5	6	7	8
Ratios	-25.2	-36.4	29.2	2.8	272.7	-25.1	-172.9

Source: RBI Supervisory Returns.

IV. All India Financial Institutions

VII.40 There are three broad categories of non-bank financial institutions: First, term-lending institutions such as the Export Import Bank of India (EXIM Bank) that engage in direct lending by way of term loans and investments. Second, institutions such as the National Bank for Agriculture and Rural Development (NABARD), the Small Industries Development Bank of India (SIDBI) and the National Housing Bank (NHB), which mainly extend refinance to banks and NBFIs. Third, investment institutions such as the Life Insurance Corporation of India (LIC), which deploy their funds largely in marketable securities. State/regional level institutions are another distinct group and comprise State Financial Corporations (SFCs), State Industrial and Development Corporations (SIDCs) and North-Eastern Development Finance Corporation Ltd. (NEDFi).

VII.41 Four AIFIs *viz*., the EXIM Bank, the NABARD, the NHB and the SIDBI, are under the oversight of the Reserve Bank (Table VII.19).

Table VII.19: Ownership Pattern of AIFIs
(End-March 2017)

(Per cent)

Institution	Owner	Ownership share
1	2	3
EXIM Bank	Government of India	100.0
NABARD	Government of India	99.6
	Reserve Bank of India	0.4
NHB	Reserve Bank of India	100.0
SIDBI *	Public Sector Banks	61.6
	Insurance Companies	18.5
	Financial Institutions	4.5
	Others	15.4

*: State Bank of India (16.7 per cent), IDBI Bank Ltd. (16.3 per cent) and Government of India (15.4 per cent) are SIDBI's three major shareholders.

AIFIs'[3] Operations

VII.42 Financial assistance sanctioned by AIFIs during 2016-17 increased by 15.7 per cent whereas their disbursement growth was moderate at 7.7 per cent amidst sluggish demand conditions. Notably, disbursements by the SIDBI contracted during the year indicating moderation in industrial activity while those by the EXIM Bank declined due to deleveraging in view of bad assets and provisioning requirements. The increase in disbursements by the NABARD and the NHB reflects resilience in the agriculture and housing sectors (Table VII.20) (Appendix Table VII.2).

Table VII.20: Financial Assistance Sanctioned and Disbursed by AIFIs

(₹ billion)

Category	2015-16		2016-17 P	
	S	D	S	D
1	2	3	4	5
SIDBI	561	559	406	395
NABARD	1,695	1,582	2,401	1,977
NHB	357	219	379	234
EXIM Bank	753	552	709	531
Total	**3,366**	**2,912**	**3,895**	**3,137**

P: Provisional; S: Sanction; D: Disbursement
Source: Respective financial institutions.

[3] The financial year for EXIM Bank, SIDBI and NABARD runs from April to March and for NHB it runs from July to June.

Balance sheet

VII.43 AIFIs' consolidated balance sheet expanded during 2016-17 on the back of loans and advances, which constituted the largest share of assets (Table VII.21). Investments contracted in contrast, with the NHB showing a significant decline due to redemption of treasury bills (T-bills) in June 2017. Notably, AIFIs' cash and bank balances at the close of 2016-17 were 30 per cent lower than a year ago as they did not renew their fixed deposits with banks that matured towards the end of the year and instead used them for normal business activities. Growth in deposit mobilisation was moderate leading to a decline in their share in total liabilities over the year. On the other hand, resources raised through borrowings expanded sizeably during the year.

VII.44 The resources mobilised by the AIFIs picked up during 2016-17 resulting in the utilisation of about 83 per cent of their 'umbrella limit' for raising resources from the money market as compared to 71 per cent a year ago. Mobilisation through CPs increased significantly, reflecting competitive interest rates on these instruments (Table VII.22).

Table VII.21: AIFIs' Balance sheet

(Amount in ₹ billion)

Items	2015-16	2016-17	Percentage variation
1	2	3	4
Liabilities			
1. Capital	136 (2.4)	155 (2.6)	14.0
2. Reserves	435 (7.8)	490 (8.1)	12.6
3. Bonds and debentures	1,386 (24.7)	1,472 (24.4)	6.2
4. Deposits	2,387 (42.5)	2,467 (40.9)	3.4
5. Borrowings	741 (13.2)	898 (14.9)	21.2
6. Other liabilities	528 (9.4)	552 (9.1)	4.5
Total liabilities/assets	**5,613**	**6,034**	**7.5**
Assets			
1. Cash and bank balances	273 (4.9)	193 (3.2)	-29.3
2. Investments	422 (7.5)	408 (6.8)	-3.3
3. Loans and advances	4,762 (84.8)	5,283 (87.6)	10.9
4. Other assets	157 (2.8)	150 (2.5)	-4.5

Note: Figures in parentheses are percentages to total liabilities / assets.
Source: Audited OSMOS returns.

Sources and Uses of Funds

VII.45 During the year, internal sources of funds increased with scaling up of operations as well as higher capital and reserves. External sources, which include resources raised from the market and capital infusion from the government, increased marginally (Table VII.23). The deployment of resources during 2016-17 indicates a preference for investments followed by fresh deployment and repayment of past borrowings. The share of interest payments in the deployment of funds has declined in 2016-17.

Maturity and Cost of Borrowings and Lending

VII.46 The weighted average cost (WAC) of rupee resources raised by AIFIs declined in 2016-17 for all AIFIs with faster transmission of monetary policy accommodation. The weighted average maturity (WAM) of rupee resources increased for

Table VII.22: Resources Raised by AIFIs from the Money Market
(End-March)#

(Amount in ₹ billion)

Instrument	2015-16	2016-17
1	2	3
A. Total	**475**	**613**
(i) Term deposits	12	24
(ii) Term money	15	22
(iii) Inter-corporate deposits	0	0
(iv) Certificate of deposits	139	125
(v) Commercial paper	308	442
Memo:		
B. Umbrella limit	**672**	**742**
C. Utilisation of umbrella limit (A as percentage of B)	**70.7**	**82.6**

#: End-June for NHB.
Note: AIFIs are allowed to mobilise resources within the overall 'umbrella limit', which is linked to the net owned funds (NOF) of the financial institution concerned as per its latest audited balance sheet. The umbrella limit is applicable for five instruments – term deposits, term money borrowings, certificates of deposits (CDs), commercial papers (CPs) and inter-corporate deposits.
Source: Respective financial institutions.

Table VII.23: Pattern of AIFIs' Sources and Deployment of Funds

(Amount in ₹ billion)

Items	2015-16	2016-17
1	2	3
A. Sources of funds		
(i) Internal	7,584 (60.7)	11,331 (67.2)
(ii) External	3,146 (25.2)	4,374 (26.0)
(iii) Others*	1,754 (14.0)	1,148 (6.8)
Total	**12,484 (100)**	**16,853 (100)**
B. Deployment of funds		
(i) Fresh deployment	2,706 (21.7)	3,175 (18.8)
(ii) Repayment of past borrowings	2,125 (17.0)	2,217 (13.2)
(iii) Other deployment	7,653 (61.3)	11,460 (68.0)
Of which, Interest payments	253 (2.0)	296 (1.8)
Total	**12,484 (100)**	**16,853 (100)**

*: Includes cash and balances with banks and the Reserve Bank of India.
Note: Figures in parentheses are percentages to total.
Source: Respective financial institutions.

the NHB and the EXIM Bank while it declined for the SIDBI and the NABARD. The EXIM Bank had the highest WAC of rupee resources while the NHB had the longest WAM (Table VII.24).

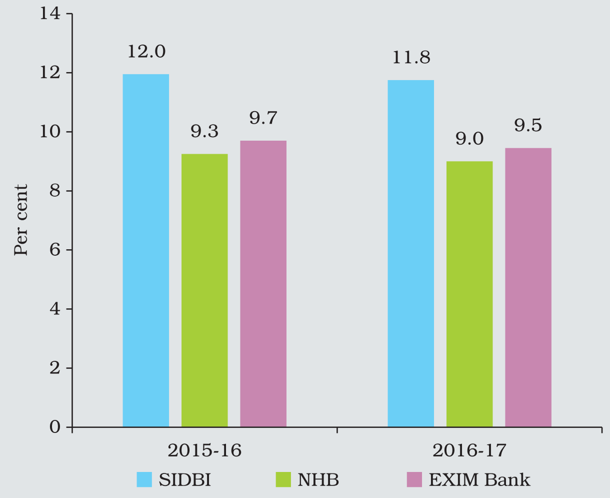
VII.47 The long-term prime lending rate (PLR) of all AIFIs declined in 2016-17 reflecting a reduction in the cost of funds for the borrowers. The SIDBI and the NHB had the highest and the lowest PLRs, respectively (Chart VII.15).

Table VII.24: Weighted Average Cost and Maturity of Rupee Resources Raised by AIFIs

Institution	Weighted average cost (Per cent)		Weighted average maturity (Years)	
	2015-16	2016-17	2015-16	2016-17
1	2	3	4	5
1. SIDBI	7.55	6.54	1.13	0.51
2. NABARD	8.41	7.89	2.27	1.78
3. NHB	6.32	6.17	4.10	4.62
4. EXIM Bank	8.69	8.12	3.33	3.55

Source: Respective financial institutions.

Chart VII.15: Long-term PLR Structure of Select AIFIs



Note: EXIM Bank is using long-term minimum lending rate based on the base rate.
Source: Respective financial institutions.

Financial Performance

VII.48 AIFIs posted a modest growth in income during the year, partly reflecting the impact of declining interest rates, lower bank balances and subdued activity under bill discounting / rediscounting. Non-interest income showed strong growth (Table VII.25).

Table VII.25: Financial Performance of Select AIFIs

(Amount in ₹ billion)

Item	2015-16	2016-17	Variation	
			Amount	Per cent
1	2	3	4	5
A. Income	395	424	29	7.3
(a) Interest income	386 (97.6)	409 (96.5)	23	6.0
(b) Non-interest income	9 (2.4)	15 (3.5)	6	66.7
B. Expenditure	301	326	25	8.3
(a) Interest expenditure	279 (92.6)	298 (91.3)	19	6.8
(b) Operating expenses	22 (7.3)	28 (8.7)	6	27.3
Of which, Wage bill	15	21	6	40.0
C. Provisions for taxation	22	26	4	18.2
D. Profit				
Operating profit	70	73	3	4.3
Net profit	48	47	-1	-2.1

Note: Figures in parentheses are percentages to total income/expenditure.
Source: Audited OSMOS returns.

Table VII.26: AIFIs' Financial Ratios

(Per cent)

Financial Ratios*	2015-16	2016-17
1	2	3
1. Operating profit	1.3	1.7
2. Net profit	0.9	0.8
3. Income	7.5	7.4
4. Interest income	7.3	7.1
5. Other income	0.1	0.3
6. Expenditure	5.7	5.7
7. Interest expenditure	5.3	5.2
8. Other operating expenses	0.4	0.5
9. Wage bill	0.3	0.4
10. Provisions	0.5	0.4

*:- As percentage of total average assets.
Source: Respective financial institutions.

VII.49 Although the operating profit ratio improved, relatively higher growth in the wage bill moderated net profits (Table VII.26).

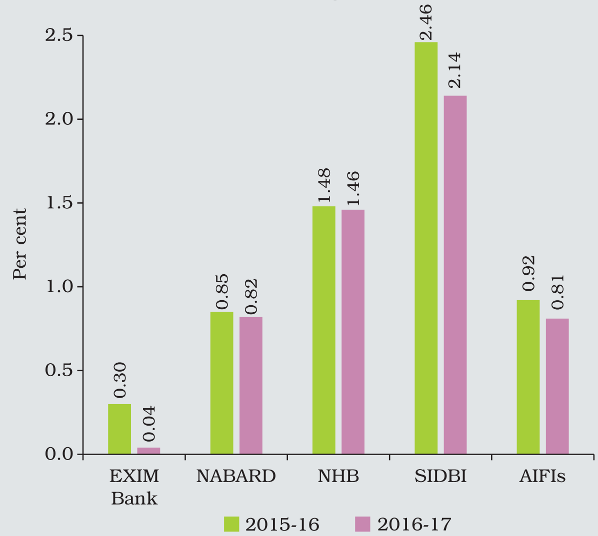
VII.50 Net profit per employee declined across AIFIs in 2016-17 except for NABARD where it remained unchanged. The SIDBI registered the highest net profit per employee while the EXIM Bank reported the lowest (Table VII.27). Barring the NHB, the ratio of operating profits to average working funds of AIFIs declined, indicating loss of efficiency in the use of working capital. As a result, AIFIs reported lower RoA during 2016-17; it was the highest for SIDBI and the lowest for EXIM Bank (Chart VII.16).

Table VII.27: AIFIs' Select Financial Parameters

Institution	Interest income/ average working funds (Per cent)		Non-interest income/ average working funds (Per cent)		Operating profit/ average working funds (Per cent)		Net profit per employee (₹ million)	
	2015-16	2016-17	2015-16	2016-17	2015-16	2016-17	2015-16	2016-17
1	2	3	4	5	6	7	8	9
EXIM	7.8	7.3	0.5	0.7	2.4	2.1	9.7	1.2
NABARD	6.9	6.8	0.1	0.1	1.3	1.2	6.0	6.0
NHB	7.8	7.4	0.1	0.4	2.4	2.6	7.5	7.2
SIDBI	8.3	7.6	0.4	0.4	2.8	2.2	11.1	9.6

Source: Respective financial institutions.

Chart VII.16: Average RoA of AIFIs



Source: Respective financial institutions.

Soundness Indicators

VII.51 The total amount of AIFIs' net NPAs increased during 2016-17 on account of the EXIM Bank's reduction in the provisioning coverage ratio (PCR) even as the other AIFIs' net NPAs declined during the year (Table VII.28).

VII.52 The share of AIFIs' standard assets declined in 2016-17 again on account of the EXIM Bank (Table VII.29).

Table VII.28: AIFIs' Net NPAs

(Amount in ₹ billion)

Institution	Net NPAs		Net NPAs / net loans (Per cent)	
	2015-16	2016-17	2015-16	2016-17
1	2	3	4	5
EXIM Bank	8.5	48.0	0.9	4.7
NABARD	0.2	0.0	0.01	0.00
NHB	0.3	0.0	0.3	0.00
SIDBI	4.8	3.0	0.7	0.4
All FIs	**14.1**	**51.0**	**0.3**	**1.0**

Note: Data relate to end-March for EXIM Bank, NABARD and SIDBI and end-June for NHB.
Source: Respective financial institutions.

Table VII.29: AIFIs' Assets Classification

(Per cent)

Category	2015-16	2016-17
1	2	3
Standard	98.9	98.0
Sub-standard	0.4	0.8
Doubtful	0.7	1.2
Loss	0.0	0.0
Total	**100.0**	**100.0**

Note: Data relate to end-March for EXIM Bank, NABARD and SIDBI and end-June for NHB.
Source: Respective financial institutions.

VII.53 AIFIs reported a marginal improvement in CRAR at the aggregate level even as they exceeded the stipulated minimum of 9 per cent. Institution-wise, CRARs of EXIM Bank and NABARD improved over the year while they declined marginally for the others (Chart VII.17).

V. Primary Dealers

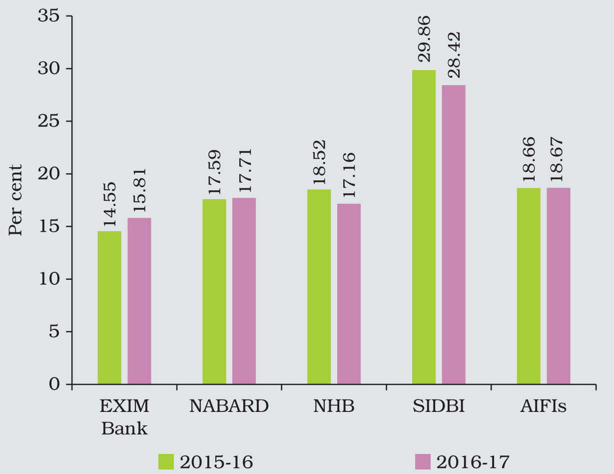
VII.54 As on March 31, 2017, there were 21 primary dealers (PDs) – 14 run by banks and 7 standalone PDs registered as NBFCs under Section 45 IA of the RBI Act, 1934.

Operations and Performance of PDs

VII.55 PDs have mandatory obligations to participate in underwriting and auctions of government dated securities. They are also mandated to achieve a minimum success ratio (bids accepted to the bidding commitment) of 40 per cent in primary auctions of T-bills and Cash Management Bills (CMBs), assessed on a half-yearly basis.

VII.56 During 2016-17, the government auctioned dated securities of ₹5,820 billion, marginally lower than ₹5,850 billion during the previous year. PDs' share of subscriptions in the primary issuance of dated securities declined during 2016-17. Partial devolvement took place on four instances for ₹53 billion during 2016-17 as against seven instances for ₹110 billion in 2015-16. The underwriting commission paid to PDs during 2016-17 was lower at ₹356.6 million as compared to ₹470.9 million in the previous year. Reflecting the lower devolvement during the year, the average rate of underwriting commission in 2016-17 declined on a year-on-year basis (Chart VII.18).

Chart VII.17: Capital to Risk (Weighted) Assets Ratio of AIFIs



Note: Data relate to end-March for EXIM Bank, NABARD and SIDBI and end-June for NHB.
Source: Respective financial institutions.

Chart VII.18: Average Rate of Underwriting Commission of PDs

VII.57 With respect to auctions of T-bills and CMBs, all PDs achieved the stipulated minimum success ratio. PDs placed higher bids (in relation to their bidding commitments) in 2016-17; their share in subscription of T-Bills / CMBs issued during the year, however, declined marginally to 74 per cent from 75 per cent in the previous year (Table VII.30).

VII.58 In the secondary market, all the 21 PDs individually achieved the required minimum annual total turnover (outright and repo transactions) ratio of 5 times in G-secs and 10 times in T-bills during 2016-17 and also the minimum annual outright turnover ratio of 3 times in G-secs and 6 times in T-bills.

Performance of Standalone PDs

VII.59 The secondary market volume of standalone primary dealers (SPDs) increased by 22.6 per cent in 2016-17 over 2015-16. Yet, their share in total market turnover declined over the year partly due to a reduction in government borrowings (Table VII.31).

Table VII.30: Performance of PDs in the Primary Market

(Amount in ₹ billion)

Items	2013-14	2014-15	2015-16	2016-17
1	2	3	4	5
Treasury bills and CMBs				
(a) Bidding commitment	8,299	8,671	8,833	8,340
(b) Actual bids submitted	17,994	19,512	25,020	32,365
(c) Bid to cover ratio	2.6	2.7	3.5	3.9
(d) Bids accepted	4,990	5,657	5,460	4,946
(e) Success ratio (d) / (a) (in Per cent)	60.1	65.2	61.8	59.3
Central government dated securities				
(a) Notified amount	5,570	5,920	5,850	5,820
(b) Actual bids submitted	8,861	10,830	12,151	12,573
(c) Bid to cover ratio	1.6	1.8	2.1	2.2
(d) Bids of PDs accepted	2,576	3,012	3,148	2,763
(e) Share of PDs (d) / (a) (Per cent)	46.3	50.9	53.8	47.5

Source: Returns filed by PDs.

Table VII.31: Performance of SPDs in the G-secs Secondary Market

(Amount in ₹ billion)

Items	2013-14	2014-15	2015-16	2016-17
1	2	3	4	5
Outright				
Turnover of SPDs	31,914	37,943	33,021	52,365
Market turnover	89,567	101,561	97,285	168,741
Share of SPDs (Per cent)	35.6	37.4	33.9	31.0
Repo				
Turnover of SPDs	19,744	28,198	39,558	36,586
Market turnover	72,281	78,752	86,217	118,350
Share of SPDs (Per cent)	27.3	35.8	45.9	30.9
Total (Outright + Repo)				
Turnover of SPDs	51,658	66,141	72,579	88,951
Market turnover	161,848	180,314	183,502	287,091
Share of SPDs (Per cent)	31.9	36.7	39.5	31.0

Notes: 1. Total turnover for market participants for outright and repo trades includes one side quantity that is, buy or sell.
2. Total turnover for standalone PDs for outright and repo trades includes both sides quantity that is, buy + sell.
3. In case of repo, only 1st leg is considered for SPDs' turnover.
4. Market turnover includes standalone PDs turnover for both outright and repo volume.

Source: Clearing Corporation of India Ltd.

Sources and Application of SPDs' Funds

VII.60 Funds mobilised by SPDs shrank by about 18.5 per cent during 2016-17 mainly reflecting lower recourse to market repo. Nevertheless, borrowings remained the major source of their funding accounting for 83.7 per cent of the total sources of funds as compared to 88.1 per cent at the end of the previous year. Unsecured loans increased during the year reflecting higher access to call money market. The decline in funds mobilised is attributable to a contraction of current assets during 2016-17 owing to reduction in market borrowings by the government during the last quarter of the year (Table VII.32).

SPDs' Financial Performance

VII.61 SPDs' profit after tax improved significantly in 2016-17 on account of favourable yields, with all seven SPDs posting substantially higher profits than the previous year (Appendix Table VII.3).

Table VII.32: Sources and Applications of SPDs' Funds

(Amount in ₹ billion)

Items	2013-14	2014-15	2015-16	2016-17	Percentage variation	
					2015-16 over 2014-15	2016-17 over 2015-16
1	2	3	4	5	6	7
Sources of Funds						
1. Capital	16	15	15	15	0.0	0.0
2. Reserves and surplus	28	30	31	36	3.3	16.1
3. Loans (a+b)	196	285	338	261	18.6	-22.8
(a) Secured	149	231	248	154	7.4	-37.9
(b) Unsecured	47	54	90	107	66.7	18.9
Total	**239**	**330**	**383**	**312**	**16.1**	**-18.5**
Application of Funds						
1. Fixed assets	0.3	0.3	0.3	0.4	0.0	33.3
2. HTM investments (a+b)	26	14	20	15	42.9	-25.0
(a) Government securities	26	14	20	15	42.9	-25.0
(b) Others	0.03	0.03	0.02	0.02	-33.3	0.0
3. Current assets	235	326	432	318	32.5	-26.4
4. Loans and advances	5	8	8	10	0.0	25.0
5. Current liabilities	-28	-18	-77	-31	327.8	-59.7
6. Deferred tax	0.08	0.08	0.03	-0.31	-62.5	-1133.3
7. Others	0.00	0.00	0.00	-0.06	-	-
Total	**239**	**330**	**383**	**312**	**16.1**	**-18.5**

Source: Returns submitted by PDs.

Their income rose due to a significant increase in trading profits while their expenditure posted a marginal decline (Table VII.33).

VII.62 In line with the increase in PAT, SPDs' return on net worth increased in 2016-17. Reflecting improvement in operational efficiency, the cost-income ratio of these PDs also improved during the year (Table VII.34).

VII.63 The combined CRAR of standalone PDs improved during 2016-17 and remained

Table VII.33: Financial Performance of SPDs

(Amount in ₹ billion)

Items	2013-14	2014-15	2015-16	2016-17	Variation			
					2015-16 over 2014-15		2016-17 over 2015-16	
					Amount	Per cent	Amount	Per cent
1	2	3	4	5	6	7	8	9
A. Income (i to iii)	28	32	30	42	-2	-6.3	12	40.0
(i) Interest and discount	20	24	27	27	2	12.5	1	0.0
(ii) Trading profits	6	8	3	14	-5	-62.5	11	366.7
(iii) Other income	2	1	1	1	0	0.0	0	0.0
B. Expenses (i to ii)	19	23	25	24	2	8.7	0	-4.0
(i) Interest	17	20	22	21	2	10.0	-1	-4.5
(ii) Other expenses including establishment and administrative costs	2	3	3	3	0	0.0	0	0.0
C. Profit before tax	4	9	5	18	-4	-44.4	13	260.0
D. Profit after tax	6	6	3	12	-3	-50.0	8	300.0

Note: Figures may not add up due to rounding-off.
Source: Returns submitted by PDs.

Table VII.34: SPDs' Financial Indicators

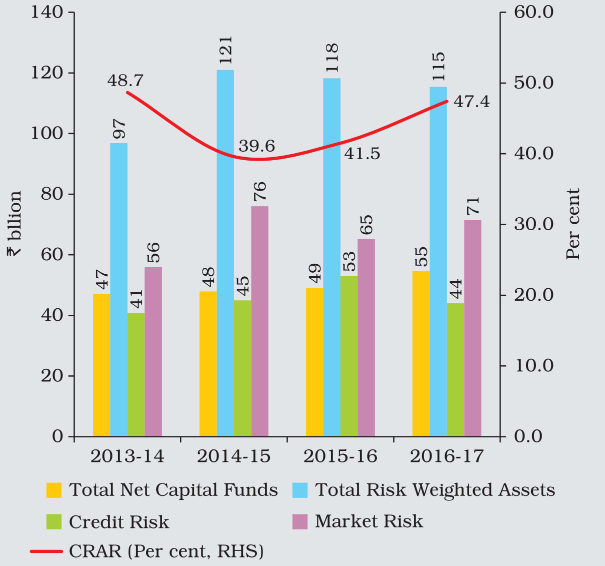
(Amount in ₹ billion)

Indicator	2013-14	2014-15	2015-16	2016-17
1	2	3	4	5
(i) Net profit	6	6	3	12
(ii) Average assets	291	359	413	444
(iii) Return on average assets (Per cent)	1.9	1.7	0.8	2.6
(iv) Return on net worth (Per cent)	13.0	13.6	7.5	22.8
(v) Cost to income ratio	22.7	21.5	33.3	16.3

comfortably above the regulatory stipulation of 15 per cent (Chart VII.19) (Appendix table VII.4).

VII.64 PDs' share in the subscription of primary issuances of dated securities declined in 2016-17 due to lower devolvement and increased appetite from other market participants amidst reduction in government borrowings and lower bank credit off-take. The average underwriting commission paid to PDs during the year also declined. Though the share of SPDs declined in the total market turnover, their net profits improved considerably in 2016-17 on account of higher trading profits.

Chart VII.19: Capital and Risk Weighted Asset Position of SPDs



VI. Recent Developments

VII.65 This section discusses developments in the NBFI sector during April-September 2017.[4] In view of the limited availability of data for this period, the discussion is focussed on select variables.

NBFCs Sector

VII.66 NBFCs' consolidated balance sheet in the first half of 2017-18 expanded on the back of strong credit growth financed through higher borrowings (Table VII.35).

VII.67 NBFCs' credit growth during April-September 2017 was about seven percentage points higher than in the previous year on the back of retail and services sectors (Chart VII.20).

VII.68 Disaggregation of credit extended by the NBFCs-ND-SI segment indicates a sharp growth in credit provided by LCs, followed by AFCs and ICs. LCs have relatively large exposure to commercial real estate, which saw a sharp increase in credit, signifying the revival of economic activity. NBFCs-IFC credit growth, on the other hand, remained subdued during the first half of 2017-18 amidst asset quality concerns in the sector. The share of retail and

Table VII.35: Abridged Balance Sheet of NBFCs

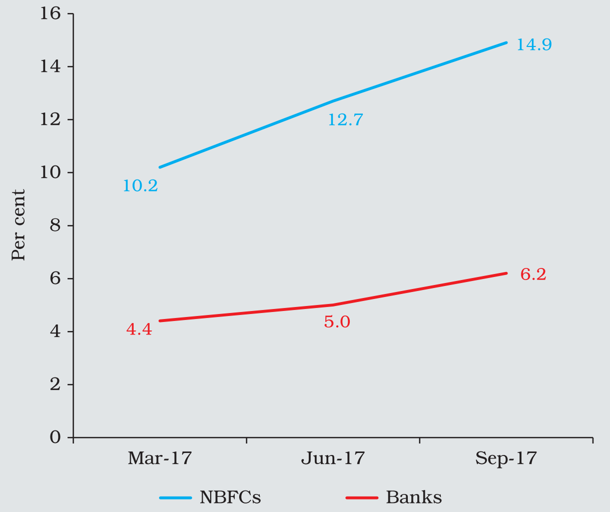
(Amount in ₹ billion)

Items	End-Sept. 2017	Y-o-Y variation (up to Sept.)		Financial year variation (Apr-Sept.)	
		2016-17	2017-18	2016-17	2017-18
1	2	3	4	5	6
1. Borrowings	14,739	5.1	4.9	12.8	4.9
2. Loans and advances	15,821	7.6	14.9	13.5	7.3
3. Total assets/ liabilities	20,631	7.8	6.5	13.9	4.6

Source: RBI Supervisory Returns.

[4] Analysis is based on the provisional data for April-September 2017.

Chart VII.20: Growth Rates of Credit of NBFCs and Banks



Source: RBI Supervisory Returns.

Table VII.36: Weighted Average Lending Rates of Various Categories of NBFCs-ND-SI

(Per cent)

Categories	Dec-15	Mar-16	Jun-16	Sep-16	Dec-16	Mar-17	Jun-17	Sep-17
1	2	3	4	5	6	7	8	9
Infrastructure finance companies	12.3	12.1	12.0	12.0	12.0	11.6	11.4	11.1
Loan companies	14.3	13.9	14.7	14.3	14.1	13.9	13.1	11.5
Asset finance companies	13.6	13.5	13.5	13.2	13.0	12.8	12.6	12.4
Investment companies	11.9	13.5	12.6	11.6	11.4	12.4	11.5	10.2
NBFCs-MFI	19.0	20.6	22.4	22.1	20.5	21.1	20.5	21.3
NBFCs-ND-SI	**13.6**	**13.2**	**14.1**	**13.7**	**13.4**	**13.2**	**11.9**	**11.6**

Note: Core Investment Companies, NBFCs-Factor and IDF-NBFCs have negligible share in credit deployment among NBFCs-ND-SI.
Source: RBI Supervisory Returns.

services sectors improved during the first half of 2017-18 (Chart VII.21).

Lending rates of NBFCs-ND-SI

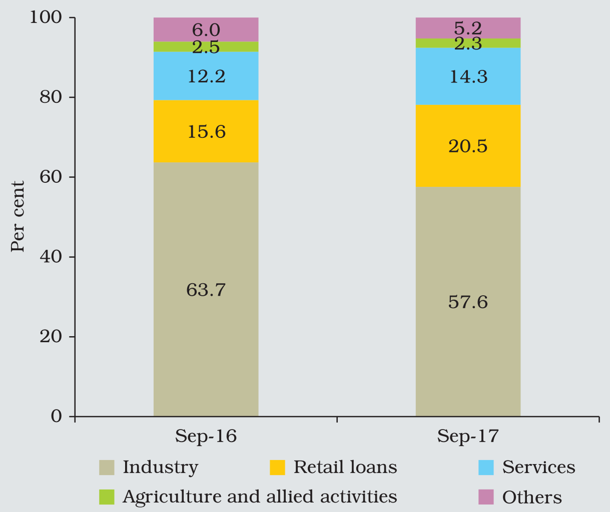
VII.69 The weighted average lending rates (WALR) of NBFCs-ND-SI have been declining in line with the monetary easing cycle across all categories barring NBFCs-MFI which showed some uptick in the WALR (Table VII.36).

VII.70 NPAs of NBFCs-ND-SI, which recorded some deterioration in the quarter ending-June 2017, improved at end-September 2017 partly reflecting higher write-offs (Chart VII.22).

Payments Banks

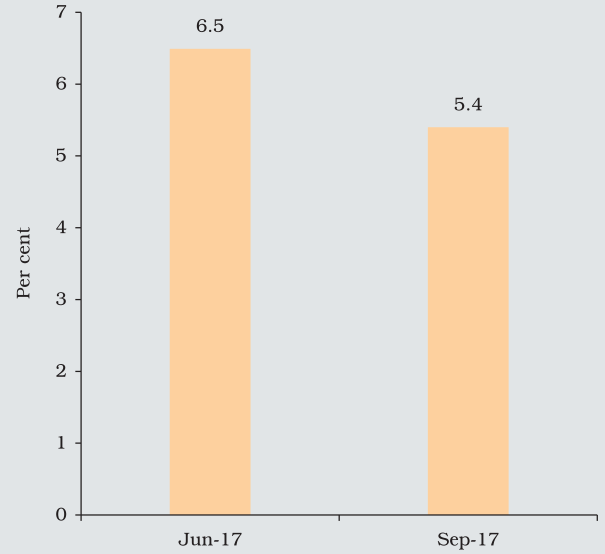
VII.71 Among the payments banks, Airtel PB became the first payments bank in India to integrate the unified payments interface (UPI) on its digital platform. Jio Payments Bank, a joint

Chart VII.21: Sectoral Credit Deployment by NBFCs-ND-SI



Source: RBI Supervisory Returns.

Chart VII.22: GNPA Ratio of NBFCs-ND-SI



Source: RBI Supervisory Returns.

venture of Reliance Industries Ltd. (RIL) and the State Bank of India (SBI), is expected to begin operations in December 2017. The government is working on expanding India Post payments bank's branches for reaching out to rural people. These developments indicate the potential role of payments banks in promoting financial inclusion in the country. New categories of NBFCs engaged in P2P lending and account aggregation are expected to evolve over time (Box VII.2).

Box VII.2: Account Aggregator: A Cross-Country Analysis

An account aggregator (AA) is an entity that retrieves or collects information related to a customer's financial assets from the holders of such information and provides consolidated information to the customer or other users specified by the customer. In terms of the Reserve Bank's guidelines issued in September 2016, NBFC-AAs are prohibited from undertaking any other business to support transactions by customers or from using the services of a third-party service provider for undertaking the business of account aggregation. AA's utility was discussed in the Reserve Bank's Annual Report, 2015–16 (p.73). Somewhat similar services are already being provided in India by some companies such as Perfios in the form of financial data aggregation based on the application programme interface (API).

Account aggregation was started in 1999 in USA by Vertical One, which was subsequently merged with Yodlee. Business activity in this segment has been rising since then (ASIC, 2001 and Fujii, *et al.* 2002). In this context, it is interesting to note the variations in the regulatory frameworks prescribed and business models followed in different countries.

The Consumer Financial Protection Bureau in the US released a set of consumer protection principles in October 2017 to ensure only consumer-authorised usage of financial data (CFPB, 2017). In Canada, financial institutions and independent companies provide aggregation service. Their activities are covered under different regulations and there is no specific regulation for the aggregation activity (Gentzoglanis, *et al.*, 2014). In 2010, the Hong Kong Monetary Authority prescribed principles and risk management controls to be followed and put in place by institutions offering account aggregation services (HKMA, 2010).

Broadly, two distinct aggregation techniques are used for account aggregation – screen scraping and direct data feed. In screen scraping, aggregator collects the information by using the consumer's username and password shared by the customer himself with the account aggregator. Direct data feed, on the other hand, involves a tri-partite agreement among account aggregator, financial institution, and customer. The financial institution provides account information to the account aggregator in standardised format (ASIC, 2001).

In the US, aggregators are usually operated by banks, banks' agents, wealth managers and software companies such as Yodlee, Mint, and Simple. Aggregators allow customers to track their spending and saving patterns and manage bills and payments. The aggregators also analyse the financial data to make recommendations of new products and services to customers (CMA, 2016).

In the UK, Citi Bank, Egg, and Money Supermarket started account aggregation services in the early 2000s. They provided information on banking, credit cards, investments, utilities, communication, travel, shopping and rewards. Initially, they used the screen scraping method but later shifted to direct data feed.

In Canada, account aggregation services are provided by subsidiaries of foreign firms such as Mint as well as banks (Gentzoglanis, *op. cit.*). Mostly, they offer API-based account verification, account transactions (personal or business) and balance verification. Aggregation services in Japan developed around brokerage firms and the Nomura Research Institution and Monex started these services (application service implementation type) in 2001. In Hong Kong, account aggregation service is provided by authorised institutions only in co-operation with affiliated banking institution(s), which include overseas branches, local or overseas subsidiaries or the parent bank. Aggregators offer services such as balance enquiries, cross-fund transfers and securities trading activities (HKMA, 2010).

Cross-country experience indicates variety in the services offered by AAs and points to the fact that financial viability of account aggregation on a stand-alone basis could be a challenge. The security and safety of consumers' financial data are key concerns in the evolution of the regulatory regime and business models of account aggregators. India being a cost-sensitive market, the fee charged by account aggregators for their services will be crucial in their growth. Fast growing Fintech is expected to provide a vantage to AAs in India. Going forward, the scope of expanding permissible activities for account aggregators needs to be explored while ensuring the security of financial data.

(Contd...)

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VII. Overall Assessment

VII.72 The number of NBFCs has declined because of the regulatory initiatives aimed at protecting depositors' interests and safeguarding financial stability. Nevertheless, the overall balance sheet size of NBFCs has expanded with their credit growth recording a higher reading in 2016-17 when bank credit witnessed historically low growth. More importantly, credit to the micro and small segments, both in industry and services sectors, displayed robust growth. Financial performance of these companies came under stress with a decline in profitability and deterioration in asset quality. Their capital positions also deteriorated during 2016-17 though they remained well above the stipulated norms. Their exposure to sensitive sectors such as capital markets and real estate at 13.4 per cent of their total assets as of March 2017 was marginally higher than the previous year. Notwithstanding a double-digit growth in public deposits mobilised by NBFCs, they remained well below 1 per cent of bank deposits. NBFCs took higher recourse to market-based instruments for resource mobilisation while reducing their dependence on bank borrowings. Conversion of a few large NBFCs-MFI into small finance banks may have implications for credit to the microfinance segment.

VII.73 Primary dealers reported an increase in profits during the year due to favourable yields and higher trading profits. Payments banks reported negative profits due to high operational expenditures in the initial stage. Financial assistance sanctioned by AIFIs during 2016-17 increased by about 16 per cent while growth in disbursements was moderate at 7.7 per cent, a possible indication of demand conditions turning lacklustre during the year. NABARD and NHB disbursed significantly higher financial assistance supporting agriculture and housing sectors.

VII.74 Regulations governing NBFCs are being increasingly harmonised with the banking sector while encouraging them to focus on specialised areas as evidenced by the recent notifications for setting up two new types of NBFCs by the Reserve Bank – Account Aggregator and Peer-to-Peer Lending Platform. Another recent regulatory development in the sector was the issuance of a comprehensive Information Technology Framework for NBFCs-ND to be adopted by June 30, 2018.

VII.75 In the context of a regulatory regime for the sector, Financial Stability Board's peer review of India has suggested that there is need for improving the sector's risk assessment capacity and developing appropriate policy tools for non-banking financial entities (NBFEs) to ensure sustainable market-based finance and balance between promoting financial inclusion for supporting economic development with the consideration of financial stability risks. The review also suggested that the Reserve Bank may revisit the business criteria definition for NBFCs on a regular basis, review the merits of deposit-taking activities by non-financial firms, eliminate regulatory exemptions for government-owned NBFCs, rationalise the number of NBFC categories and continue harmonising NBFC prudential rules with those for banks. Also, there is a need to improve the timeliness and granularity of data collected from NBFEs, and enhancing its analysis.

VII.76 The latest developments suggest a healthy growth in NBFCs' credit during the first half of 2017-18 particularly in the retail and services sectors. A substantial improvement in credit to commercial real estate during the current year up to September portends well for economic activity. Available data also show improvements in NBFCs' asset quality in the recent quarter pointing to the fading impact of demonetisation. The goods and services tax related adjustments may, however, need to be watched going forward.

Appendix Table V.1: Indian Banking Sector at a Glance

(Amount in ₹ billion)

Sr. No	Items	Amount Outstanding (As at end-March)		Percentage Variation	
		2016	2017*	2015-16	2016-17*
1	**Balance Sheet Operations**				
1.1	Total liabilities/assets	131,293	141,586	9.1	7.8
1.2	Deposits	100,927	111,139	7.0	10.1
1.3	Borrowings	14,488	12,807	26	-11.6
1.4	Loans and advances	78,965	81,162	6.9	2.8
1.5	Investments	33,278	36,522	11.8	9.7
1.6	Off-balance sheet exposure (as percentage of on-balance sheet liabilities)	111	107	-	-
1.7	Total consolidated international claims	5,774	7,168	42.5	24.2
2	**Profitability**				
2.1	Net profit	341	439	-61.7	28.6
2.2	Return on Asset (RoA) (Per cent)	0.4	0.35	-	-
2.3	Return on Equity (RoE) (Per cent)	3.58	4.16	-	-
2.4	Net Interest Margin (NIM) (Per cent)	2.6	2.5	-	-
3	**Capital Adequacy**				
3.1	Capital to risk weighted assets ratio (CRAR) @	13.3	13.6	-	-
3.2	Tier I capital (as percentage of total capital) @	81.2	82.1	-	-
3.3	CRAR (tier I) (Per cent) @	10.8	11.2	-	-
4	**Asset Quality**				
4.1	Gross NPAs	6,119	7,918	89.3	29.4
4.2	Net NPAs	3,498	4,331	98.9	23.8
4.3	Gross NPA ratio (Gross NPAs as percentage of gross advances)	7.5	9.3	-	-
4.4	Net NPA ratio (Net NPAs as percentage of net advances)	4.4	5.3	-	-
4.5	Provision Coverage Ratio (Per cent)**	41.9	43.5	-	-
4.6	Slippage ratio (Per cent)	6.3	5.7	-	-
5	**Sectoral Deployment of Bank Credit**				
5.1	Gross bank credit	66,500	71,347	9.0	7.3
5.2	Agriculture	8,829	9,924	15.3	12.4
5.3	Industry	27,307	26,800	2.7	-1.9
5.4	Services	15,411	18,022	9.1	16.9
5.5	Personal loans	13,922	16,200	19.4	16.4
6	**Technological Development**				
6.1	Total number of credit cards (in million)	25	30	16.1	21.8
6.2	Total number of debit cards (in million)	662	772	19.6	16.6
6.3	Number of ATMs	198,952	208,354	12	4.9
7	**Customer Services**				
7.1	Total number of complaints received during the year	102,894	130,987	20.9	27.3
7.2	Total number of complaints addressed	101,153	125,345	19.5	23.9
7.3	Percentage of complaints addressed	94.8	92	-	-
8	**Financial Inclusion**				
8.1	Credit-deposit ratio (Per cent)	78.2	73.03	-	-
8.2	Number of new bank branches opened	6,986	4,830	-20.0	-30.9
8.3	Number of banking outlets in villages (Total)	586,307	598,093	5.9	2.0

*: Provisional **: Based on off-site returns and without write-off adjusted. @: Figures are as per the Basel III framework

Notes:

1. Percentage variation could be slightly different as figures have been rounded off to million/billion.
2. Data on sectoral deployment of bank credit pertains to last reporting Friday of March.

Appendix Table V.2: Off-Balance Sheet Exposure of Scheduled Commercial Banks in India

(Amount in ₹ billion)

Item	Public Sector Banks		Private Sector Banks		Foreign Banks		Scheduled Commercial Banks *	
	2016-17	Percentage Variation	2016-17	Percentage Variation	2016-17	Percentage Variation	2016-17	Percentage Variation
1	2	3	4	5	6	7	8	9
1. Forward exchange contracts@	25,618 (26.3)	2.1	32,375 (89.9)	11.8	72,903 (900.6)	1.0	130,896 (92.5)	3.7
2. Guarantees given	6,176 (6.3)	-1.1	3,417 (9.5)	12.1	1,242 (15.3)	-0.2	10,836 (7.7)	2.8
3 Acceptances, endorsements, *etc.*	3,488 (3.6)	-5.1	1,892 (5.3)	12.9	483 (6.0)	-8.2	5,863 (4.1)	-0.2
4. Others #	3,073 (3.2)	21.2	550 (1.5)	-6.4	394 (4.9)	1.2	4,017 (2.8)	14.4
Contingent liabilities	**38,356 (39.4)**	**2.1**	**38,233 (106.2)**	**11.6**	**75,022 (926.7)**	**0.91**	**151,612 (107.1)**	**3.7**

@: includes all derivative products (including interest rate swaps) as admissible.

#: includes *inter alia* items like (a) Claims against the bank not acknowledged as debt, (b) Liability for partly paid investments, (c) Bills re-discounted and (d) Letters of Credit.

* Data for 2017 includes small finance bank group.

Note: Figures in parentheses are percentage to total liabilities of the concerned bank group.

Source: Annual accounts of respective banks.

Appendix V.3: Kisan Credit Card Scheme*: State-wise Progress

(As at end-March 2017)

(Amount in ₹ billion and number of cards in '000)

Sr. No.	State /UT	Co-operative Banks		Regional Rural Banks		Commercial Banks		Total	
		Cards issued	Amount sanctioned	Cards issued	Amount sanctioned	Cards Issued	Amount sanctioned	Cards issued	Amount sanctioned
	Northern Region	**5,749**	**269.7**	**1,040**	**193.1**	**4,024**	**455.9**	**10,813**	**918.6**
1	Haryana	1,233	87.1	225	34.6	657	100.7	2,115	222.4
2	Himachal Pradesh	88	11.9	39	4.6	210	11.1	337	27.6
3	Jammu & Kashmir	10	0.4	62	5.3	275	25.7	346	31.4
4	New Delhi #$	1	0.1	-	-	5	4.7	5	4.9
5	Punjab	988	72.3	130	38.7	863	169.0	1,981	280.0
6	Rajasthan	3,429	97.9	585	109.8	2,004	144.0	6,018	351.7
7	Chandigarh #$	-	-	-	-	10	0.7	10	0.7
	North Eastern Region	**106**	**1.2**	**434**	**13.6**	**674**	**13.9**	**1,215**	**28.7**
8	Assam	2	0.1	289	9.9	498	10.4	790	20.4
9	Arunachal Pradesh #	1	-	3	0.1	9	0.1	13	0.3
10	Meghalaya #	16	0.3	19	0.9	57	0.7	92	1.9
11	Mizoram #	1	-	7	0.9	12	0.2	20	1.1
12	Manipur #	-	-	7	0.2	15	0.3	23	0.6
13	Nagaland #	4	0.1	1	-	33	0.7	38	0.9
14	Tripura #	73	0.6	107	1.5	46	1.3	226	3.4
15	Sikkim #$	8	0.1	-	-	5	0.1	13	0.2
	Western Region	**5,622**	**259.9**	**643**	**69.8**	**3,526**	**243.6**	**9,791**	**573.3**
16	Gujarat	1,415	78.2	284	36.0	1,071	85.2	2,769	199.3
17	Maharashtra	4,205	181.5	359	33.8	2,447	157.8	7,012	373.1
18	Goa $	2	0.2	-	-	7	0.5	10	0.7
19	Daman & Diu @#$	-	-	-	-	-	0.1	-	0.1
20	Dadra and Nagar Haveli @$	-	-	-	-	1	0.1	1	0.1
	Central Region	**11,632**	**201.5**	**3,876**	**354.1**	**6,700**	**309.9**	**22,207**	**865.5**
21	Uttar Pradesh	4,431	58.3	3,136	277.2	4,452	182.1	12,018	517.6
22	Uttarakhand	350	9.7	49	3.0	387	14.5	786	27.2
23	Madhya Pradesh	5,404	122.0	514	63.7	1,641	99.9	7,559	285.6
24	Chhattisgarh	1,447	11.6	178	10.2	219	13.3	1,844	35.2
	Southern Region	**7,211**	**273.7**	**3,144**	**250.3**	**4,877**	**489.2**	**15,231**	**1,013.1**
25	Karnataka	2,493	107.3	738	85.4	932	132.0	4,164	324.7
26	Kerala	814	28.3	150	12.0	311	52.1	1,276	92.4
27	Andhra Pradesh **	1,570	68.6	767	65.7	1,754	140.6	4,091	274.9
28	Tamil Nadu	1,311	42.3	303	18.2	506	87.7	2,120	148.2
29	Telangana	1,017	27.0	1,183	68.9	1	-	2,200	95.9
30	Lakshdweep @$	-	-	-	-	15	2.4	15	2.4
31	Puducherry #	6	-	1	0.1	1,357	74.4	1,364	74.6
	Eastern Region	**5,563**	**116.1**	**3,134**	**143.4**	**3,519**	**68.6**	**12,217**	**328.1**
32	Orissa	3,537	77.7	596	23.1	605	16.9	4,738	117.7
33	West Bengal	1,857	34.8	511	23.6	824	21.7	3,193	80.1
34	Andaman and Nicobar Island @$	6	0.1	-	-	-	-	6	0.2
35	Bihar	136	3.2	1,667	84.4	1,447	24.3	3,250	111.8
36	Jharkhand **	26	0.4	361	12.3	642	5.7	1,029	18.4
	Total	**35,883**	**1,122.0**	**12,271**	**1,024.2**	**23,320**	**1,581.1**	**71,474**	**3,727.4**

-: Nil / negligible.

#: StCB functions as Central Financing Agency.

$: No RRB in these States/UTs.

*: Refers to live/operative cards.

@ No Co-operative Banks in these UTs.

** Data under reconciliation.

Note: Components may not add up to their respective totals due to rounding off.

Source: NABARD/Returns from Commercial Banks.

Appendix Table V.4: Bank Group-wise Lending to the Sensitive Sectors
(As at end-March)

(Amount in ₹ billion)

Sector	Public Sector Banks		Private Sector Banks		Foreign Banks		Scheduled Commercial Banks*	
	2016-17	Percentage Variation	2016-17	Percentage Variation	2016-17	Percentage Variation	2016-17	Percentage Variation
1	2	3	4	5	6	7	8	9
1. Capital Market #	582 (1.0)	12.7	592 (2.7)	3.4	97 (2.9)	23.3	1,271 (1.6)	8.8
2. Real Estate @	9,969 (17.9)	11.7	5,348 (24.1)	18.0	1,018 (30.6)	9.7	16,342 (20.1)	13.6
3. Commodities	-	-	-	-	-	-	-	-
Total Advances to Sensitive Sectors	**10,551 (19.0)**	**11.8**	**5,940 (26.8)**	**16.3**	**1,115 (33.5)**	**10.7**	**17,612 (21.7)**	**13.3**

- : Nil / negligible.
#: Exposure to capital market is inclusive of both investments and advances.
@: Exposure to real estate sector is inclusive of both direct and indirect lending.
*: Data for 2017 includes Small Finance Bank Group.
Note: Figures in parentheses are percentages to total loans and advances of the concerned bank-group.
Source: Annual accounts of respective banks.

Appendix Table V.5: Shareholding Pattern of Domestic Scheduled Commercial Banks (*Continued*)
(As at end-March 2017)

(Per cent)

S. No	Bank Name	Total Government & RBI - Resident	Financial Institutions - Resident	Financial Institutions - Non-Resident	Other Corporates - Resident	Other Corporates - Non-Resident	Total Individual - Resident	Total Individual - Non-Resident	Total - Resident	Total - Non-Resident
1	2	3	4	5	6	7	8	9	10	11
	Nationalised Banks									
1	Allahabad Bank	65.9	17.8	3.8	1.2	-	10.2	1.2	95.0	5.0
2	Andhra Bank	61.3	15.3	5.5	3.0	-	14.5	0.5	94.0	6.0
3	Bank of Baroda	59.2	20.6	11.8	1.5	-	6.4	0.4	87.8	12.2
4	Bank of India	73.7	2.6	1.0	15.0	1.6	5.9	0.3	97.1	2.9
5	Bank of Maharashtra	81.6	13.1	0.3	0.3	-	4.5	0.2	99.6	0.4
6	Bharatiya Mahila Bank Ltd.	100.0	-	-	-	-	-	-	100.0	-
7	Canara Bank	66.3	21.2	5.3	1.3	-	5.8	0.1	94.6	5.4
8	Central Bank of India	81.3	14.2	0.3	2.6	-	1.6	-	99.7	0.3
9	Corporation Bank	70.8	21.9	1.7	0.8	-	4.6	0.3	98.1	1.9
10	Dena Bank	68.6	14.4	4.1	1.3	-	11.1	0.5	95.4	4.6
11	IDBI Bank Ltd.	74.0	15.4	2.5	1.3	-	6.5	0.3	97.2	2.8
12	Indian Bank	82.1	8.2	-	0.3	-	2.3	7.1	92.9	7.1
13	Indian Overseas Bank	79.6	10.7	-	4.3	-	5.2	0.3	99.7	0.3
14	Oriental Bank of Commerce	58.4	24.9	6.0	2.7	-	7.8	0.3	93.7	6.3
15	Punjab and Sind Bank	79.6	10.6	-	1.1	1.8	6.7	0.2	98.0	2.0
16	Punjab National Bank	65.0	19.6	10.0	0.6	-	4.8	-	90.0	10.0
17	Syndicate Bank	72.9	12.1	4.1	1.2	-	9.6	-	95.9	4.1
18	UCO Bank	76.7	14.7	-	0.9	1.3	6.2	0.2	98.6	1.5
19	Union Bank of India	63.4	20.8	5.0	1.9	-	8.7	0.2	94.8	5.2
20	United Bank of India	85.2	11.3	-	0.4	-	3.1	-	100.0	-
21	Vijaya Bank	70.3	17.9	-	1.3	-	10.1	0.3	99.7	0.3
	State Bank Group									
22	State Bank of India	61.2	18.3	11.0	3.2	-	6.2	0.2	88.8	11.2
23	State Bank of Bikaner and Jaipur	-	83.6	-	4.1	1.2	11.0	0.2	98.6	1.4
24	State Bank of Hyderabad	-	100.0	-	-	-	-	-	100.0	-
25	State Bank of Mysore	-	90.0	-	1.3	-	8.7	-	100.0	-
26	State Bank of Patiala	-	100.0	-	-	-	-	-	100.0	-
27	State Bank of Travancore	0.9	81.3	-	3.4	2.4	10.3	1.8	95.9	4.2

Appendix Table V.5: Shareholding Pattern of Domestic Scheduled Commercial Banks (*Concluded*)

(As at end-March 2017)

(Per cent)

S. No	Bank Name	Total Government & RBI - Resident	Financial Institutions - Resident	Financial Institutions - Non-Resident	Other Corporates - Resident	Other Corporates - Non-Resident	Total Individual - Resident	Total Individual - Non-Resident	Total - Resident	Total - Non-Resident
1	2	3	4	5	6	7	8	9	10	11
	Private Sector Banks									
1	Axis Bank Ltd.	-	35.7	52.8	4.1	-	7.2	0.2	47.0	53.0
2	Bandhan Bank Ltd.	-	0.3	3.2	89.8	6.7	-	-	90.1	9.9
3	Catholic Syrian Bank Ltd.	-	3.4	-	31.8	15.8	30.9	18.1	66.1	33.9
4	City Union Bank Ltd.	-	13.0	36.7	7.0	-	42.6	0.7	62.6	37.4
5	DCB Bank Ltd.	-	15.7	-	11.4	40.3	30.9	1.7	58.0	42.0
6	Dhanlaxmi Bank Ltd.	-	1.0	16.5	10.1	-	53.8	18.7	64.8	35.2
7	Federal Bank Ltd.	-	30.0	38.3	4.4	3.4	18.9	5.0	53.3	46.7
8	HDFC Bank Ltd.	0.1	10.6	-	6.5	74.0	8.6	0.2	25.8	74.3
9	ICICI Bank Ltd.	0.2	27.8	60.4	5.4	-	5.8	0.3	39.2	60.8
10	IDFC Bank Ltd.	7.7	1.4	20.2	57.1	0.1	12.9	0.5	79.1	20.9
11	IndusInd Bank Ltd.	-	12.5	43.3	10.3	25.9	7.3	0.7	30.0	70.0
12	Jammu and Kashmir Bank Ltd.	56.5	8.4	16.5	4.0	-	13.9	0.8	82.7	17.3
13	Karnataka Bank Ltd.	-	11.5	19.2	9.3	-	58.7	1.2	79.6	20.4
14	Karur Vysya Bank Ltd.	-	21.1	1.1	6.6	18.8	51.1	1.4	78.8	21.2
15	Kotak Mahindra Bank Ltd.	-	7.9	40.4	3.1	5.8	42.6	0.4	53.5	46.5
16	Lakshmi Vilas Bank Ltd.	-	2.2	-	31.9	9.1	55.4	1.5	89.5	10.5
17	Nainital Bank Ltd.	-	98.6	-	-	-	1.4	-	100.0	-
18	RBL Bank Ltd.	-	7.6	-	10.9	40.9	39.2	1.4	57.7	42.3
19	South Indian Bank Ltd.	-	13.1	0.8	7.1	35.4	36.8	7.0	56.9	43.1
20	Tamilnad Mercantile Bank Ltd.	-	-	-	5.6	20.2	73.5	0.7	79.1	20.9
21	Yes Bank Ltd.	-	23.3	-	9.6	46.7	20.0	0.4	52.9	47.1

-:Nil / negligible.
Source: Off-site returns (domestic).

Appendix Table V.6: Branches and ATMs of Scheduled Commercial Banks *(Continued)*

(As at end-March 2017)

Sr. No.	Name of the Bank	Branches					ATMs		
		Rural	Semi - Urban	Urban	Metro-politan	Total	On-site	Off-site	Total
1	2	3	4	5	6	7	8	9	10
	Public Sector Banks	**29,033**	**25,647**	**17,890**	**18,875**	**91,445**	**86,545**	**62,010**	**148,555**
	Nationalised Banks	**21,214**	**18,491**	**13,460**	**14,269**	**67,434**	**56,960**	**32,332**	**89,292**
1	Allahabad Bank	1,206	763	648	628	**3,245**	821	393	1,214
2	Andhra Bank	745	772	668	734	**2,919**	3,113	816	3,929
3	Bank of Baroda	1,811	1,524	922	1,166	**5,423**	6,296	4,224	10,520
4	Bank of India	1,829	1,455	804	983	**5,071**	3,483	4,234	7,717
5	Bank of Maharashtra	617	435	343	502	**1,897**	1,292	586	1,878
6	Canara Bank	1,773	1,937	1,141	1,241	**6,092**	5,391	5,128	10,519
7	Central Bank of India	1,608	1,349	847	914	**4,718**	3,481	1,804	5,285
8	Corporation Bank	586	793	521	557	**2,457**	2,306	863	3,169
9	Dena Bank	573	434	367	409	**1,783**	1,290	248	1,538
10	Indian Bank	706	732	574	605	**2,617**	2,617	741	3,358
11	Indian Overseas Bank	923	1,000	693	767	**3,383**	2,705	974	3,679
12	Oriental Bank of Commerce	557	619	609	597	**2,382**	2,296	325	2,621
13	Punjab and Sind Bank	554	276	347	327	**1,504**	1,049	204	1,253
14	Punjab National Bank	2,538	1,682	1,190	1,094	**6,504**	5,947	4,734	10,681
15	Syndicate Bank	1,190	1,092	813	856	**3,951**	3,571	402	3,973
16	UCO Bank	1,074	821	599	579	**3,073**	2,201	578	2,779
17	Union Bank of India	1,243	1,279	846	906	**4,274**	4,484	3,034	7,518
18	United Bank of India	778	406	470	358	**2,012**	1,132	991	2,123
19	Vijaya Bank	470	528	519	513	**2,030**	1,663	338	2,001
20	IDBI Bank Ltd.	408	585	503	499	**1,995**	1,822	1,715	3,537
21	Bhartiya Mahila Bank	25	9	36	34	**104**	-	-	-
	State Bank Group	**7,819**	**7,156**	**4,430**	**4,606**	**24,011**	**29,585**	**29,678**	**59,263**
22	State Bank of Bikaner and Jaipur	462	339	226	289	**1,316**	1,220	798	2,018
23	State Bank of Hyderabad	509	603	374	438	**1,924**	1,793	572	2,365
24	State Bank of India	5,962	4,888	3,078	3,239	**17,167**	23,161	27,027	50,188
25	State Bank of Mysore	318	255	228	273	**1,074**	1,096	330	1,426
26	State Bank of Patiala	456	346	313	228	**1,343**	1,183	344	1,527
27	State Bank of Travancore	112	725	211	139	**1,187**	1,132	607	1,739

Appendix Table V.6: Branches and ATMs of Scheduled Commercial Banks *(Continued)*
(As at end-March 2017)

Sr. No.	Name of the Bank	Branches					ATMs		
		Rural	Semi - Urban	Urban	Metro-politan	Total	On-site	Off-site	Total
1	2	3	4	5	6	7	8	9	10
	Private Sector Banks	**4,822**	**7,803**	**5,158**	**6,878**	**24,661**	**23,045**	**35,788**	**58,833**
1	Axis Bank Ltd.	542	955	779	1,023	**3,299**	3,209	10,954	14,163
2	Bandhan Bank Ltd.	275	209	227	129	**840**	282	-	282
3	Catholic Syrian Bank Ltd.	44	229	88	65	**426**	205	58	263
4	City Union Bank Ltd.	78	224	112	137	**551**	805	681	1,486
5	DCB Bank Ltd.	56	66	55	87	**264**	217	298	515
6	Dhanalakshmi Bank Ltd.	20	108	67	71	**266**	199	172	371
7	Federal Bank Ltd.	153	683	211	194	**1,241**	1,151	516	1,667
8	HDFC Bank Ltd.	962	1,509	909	1,332	**4,712**	5,791	6,469	12,260
9	ICICI Bank Ltd.	979	1,444	987	1,440	**4,850**	4,988	8,894	13,882
10	IDFC Bank Ltd.	20	23	13	21	**77**	20	1	21
11	IndusInd Bank Ltd.	252	258	320	381	**1,211**	874	1,162	2,036
12	Jammu and Kashmir Bank Ltd.	450	156	98	162	**866**	640	456	1,096
13	Karnataka Bank Ltd.	162	180	209	217	**768**	549	831	1,380
14	Karur Vysya Bank Ltd.	103	266	152	190	**711**	763	984	1,747
15	Kotak Mahindra Bank Ltd.	197	280	287	605	**1,369**	971	1,192	2,163
16	Lakshmi Vilas Bank Ltd.	99	142	111	128	**480**	362	596	958
17	Nainital Bank Ltd.	33	32	37	31	**133**	-	-	-
18	RBL Bank Ltd.	50	68	41	81	**240**	150	225	375
19	South Indian Bank Ltd.	96	425	159	170	**850**	763	557	1,320
20	Tamilnad Mercantile Bank Ltd.	106	246	79	75	**506**	443	620	1,063
21	Yes Bank Ltd.	145	300	217	339	**1,001**	663	1,122	1,785

Appendix Table V.6: Branches and ATMs of Scheduled Commercial Banks *(Concluded)*

(As at end-March 2017)

Sr. No.	Name of the Bank	Branches					ATMs		
		Rural	Semi - Urban	Urban	Metro-politan	Total	On-site	Off-site	Total
1	2	3	4	5	6	7	8	9	10
	Foreign Banks	**9**	**9**	**39**	**231**	**288**	**219**	**747**	**966**
1	AB Bank Limited	-	-	-	1	**1**	-	-	-
2	Abu Dhabi Commercial Bank PJSC	-	-	-	2	**2**	-	-	-
3	American Express Banking Corp.	-	-	-	1	**1**	-	-	-
4	American Express Bank Ltd.	-	-	-	-	-	-	-	-
5	Australia and New Zealand Banking Group Limited	1	-	1	1	**3**	-	-	-
6	Bank of America, National Association	-	-	-	4	**4**	-	-	-
7	Bank of Bahrain and Kuwait B.S.C.	-	1	-	3	**4**	-	-	-
8	Bank of Ceylon	-	-	-	1	**1**	-	-	-
9	Bank of Nova Scotia	-	-	-	3	**3**	-	-	-
10	Barclays Bank Plc		1	1	4	**6**	-	-	-
11	BNP Paribas	-	-	-	8	**8**	-	-	-
12	Citibank N.A.	-	-	7	33	**40**	54	503	557
13	Commonwealth Bank of Australia	-	-	-	1	**1**	-	-	-
14	Cooperative Rabobank U.A.	-	-	-	1	**1**	-	-	-
15	Credit Agricole Corporate and Investment Bank	-	-	-	5	**5**	-	-	-
16	Credit Suisse A.G.	-	-	-	1	**1**	-	-	-
17	CTBC Bank Co. Ltd.	-	1	-	1	**2**	-	-	-
18	DBS Bank Ltd.	2	4	-	6	**12**	5	25	30
19	Deutsche Bank A.G.	1	-	5	11	**17**	**13**	**19**	**32**
20	Doha Bank Qsc	-	-	1	2	**3**	-	-	-
21	First Abu Dhabi Bank PJSC	-	-	-	1	**1**	-	-	-
22	Firstrand Bank Ltd	-	-	-	1	**1**	-	-	-
23	Hongkong and Shanghai Banking Corpn. Ltd.	-	-	4	22	**26**	**44**	**54**	**98**
24	HSBC Bank Oman S.A.O.G.	-	-	-	-	-	-	-	-
25	Industrial and Commercial Bank of China	-	-	-	1	**1**	-	-	-
26	Industrial Bank of Korea	-	-	-	1	**1**	-	-	-
27	JP Morgan Chase Bank National Association	2	-	-	2	**4**	-	-	-
28	JSC VTB Bank	-	-	-	1	**1**	-	-	-
29	KBC Bank Nv	-	-	-	-	-	-	-	-
30	KEB Hana Bank	-	-	-	1	**1**	-	-	-
31	Krung Thai Bank Public Company Limited	-	-	-	1	**1**	-	-	-
32	Mashreq Bank Psc	-	-	-	1	**1**	-	-	-
33	Mizuho Bank Ltd.	-	1	-	4	**5**	-	-	-
34	National Australia Bank	-	-	-	1	**1**	-	-	-
35	PT Bank Maybank Indonesia Tbk	-	-	-	1	**1**	-	-	-
36	Qatar National Bank Saq	-	-	-	-	-	-	-	-
37	Sberbank	-	-	-	1	**1**	-	-	-
38	SBM Bank (Mauritius) Ltd.	-	-	-	4	**4**	-	-	-
39	Shinhan Bank	1	-	-	5	**6**	-	-	-
40	Societe Generale	-	1	-	2	**3**	-	-	-
41	Sonali Bank	-	-	1	1	**2**	-	-	-
42	Standard Chartered Bank	1	-	18	81	**100**	103	146	**249**
43	Sumitomo Mitsui Banking Corporation	-	-	-	2	**2**	-	-	-
44	The Bank of Tokyo-Mitsubishi UFJ Ltd.	1	-	-	4	**5**	-	-	-
45	The Royal Bank of Scotland Plc	-	-	-	1	**1**	-	-	-
46	UBS A.G.	-	-	-	-	-	-	-	-
47	United Overseas Bank Ltd.	-	-	-	1	**1**	-	-	-
48	Westpac Banking Corporation	-	-	-	1	**1**	-	-	-
49	Woori Bank	-	-	1	1	**2**	-	-	-

Notes : 1. -: Nil/ Negligible.
2. Branches data exclude administrative offices.

Source: Reserve Bank of India.

Appendix Table V.7: Statement of Complaints Received at Banking Ombudsman Office *(Continued)*

(For the Period 2016-17)

Sr. No.	Name of the Bank	Number of Complaints in Major Categories							Total Number of Complaints
		Deposit Account	Loans/ Advances (General & Housing)	ATM/ Credit/ Debit Cards	Pension	Failure on Commitments and Non Adherence to BCSBI Codes	Non-Observance of Fair Practices Code	Non-Adherence to Instructions on Direct Selling Agents and Recovery Agents	
1	2	3	4	5	6	7	8	9	10
	Scheduled Commercial Banks	**6,931**	**5,181**	**24,278**	**8,400**	**12,017**	**29,521**	**318**	**119,673**
	Public Sector Banks	**4,889**	**3,610**	**15,105**	**8,366**	**8,232**	**19,835**	**86**	**81,309**
	Nationalised Banks	**2,848**	**2,110**	**7,434**	**4,450**	**4,600**	**11,175**	**45**	**45,369**
1	Allahabad Bank	42	62	195	135	153	474	2	1,413
2	Andhra Bank	70	42	286	32	127	340	2	1,308
3	Bank of Baroda	391	187	792	435	477	1,117	6	5,043
4	Bank of India	149	144	612	801	436	1,072	1	4,191
5	Bank of Maharashtra	31	24	93	38	162	320	-	845
6	Canara Bank	433	256	657	673	582	1,320	7	5,248
7	Central Bank of India	91	104	409	370	308	757	3	2,716
8	Corporation Bank	132	73	333	7	139	226	-	1,255
9	Dena Bank	107	65	169	124	79	302	-	1,140
10	Indian Bank	200	215	264	119	106	430	4	1,673
11	Indian Overseas Bank	175	162	490	116	292	718	6	2,633
12	Oriental Bank of Commerce	82	56	331	40	110	369	-	1,523
13	Punjab and Sind Bank	26	38	62	49	50	250	3	690
14	Punjab National Bank	241	259	1,170	890	436	1,187	2	6,226
15	Syndicate Bank	123	94	157	161	136	283	1	1,416
16	UCO Bank	91	69	222	215	222	448	4	1,747
17	Union Bank of India	207	120	441	136	299	676	2	2,559
18	United Bank of India	34	30	177	92	179	193	1	958
19	Vijaya Bank	81	39	106	11	101	151	-	690
20	Bharatiya Mahila Bank Ltd.	2	1	3	-	1	3	-	16
21	IDBI Bank Ltd.	140	70	465	6	205	539	1	2,079
	State Bank Group	**2,041**	**1,500**	**7,671**	**3,916**	**3,632**	**8,660**	**41**	**35,940**
22	State Bank of India	1,690	1,313	6,844	3,098	3,175	7,297	36	30,579
23	State Bank of Bikaner and Jaipur	138	99	262	514	176	154	2	2,033
24	State Bank of Hyderabad	50	26	205	49	69	271	-	862
25	State Bank of Mysore	105	17	56	14	112	63	1	450
26	State Bank of Patiala	40	28	161	161	59	452	2	1,167
27	State Bank of Travancore	18	17	143	80	41	423	-	849

Appendix Table V.7: Statement of Complaints Received at Banking Ombudsman Office *(Continued)*

(For the Period 2016-17)

Sr. No.	Name of the Bank	Number of Complaints in Major Categories							Total Number of Complaints
		Deposit Account	Loans/ Advances (General & Housing)	ATM/ Credit/ Debit Cards	Pension	Failure on Commitments and Non Adherence to BCSBI Codes	Non-Observance of Fair Practices Code	Non-Adherence to Instructions on Direct Selling Agents and Recovery Agents	
1	2	3	4	5	6	7	8	9	10
	Private Sector Banks	**1,890**	**1,426**	**7,937**	**34**	**3,491**	**9,065**	**213**	**35,078**
1	Axis Bank Ltd.	364	259	1,431	10	677	1,887	27	6,748
2	Bandhan Bank Ltd.	5	2	17	-	14	32	-	102
3	Catholic Syrian Bank Ltd.	7	8	1	-	5	22	-	66
4	City Union Bank Ltd.	6	6	14	1	6	74	-	136
5	DCB Bank Ltd.	11	38	59	-	27	106	-	316
6	Dhanlaxmi Bank Ltd.	7	3	6	-	2	38	-	64
7	Federal Bank Ltd.	28	25	111	-	36	175	2	503
8	HDFC Bank Ltd.	447	385	2,610	3	1,168	2,178	97	9,885
9	ICICI Bank Ltd.	486	402	2,194	16	841	2,489	38	9,541
10	IDFC Bank Ltd.	5	-	1	-	10	11	-	29
11	IndusInd Bank Ltd.	74	50	351	1	136	358	9	1,436
12	Jammu and Kashmir Bank Ltd.	6	4	31	-	3	20	-	140
13	Karnataka Bank Ltd.	51	2	41	-	37	34	-	222
14	Karur Vysya Bank Ltd.	18	4	40	-	27	140	1	298
15	Kotak Mahindra Bank Ltd.	205	165	588	1	332	1,004	37	3,711
16	Lakshmi Vilas Bank Ltd.	18	6	11	1	5	64	-	120
17	Nainital Bank Ltd.	2	2	5	-	1	2	-	25
18	RBL Bank Ltd.	16	11	193	-	36	85	1	417
19	South Indian Bank Ltd.	22	10	17	-	13	90	1	206
20	Tamilnad Mercantile Bank Ltd.	42	26	16	1	9	28	-	144
21	Yes Bank Ltd.	70	18	200	-	106	228	-	969

Appendix Table V.7: Statement of Complaints Received at Banking Ombudsman Office *(Concluded)*

(For the Period 2016-17)

Sr. No.	Name of the Bank	Number of Complaints in Major Categories							Total Number of Complaints
		Deposit Account	Loans/ Advances (General & Housing)	ATM/ Credit/ Debit Cards	Pension	Failure on Commitments and Non Adherence to BCSBI Codes	Non-Observance of Fair Practices Code	Non-Adherence to Instructions on Direct Selling Agents and Recovery Agents	
1	2	3	4	5	6	7	8	9	10
	Foreign Banks	**152**	**145**	**1,236**	**-**	**294**	**621**	**19**	**3,286**
1	AB Bank Ltd.	-	1	2	-	-	-	-	6
2	Abu Dhabi Commercial Bank PJSC	1	-	1	-	1	4	-	7
3	American Express Banking Corp.	2	1	111	-	13	25	1	187
4	Antwerp Diamond Bank NV	-	-	-	-	-	-	-	-
5	Australia and New Zealand Banking Group Ltd.	-	-	-	-	-	2	-	2
6	Bank of America, National Association	1	1	3	-	-	1	-	12
7	Bank of Bahrain and Kuwait B.S.C.	-	-	-	-	-	-	-	2
8	Bank of Nova Scotia	-	-	-	-	-	-	-	2
9	Barclays Bank Plc	2	2	28	-	2	15	2	55
10	BNP Paribas	-	-	-	-	-	-	-	1
11	China trust Commercial Bank	-	-	-	-	-	1	-	1
12	Credit Agricole Corporate and Investment Bank	-	-	-	-	1	-	-	1
13	Citibank N.A.	58	37	503	-	107	235	2	1,242
14	Commonwealth Bank Of Australia	1	-	-	-	-	-	-	1
15	DBS Bank Ltd.	3	-	1	-	2	8	-	28
16	Deutsche Bank (Asia)	3	8	8	-	13	30	-	105
17	Hongkong and Shanghai Banking Corpn.Ltd.	34	23	128	-	44	93	-	413
18	HSBC Bank Oman S.A.O.G.	-	-	-	-	-	2	-	2
19	JP Morgan Chase Bank National Association	-	-	-	-	-	-	-	-
20	Mashreq Bank PSC	-	-	4	-	-	-	1	5
21	Royal Bank of Scotland	7	3	47	-	7	15	2	126
22	Sberbank	-	-	-	-	-	-	-	-
23	Societe Generale	-	-	-	-	-	-	-	1
24	Sonali Bank	-	-	-	-	-	-	-	1
25	Standard Chartered Bank	40	69	400	-	104	190	11	1,086
26	State Bank of Mauritius Ltd.	-	-	-	-	-	-	-	-
27	The Bank of Tokyo-Mitsubishi UFJ Ltd.	-	-	-	-	-	-	-	-
28	UBS A.G.	-	-	-	-	-	-	-	-

-: Nil / negligible.

Appendix Table VI.1: Select Financial Parameters of Scheduled UCBs
(As at end-March 2017)

(Per cent)

Sr. No.	Bank Name	CRAR	Net Interest Income to Total Assets	Net Interest Income to Working Funds	Non-Interest Income to Working Funds	Return on Assets	Average Cost of Deposits	Average Yield on Advances	Business per Employee (₹ Million)	Profit per Employee (₹ Million)
1	2	3	4	5	6	7	8	9	10	11
1	Abhyudaya Co-operative Bank Limited, Mumbai	11.0	1.6	1.6	1.4	0.0	6.8	9.1	66.3	0.0
2	Ahmedabad Mercantile Co-operative Bank Limited	31.4	3.5	3.0	0.5	1.7	6.7	11.0	77.1	0.9
3	Akola Janata Commercial Co-operative Bank Limited, Akola	17.3	3.0	2.9	1.0	0.8	6.8	12.9	39.7	0.2
4	Akola Urban Co-operative Bank Limited, Akola	8.3	2.1	2.1	2.0	0.1	6.7	11.4	37.4	0.0
5	Amanath Co-operative Bank Limited, Bangalore	-72.1	1.8	2.4	1.7	0.4	3.6	2.3	17.1	0.1
6	Andhra Pradesh Mahesh Co-operative Urban Bank Limited	18.5	3.2	3.0	0.4	0.9	7.3	13.8	59.0	0.4
7	Apna Sahakari Bank Limited	12.3	2.3	2.3	1.3	0.4	7.3	11.7	84.6	0.2
8	Bassein Catholic Co-operative Bank Limited	17.3	3.1	2.9	0.6	1.2	7.3	12.0	170.8	1.4
9	Bharat Co-operative Bank (Mumbai) Limited, Mumbai	13.9	2.5	2.4	1.6	1.0	7.9	12.5	124.2	0.9
10	Bharati Sahakari Bank Limited	15.1	2.6	2.5	0.4	0.4	7.4	12.0	72.5	0.2
11	Bombay Mercantile Co-operative Bank Limited	14.6	3.0	3.1	1.8	0.4	4.6	10.4	24.3	0.1
12	Citizen Credit Co-operative Bank Limited, Mumbai	18.7	2.4	2.5	0.6	0.6	6.7	11.0	87.1	0.4
13	Cosmos Co-operative Bank Limited	15.4	1.8	1.9	3.2	0.4	7.4	11.2	93.6	0.3
14	Dombivli Nagari Sahakari Bank Limited	14.4	2.8	2.8	1.3	0.8	7.2	11.1	95.8	0.5
15	Goa Urban Co-operative Bank Limited	14.7	3.2	3.1	0.5	0.1	6.5	10.9	62.8	0.0
16	Gopinath Patil Parsik Janata Sahakari Bank Limited, Thane	18.5	3.9	3.7	1.0	1.4	6.0	12.3	62.3	0.6
17	Greater Bombay Co-operative Bank Limited	10.8	2.3	2.2	1.6	-0.3	6.9	11.3	83.3	-0.2
18	Indian Mercantile Co-operative Bank Limited, Lucknow	17.1	3.9	4.1	0.0	-9.3	6.0	12.0	15.8	-1.6
19	Jalgaon Janata Sahakari Bank Limited	12.4	3.1	3.2	0.7	0.6	6.8	12.9	58.1	0.2
20	Jalgaon People's Co-operative Bank Limited	12.8	2.4	2.4	0.9	0.5	6.7	11.4	85.8	0.3
21	Janakalyan Sahakari Bank Limited, Mumbai	11.5	2.3	2.3	0.6	0.0	6.6	10.7	91.2	0.0
22	Janalaxmi Co-operative Bank Limited, Nashik	25.3	1.7	3.1	0.9	0.6	5.9	8.9	10.3	0.1
23	Janata Sahakari Bank Limited, Pune	12.9	2.7	2.6	1.2	0.4	7.6	11.9	111.6	0.3
24	Kallappanna Awade Ichalkaranji Janata Sahakari Bank Limited	13.0	2.3	2.3	0.8	0.6	7.6	12.1	57.2	0.2
25	Kalupur Commercial Co-operative Bank Limited	16.9	2.9	2.7	0.6	1.2	6.9	10.6	129.4	1.1
26	Kalyan Janata Sahakari Bank Limited, Kalyan	12.4	3.0	2.8	1.3	0.9	7.1	12.1	86.5	0.5
27	Kapol Co-operative Bank Limited, Mumbai	-57.1	-1.6	-0.2	0.8	-6.4	6.4	7.3	21.5	-1.3
28	Karad Urban Co-operative Bank Limited	16.9	2.9	2.7	1.1	0.9	7.9	12.9	66.7	0.4
29	Khamgaon Urban Co-operative Bank Ltd, Khamgaon	18.0	3.7	3.7	1.1	1.5	5.7	12.5	34.4	0.4
30	Mahanagar Co-operative Bank Ltd, Mumbai	13.9	3.4	3.6	0.8	0.6	7.1	13.0	73.5	0.3
31	Mapusa Urban Co-operative Bank of Goa Ltd, Mapusa	-18.8	1.2	1.6	0.6	-1.5	6.8	11.9	29.1	-0.4
32	Mehsana Urban Co-operative Bank Limited	14.2	3.0	2.8	0.4	1.1	7.1	11.9	145.6	1.0
33	Nagar Urban Co-operative Bank Limited, Ahmednagar	13.3	3.0	2.9	0.8	0.3	7.7	14.9	49.6	0.1
34	Nagpur Nagrik Sahakari Bank Limited	19.4	2.4	2.4	1.3	0.7	6.2	11.5	40.2	0.2
35	Nasik Merchant's Co-operative Bank Limited	39.7	4.0	4.0	1.0	1.9	6.4	12.9	47.0	0.8
36	New India Co-operative Bank Limited, Mumbai	12.4	2.1	2.1	1.4	0.4	7.2	11.3	126.9	0.4
37	NKGSB Co-operative Bank Limited, Mumbai	12.3	2.8	2.6	0.8	0.6	7.2	11.4	100.4	0.4
38	Nutan Nagarik Sahakari Bank Limited, Ahmedabad	14.6	2.4	2.2	0.8	0.7	6.7	10.7	84.4	0.4
39	Pravara Sahakari Bank Limited	12.2	2.4	2.4	0.6	0.2	6.4	11.7	42.1	0.1
40	Punjab & Maharashtra Co-operative Bank Limited	12.3	3.8	3.6	1.0	1.0	7.7	14.1	92.0	0.6
41	Rajarambapu Sahakari Bank Limited	12.9	2.9	2.9	0.6	0.8	8.1	12.7	74.8	0.4
42	Rajkot Nagrik Sahakari Bank Limited	15.6	2.4	2.2	1.1	1.3	7.4	12.4	70.8	0.7
43	Rupee Co-operative Bank Limited	-442.1	2.2	2.2	1.2	1.3	2.3	4.1	41.1	0.4
44	Sangli Urban Co-operative Bank Limited, Sangli	12.3	2.5	2.7	0.8	0.2	7.9	12.8	35.6	0.1
45	Saraswat Co-operative Bank Limited, Bombay	14.0	2.1	2.1	1.1	0.6	6.8	10.4	134.1	0.6
46	Sardar Bhiladwala Pardi Peoples Co-operative Bank Ltd.	19.1	3.3	3.1	0.3	0.6	5.9	10.7	80.3	0.3
47	Shamrao Vithal Co-operative Bank Limited	12.7	2.5	2.5	1.4	0.8	7.1	11.3	94.0	0.5
48	Shikshak Sahakari Bank Limited, Nagpur	14.7	2.5	2.4	1.3	0.1	7.4	11.2	38.2	0.0
49	Solapur Janata Sahakari Bank Limited	13.1	3.5	3.3	0.5	1.0	8.0	13.8	62.9	0.4
50	Surat Peoples Co-operative Bank Limited	16.5	2.6	2.5	0.5	0.9	7.6	11.7	131.7	0.8
51	Thane Bharat Sahakari Bank Limited	13.7	3.0	2.9	0.9	0.5	6.9	12.5	68.3	0.2
52	TJSB Sahakari Bank	13.8	2.7	2.5	1.0	1.0	7.1	12.1	110.1	0.8
53	Vasai Vikas Sahakari Bank Limited	11.9	1.8	2.3	0.6	0.8	7.3	12.3	81.9	0.6
54	Zoroastrian Co-operative Bank Limited, Bombay	17.3	3.2	3.0	0.3	1.4	6.7	11.9	70.3	0.7

Note: Data for 2016-17 are provisional.

Appendix Table VI.2: Major Indicators of Financial Performance of Scheduled UCBs *(Continued)*

(As per cent to total assets)

Sr. No.	Name of the Banks	Operating Profit		Net Profit after Taxes		Interest Income	
		2015-16	2016-17	2015-16	2016-17	2015-16	2016-17
1	2	3	4	5	6	7	8
1	Abhyudaya Co-operative Bank Limited, Mumbai	0.6	0.9	0.0	0.0	8.0	7.2
2	Ahmedabad Mercantile Co-operative Bank Limited	2.0	1.9	2.0	1.4	8.1	7.6
3	Akola Janata Commercial Co-operative Bank Limited, Akola	1.4	1.4	0.7	0.7	8.9	8.1
4	Akola Urban Co-operative Bank Limited, Akola	-0.7	0.1	-1.1	0.1	7.5	7.4
5	Amanath Co-operative Bank Limited, Bangalore	1.9	0.2	1.9	0.2	3.0	1.8
6	Andhra Pradesh Mahesh Co-operative Urban Bank Ltd	2.1	1.7	1.0	0.9	9.5	8.8
7	Apna Sahakari Bank Limited	0.9	1.1	0.5	0.3	8.4	8.5
8	Bassein Catholic Co-operative Bank Limited	2.5	2.1	1.2	1.1	8.9	8.4
9	Bharat Co-operative Bank (Mumbai) Limited, Mumbai	2.0	1.9	1.1	1.0	9.5	8.8
10	Bharati Sahakari Bank Limited	1.1	1.1	0.5	0.4	9.0	8.6
11	Bombay Mercantile Co-operative Bank Limited	0.3	0.3	-0.2	0.3	5.3	5.2
12	Citizen Credit Co-operative Bank Limited, Mumbai	1.3	1.1	0.7	0.6	8.5	8.0
13	Cosmos Co-operative Bank Limited	1.6	1.7	0.2	0.4	9.5	8.3
14	Dombivli Nagari Sahakari Bank Limited	2.2	2.3	0.8	0.8	8.6	8.6
15	Goa Urban Co-operative Bank Limited	1.2	1.7	0.3	0.1	8.3	8.1
16	Gopinath Patil Parsik Janata Sahakari Bank Ltd, Thane	2.1	2.4	1.0	1.3	8.8	8.3
17	Greater Bombay Co-operative Bank Limited	1.1	1.4	0.6	-0.3	8.9	8.1
18	Indian Mercantile Co-operative Bank Limited, Lucknow	0.9	-9.6	0.7	-9.6	9.9	8.4
19	Jalgaon Janata Sahakari Bank Limited	1.8	1.3	0.6	0.5	9.3	8.4
20	Jalgaon People's Co-operative Bank Limited	-	1.0	-	0.5	-	8.0
21	Janakalyan Sahakari Bank Limited, Mumbai	0.6	0.7	0.1	0.0	8.1	6.6
22	Janalaxmi Co-operative Bank Limited, Nashik	1.4	0.6	1.3	0.6	3.5	3.4
23	Janata Sahakari Bank Limited, Pune	1.5	1.8	0.4	0.4	9.8	8.7
24	Kallappanna Awade Ichalkaranji Janata Sahakari Bank Ltd	1.1	1.1	0.6	0.5	9.0	8.6
25	Kalupur Commercial Co-operative Bank Limited	2.1	1.9	1.3	1.1	8.2	7.4
26	Kalyan Janata Sahakari Bank Limited, Kalyan	1.5	1.6	0.9	0.8	8.9	8.7
27	Kapol Co-operative Bank Limited, Mumbai	-3.8	-5.1	-4.9	-7.4	7.2	5.3
28	Karad Urban Co-operative Bank Limited	1.1	1.8	0.4	0.8	9.7	9.0
29	Khamgaon Urban Co-operative Bank Limited, Khamgaon	1.7	2.0	1.2	1.4	8.0	7.8
30	Mahanagar Co-operative Bank Limited, Mumbai	1.4	1.6	0.7	0.6	9.9	9.2
31	Mapusa Urban Co-operative Bank of Goa Limited, Mapusa	-0.2	-1.3	-0.2	-1.5	8.2	6.4
32	Mehsana Urban Co-operative Bank Limited	2.1	2.1	1.0	1.0	9.5	8.6
33	Nagar Urban Co-operative Bank Limited, Ahmednagar	1.9	1.2	0.8	0.3	10.0	8.7
34	Nagpur Nagrik Sahakari Bank Limited	0.6	1.0	0.2	0.6	7.8	7.4
35	Nasik Merchant's Co-operative Bank Limited	3.6	3.1	2.1	1.8	10.3	9.7
36	New India Co-operative Bank Limited, Mumbai	0.7	1.2	0.4	0.5	9.0	8.6
37	NKGSB Co-operative Bank Limited, Mumbai	1.2	1.2	0.6	0.6	8.9	8.4
38	Nutan Nagarik Sahakari Bank Limited, Ahmedabad	1.2	1.1	0.6	0.7	8.4	7.6
39	Pravara Sahakari Bank Limited	1.0	0.2	1.0	0.2	10.0	8.5
40	Punjab & Maharashtra Co-operative Bank Limited	1.5	1.9	0.9	0.9	10.2	9.9
41	Rajarambapu Sahakari Bank Limited	-	1.8	-	0.7	-	8.9
42	Rajkot Nagrik Sahakari Bank Limited	1.6	1.4	1.0	0.9	6.7	6.0
43	Rupee Co-operative Bank Limited	-1.7	0.1	-0.8	0.8	2.2	3.1
44	Sangli Urban Co-operative Bank Limited, Sangli	0.7	0.7	0.1	0.2	8.7	8.4
45	Saraswat Co-operative Bank Limited, Bombay	0.9	1.4	0.5	0.5	7.3	7.2
46	Sardar Bhiladwala Pardi Peoples Co-operative Bank Ltd	0.9	0.9	0.5	0.5	7.8	7.4
47	Shamrao Vithal Co-operative Bank Limited	1.1	1.3	0.8	0.7	8.8	8.2
48	Shikshak Sahakari Bank Limited, Nagpur	1.0	0.9	0.5	0.1	8.3	7.3
49	Solapur Janata Sahakari Bank Limited	2.0	1.4	1.0	0.9	10.4	9.4
50	Surat Peoples Co-operative Bank Limited	2.0	1.6	0.9	0.8	9.6	8.7
51	Thane Bharat Sahakari Bank Limited	0.7	0.7	0.1	0.5	9.2	8.7
52	TJSB Sahakari Bank	1.4	1.4	1.0	0.9	8.8	7.8
53	Vasai Vikas Sahakari Bank Limited	1.2	1.3	0.7	1.0	8.4	8.3
54	Zoroastrian Co-operative Bank Limited, Bombay	1.7	1.2	1.0	1.2	9.1	8.1

-: Nil / negligible.

Notes: 1. Data for 2016-17 are provisional.

2. The "Jalgaon People's Co-operative Bank Limited" and "Rajarambapu Sahakari Bank Limited" were included in the second schedule of RBI Act, 1934 during the financial year 2016-17.

Appendix Table VI.2: Major Indicators of Financial Performance of Scheduled UCBs *(Concluded)*

(As per cent to total assets)

Sr. No.	Name of the Banks	Interest Expended		Non-Interest Expenses		Provisions and Contingencies	
		2015-16	2016-17	2015-16	2016-17	2015-16	2016-17
1	2	9	10	11	12	13	14
1	Abhyudaya Co-operative Bank Limited, Mumbai	6.1	5.7	1.9	2.0	0.6	0.8
2	Ahmedabad Mercantile Co-operative Bank Limited	4.8	4.7	1.7	1.5	0.0	0.5
3	Akola Janata Commercial Co-operative Bank Limited, Akola	5.9	5.3	2.4	2.3	0.7	0.7
4	Akola Urban Co-operative Bank Limited, Akola	6.1	5.5	2.4	3.7	0.3	0.0
5	Amanath Co-operative Bank Limited, Bangalore	1.6	0.9	1.2	1.2	0.0	0.0
6	Andhra Pradesh Mahesh Co-operative Urban Bank Limited	6.0	5.8	1.8	1.7	1.0	0.8
7	Apna Sahakari Bank Limited	5.9	6.3	2.2	2.4	0.4	0.8
8	Bassein Catholic Co-operative Bank Limited	5.9	5.5	1.2	1.3	1.3	1.0
9	Bharat Co-operative Bank (Mumbai) Limited, Mumbai	6.6	6.5	1.9	2.0	0.9	0.9
10	Bharati Sahakari Bank Limited	6.3	6.2	1.7	1.7	0.6	0.7
11	Bombay Mercantile Co-operative Bank Ltd	3.4	3.0	2.6	3.2	0.5	0.0
12	Citizen Credit Co-operative Bank Limited, Mumbai	5.7	5.5	1.9	2.0	0.7	0.5
13	Cosmos Co-operative Bank Limited	7.2	6.5	3.0	3.2	1.4	1.3
14	Dombivli Nagari Sahakari Bank Limited	5.9	6.0	1.4	1.6	1.5	1.5
15	Goa Urban Co-operative Bank Limited	5.6	5.2	1.8	1.7	0.9	1.6
16	Gopinath Patil Parsik Janata Sahakari Bank Limited, Thane	4.8	4.7	2.4	2.3	1.1	1.1
17	Greater Bombay Co-operative Bank Limited	6.4	6.0	2.5	2.4	0.5	1.7
18	Indian Mercantile Co-operative Bank Limited, Lucknow	5.7	4.4	3.4	13.6	0.2	0.0
19	Jalgaon Janata Sahakari Bank Limited	6.3	5.4	2.1	2.3	1.2	0.8
20	Jalgaon People's Co-operative Bank Limited	-	5.7	-	2.1	-	0.6
21	Janakalyan Sahakari Bank Limited, Mumbai	5.8	4.7	2.2	1.7	0.5	0.6
22	Janalaxmi Co-operative Bank Limited, Nashik	2.1	1.7	1.6	1.6	0.0	0.0
23	Janata Sahakari Bank Limited, Pune	7.1	6.3	1.7	1.7	1.1	1.5
24	Kallappanna Awade Ichalkaranji Janata Sahakari Bank Ltd	6.3	6.4	2.0	1.8	0.6	0.6
25	Kalupur Commercial Co-operative Bank Limited	5.4	4.9	1.3	1.2	0.8	0.9
26	Kalyan Janata Sahakari Bank Limited, Kalyan	6.1	6.0	2.2	2.4	0.5	0.8
27	Kapol Co-operative Bank Limited, Mumbai	6.3	5.5	5.7	5.9	1.1	2.3
28	Karad Urban Co-operative Bank Limited	6.9	6.4	2.1	1.9	0.7	1.0
29	Khamgaon Urban Co-operative Bank Limited, Khamgaon	4.8	4.3	2.2	2.5	0.4	0.6
30	Mahanagar Co-operative Bank Ltd, Mumbai	6.5	5.9	2.4	2.5	0.7	1.0
31	Mapusa Urban Co-operative Bank of Goa Limited, Mapusa	6.1	5.2	2.9	2.9	0.0	0.2
32	Mehsana Urban Co-operative Bank Ltd	6.5	5.7	1.1	1.1	1.1	1.2
33	Nagar Urban Co-operative Bank Limited, Ahmednagar	6.1	5.9	2.3	2.4	1.1	0.8
34	Nagpur Nagrik Sahakari Bank Limited	5.6	5.1	5.0	2.6	0.4	0.4
35	Nasik Merchant's Co-operative Bank Ltd	5.6	5.8	1.8	1.6	1.5	1.3
36	New India Co-operative Bank Limited, Mumbai	6.4	6.4	2.4	2.3	0.3	0.7
37	NKGSB Co-operative Bank Limited, Mumbai	6.3	5.8	2.2	2.1	0.6	0.7
38	Nutan Nagarik Sahakari Bank Limited, Ahmedabad	5.9	5.4	2.1	1.8	0.6	0.5
39	Pravara Sahakari Bank Limited	6.4	6.2	2.9	2.7	0.0	0.0
40	Punjab & Maharashtra Co-operative Bank Limited	6.8	6.4	2.3	2.5	0.7	1.0
41	Rajarambapu Sahakari Bank Limited	-	6.3	-	1.3	-	1.0
42	Rajkot Nagrik Sahakari Bank Limited	4.6	4.4	1.0	1.0	0.6	0.5
43	Rupee Co-operative Bank Limited	2.2	1.7	1.6	2.0	-0.9	-0.7
44	Sangli Urban Co-operative Bank Ltd, Sangli	6.4	6.0	2.3	2.4	0.6	0.5
45	Saraswat Co-operative Bank Ltd, Bombay	5.7	5.3	1.7	1.5	0.4	0.8
46	Sardar Bhiladwala Pardi Peoples Co-operative Bank Limited	4.8	4.4	2.3	2.5	0.4	0.4
47	Shamrao Vithal Co-operative Bank Limited	6.6	6.0	2.1	2.2	0.3	0.5
48	Shikshak Sahakari Bank Limited, Nagpur	5.8	5.3	2.4	2.2	0.5	0.8
49	Solapur Janata Sahakari Bank Limited	6.5	6.3	2.4	2.2	1.0	0.5
50	Surat Peoples Co-operative Bank Limited	6.2	6.2	1.6	1.4	1.1	0.8
51	Thane Bharat Sahakari Bank Limited	6.3	5.8	3.0	3.0	0.6	0.2
52	TJSB Sahakari Bank	6.1	5.5	2.1	1.8	0.4	0.6
53	Vasai Vikas Sahakari Bank Limited	6.0	6.0	1.8	1.6	0.5	0.3
54	Zoroastrian Co-operative Bank Limited, Bombay	5.5	5.1	2.3	2.0	0.7	0.0

-: Nil / negligible.

Notes: 1. Data for 2016-17 are provisional.

2. The 'Jalgaon People's Co-operative Bank Limited" and "Rajarambapu Sahakari Bank Limited" were included in the second schedule of RBI Act, 1934 during the financial year 2016-17.

Appendix Table VI.3: Salient Indicators of Financial Health of State Co-operative Banks - Region and State-wise

(As at end-March)

(Amount in ₹ million)

Sr. No.	Region/State	Amount of Profit/Loss		NPAs as Percentage of Loans Outstanding		Recovery to Demand (Per cent as at end-June)	
		2015	**2016**	**2015**	**2016**	**2015**	**2016**
1	2	3	4	5	6	7	8
	Northern Region	**1,390**	**1,065**	**1.8**	**1.7**	**98.1**	**98.8**
1.	Chandigarh	50	43	4.2	4.0	72.7	77.1
2.	Delhi	78	-126	0.1	5.3	91.5	93.9
3.	Haryana	162	238	8.6	0.0	99.9	99.5
4.	Himachal Pradesh	599	539	19.6	6.6	78.7	80.9
5.	Jammu & Kashmir	25	26	6.4	19.1	55.8	55.6
6.	Punjab	213	125	0.8	0.9	97.4	99.6
7.	Rajasthan	263	219	0.3	0.3	99.8	99.5
	North-Eastern Region	**465**	**-507**	**14.5**	**13.1**	**53.1**	**59.6**
8.	Arunachal Pradesh	5	2	70.8	67.2	10.3	0.0
9.	Assam	77	27	11.2	11.1	22.9	37.4
10.	Manipur	-64	-736	95.8	90.5	13.1	11.5
11.	Meghalaya	95	25	8.2	7.8	26.1	32.8
12.	Mizoram	39	88	11.5	10.9	50.6	78.8
13.	Nagaland	6	22	16.2	13.5	65.2	71.1
14.	Sikkim	27	21	5.8	4.2	26.9	83.6
15.	Tripura	280	44	3.5	3.5	84.6	80.2
	Eastern Region	**1,160**	**532**	**6.2**	**5.6**	**94.5**	**62.4**
16.	Andaman & Nicobar Islands	44	51	21.7	21.9	57.6	64.1
17.	Bihar	394	360	12.2	10.3	64.7	37.0
18.	Jharkhand	-45	-51	35.3	28.2	6.3	16.2
19.	Odisha	156	167	2.9	2.4	100.0	88.2
20.	West Bengal	611	6	7.9	7.3	62.3	84.5
	Central Region	**1,436**	**1,047**	**3.0**	**4.0**	**95.2**	**95.5**
21.	Chhattisgarh	199	215	4.4	3.8	94.5	85.7
22.	Madhya Pradesh	741	561	1.4	4.2	95.2	95.1
23.	Uttar Pradesh	404	201	4.8	4.2	95.2	96.6
24.	Uttarakhand	92	70	2.9	2.5	94.8	97.7
	Western Region	**4,471**	**2,534**	**8.8**	**7.5**	**91.0**	**87.6**
25.	Goa	-81	-76	11.3	9.5	74.2	89.2
26.	Gujarat	446	181	2.4	2.5	98.5	98.5
27.	Maharashtra	4,106	2,429	11.7	9.3	92.0	82.8
	Southern Region	**1,898**	**1,334**	**5.2**	**3.6**	**94.2**	**94.3**
28.	Andhra Pradesh	775	331	2.7	0.4	95.6	91.1
29.	Karnataka	303	315	3.8	3.3	97.9	96.5
30.	Kerala	465	128	16.0	15.6	86.0	84.7
31.	Puducherry	-59	-151	9.8	5.9	51.1	85.4
32.	Tamil Nadu	414	433	4.7	3.1	93.2	98.8
33.	Telangana	-	278	-	0.04	-	82.8
	All India	**10,820**	**6,005**	**5**	**4.5**	**94.9**	**91.7**

-: Nil / negligible.

Notes: 1. Components may not add up to total due to rounding off.

2. Recovery for the year 2015-16 is taken as on 30th June 2015.

Source : NABARD.

Appendix Table VI.4: Salient Indicators of Financial Health of District Central Co-operative Banks - Region and State-wise

(As at end-March)

(Amount in ₹ million)

Sr. No.	Region/State	2014-2015					2015-2016					2015		2016	
		No. of reporting DCCBs	Profit		Loss		No. of reporting DCCBs	Profit		Loss		NPA to Loans ratio (per cent)	Recovery to Demand (per cent) (At end-June)	NPA to Loans ratio (per cent)	Recovery to Demand (per cent) (At end-June) **
			No. of DCCBs	Amt.	No. of DCCBs	Amt.		No. of DCCBs	Amt.	No. of DCCBs	Amt.				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	Northern Region	**69**	**56**	**1,373**	**13**	**657**	**72**	**60**	**1,447**	**12**	**607**	**5.2**	**89.8**	**5.7**	**68.5**
1	Haryana	17	11	119	6	296	19	14	265	5	158	6.0	67.5	5.8	67.8
2	Himachal Pradesh	2	2	497	0	0	2	2	535	0	0	10.8	75.7	11.8	49.5
3	Jammu & Kashmir	3	2	61	1	54	3	1	25	2	243	15.4	56.3	15.1	49.3
4	Punjab	20	18	295	2	102	20	18	222	2	73	4.1	91.5	4.8	87.6
5	Rajasthan	27	23	401	4	206	28	25	399	3	133	3.6	89.9	3.8	88.3
	Eastern Region	**61**	**53**	**943**	**8**	**1,019**	**64**	**55**	**1,722**	**9**	**531**	**11.4**	**71.2**	**10.7**	**49.5**
6	Bihar	22	18	170	4	418	22	18	108	4	118	30.9	24.8	24.5	30.5
7	Jharkhand	6	2	32	4	601	8	7	417	1	11	43.1	18.8	47.6	25.2
8	Odisha	17	17	294	0	0	17	17	832	0	0	8.3	72.7	7.6	74.1
9	West Bengal	16	16	447	0	0	17	13	364	4	401	9.2	79.1	9.9	68.2
	Central Region	**103**	**77**	**3,327**	**26**	**3,196**	**104**	**85**	**3,395**	**19**	**1,950**	**14.3**	**74.3**	**13.0**	**60.9**
10	Chhattisgarh	6	6	833	0	0	6	6	738	0	0	15.8	77.6	14.9	72.4
11	Madhya Pradesh	38	33	1,289	5	446	38	34	1,284	4	706	14.4	74.3	13.3	61.0
12	Uttar Pradesh	49	30	786	19	2,584	50	36	961	14	1,076	13.9	71.8	13.2	49.0
13	Uttaranchal	10	8	420	2	166	10	9	412	1	169	9.6	81.7	8.5	61.1
	Western Region	**46**	**40**	**6,885**	**6**	**3,259**	**49**	**41**	**4,591**	**8**	**1,218**	**11.9**	**72.5**	**12.8**	**75.7**
14	Gujarat	18	16	1,288	2	475	18	17	1,309	1	6	5.7	89.9	5.8	86.0
15	Maharashtra	28	24	5,597	4	2,784	31	24	3,282	7	1,212	14.0	66.4	15.0	65.5
	Southern Region	**80**	**75**	**5,883**	**5**	**2,232**	**81**	**78**	**5,749**	**3**	**1,369**	**7.5**	**75.9**	**6.7**	**85.5**
16	Andhra Pradesh	13	11	542	2	1,134	13	12	568	1	139	8.2	52.1	5.7	83.0
17	Telangana	9	9	278	0	0	21	21	1,134	0	0	6.8	51.1	4.5	92.7
18	Karnataka	21	19	1,171	2	466	14	14	1,301	0	0	4.0	93.5	7.7	85.1
19	Kerala	14	14	1,466	0	0	24	22	2,504	2	1,229	8.2	87.4	8.1	79.0
20	Tamil Nadu	23	22	2,426	1	631	9	9	241	0	0	9.2	90.1	5.4	87.7
	All India	**359**	**301**	**18,412**	**58**	**10,363**	**370**	**319**	**16,903**	**51**	**5,675**	**9.4**	**77.3**	**9.3**	**79.6**

Notes: 1. Components may not add up to the exact total due to rounding off.

2. ** Recovery for the year 2015-16 is taken as on 30th June 2015.

Source : NABARD.

Appendix Table VI.5: Select Indicators of Primary Agricultural Credit Societies - State-wise *(Continued)*
(As at end-March 2016)

(Amount in ₹ million)

Sr. No.	State	Number of PACS	Deposits	Working Capital	Loans and Advances Outstanding		Societies in Profit	
					Agriculture	Non-Agriculture	Number	Amount
1	2	3	4	5	6	7	8	9
	Northern Region	**11,480**	**57,488**	**303,637**	**126,161**	**4,152**	**8,122**	**13,058**
1	Chandigarh	17	0.00	1	-	0.09	10	-
2	Haryana	711	5,048	121,404	108,087	3,675	99	123
3	Himachal Pradesh*	2,135	22,832	28,783	5,864	106	1,718	3
4	Jammu & Kashmir*	643	42	593	376	15	451	4
5	Punjab*	1,609	4,343	12,059	11,834	356	925	1,986
6	Rajasthan	6,365	25,223	140,798	N.A.	N.A.	4,919	10,943
	North-Eastern Region	**3,499**	**981**	**6,908**	**512**	**61**	**653**	**896**
7	Arunachal Pradesh*	34	-	194	-	-	13	45
8	Assam*	766	-	1,112.3	57	2	309	764
9	Manipur*	223	-	62	-	-	24	1
10	Meghalaya	179	74	363	187	17	54	5
11	Mizoram*	136	33	2,586	21	7	N.A.	N.A.
12	Nagaland*	1,719	642	1,125	20	36	N.A.	N.A.
13	Sikkim	174	N.A.	172	55	-	82	4
14	Tripura	268	232	1,295	173	-	171	76
	Eastern Region	**18,612**	**35,997**	**110,765**	**61,799**	**4,056**	**4,283**	**451**
15	Andaman and Nicobar Islands	46	15	89	110	-	20	1
16	Bihar*	8,463	1,753	5,082	-	-	1,180	60
17	Jharkhand	n.a	n.a	n.a	n.a	n.a	n.a	n.a
18	Odisha	2,701	15,318	59,297	47,815	1,648	739	185
19	West Bengal*	7,402	18,910	46,297	13,875	2,408	2,344	204
	Central Region	**15,478**	**22,054**	**134,683**	**64,509**	**2,810**	**8,205**	**2,373**
20	Chhattisgarh	1,333	4,705	38,656	16,400	388	912	758
21	Madhya Pradesh*	4,457	8,173	64,555	33,996	1,189	2,153	1,312
22	Uttarakhand*	759	8,495	18,880	6,110	1,234	604	125
23	Uttar Pradesh*	8,929	682	12,593	8,003	-	4,536	177
	Western Region	**29,977**	**9,892**	**293,525**	**193,832**	**10,072**	**14,998**	**572**
24	Goa	79	320	707	140	106	61	12
25	Gujarat	8,804	7,826	117,284	85,331	2,224	6,013	519
26	Maharashtra	21,094	1,746	175,535	108,360	7,742	8,924	41
	Southern Region	**14,321**	**884,242**	**1,163,526**	**305,298**	**486,723**	**8,980**	**23,166**
27	Andhra Pradesh	2,050	13,434	89,335	56,405	7,130	1,287	1,819
28	Telangana	798	3,745	N.A.	7,701	2,357	485	1,655
29	Karnataka	5,337	58,599	180,377	99,507	N.A.	3,867	320
30	Kerala	1,647	727,235	689,034	69,554	368,633	1,033	8,269
31	Puducherry	53	1,306	1,979	370	39	19	17
32	Tamil Nadu	4,436	79,923	202,800	71,761	108,565	2,289	11,086
	All India	**93,367**	**1,010,655**	**2,013,044**	**752,111**	**507,875**	**45,241**	**40,516**

-: Nil / negligible. n.a. = not applicable, N.A. = Not Available
Notes: 1.*: Data relate to previous year.
2. Data are provisional for 2015-16.
Source: NAFSCOB.

Appendix Table VI.5: Select Indicators of Primary Agricultural Credit Societies - State-wise *(Concluded)*

(As at end-March 2016)

(Amount in ₹ million)

Sr. No.	State	Societies in Loss		Viable	Potentially viable	Dormant	Defunct	Others
		Number	Amount					
1	2	10	11	12	13	14	15	16
	Northern Region	**2,771**	**15,569**	**2,259**	**1,767**	**61**	**189**	**7,204**
1	Chandigarh	2	-	12	-	-	5	-
2	Haryana	612	3,558	N.A.	N.A.	N.A.	N.A.	711
3	Himachal Pradesh*	343	-	476	1,582	51	6	20
4	Jammu & Kashmir*	86	1	463	66	10	96	8
5	Punjab*	472	8,289	1,308	119	-	82	100
6	Rajasthan	1,256	3,721	N.A.	N.A.	N.A.	N.A.	6,365
	North-Eastern Region	**872**	**1,150**	**1,876**	**442**	**681**	**384**	**116**
7	Arunachal Pradesh*	19	72	20	5	4	5	-
8	Assam*	419	991	709	57	-	-	-
9	Manipur*	194	-	223	-	-	-	-
10	Meghalaya	125	68	34	123	22	-	-
11	Mizoram*	N.A.	N.A.	15	5	-	-	116
12	Nagaland*	N.A.	N.A.	457	228	655	379	-
13	Sikkim	18	-	158	16	-	-	-
14	Tripura	97	19	260	8	-	-	-
	Eastern Region	**9,883**	**2,790**	**14,140**	**2,878**	**586**	**411**	**597**
15	Andaman & Nicobar Island	24	6	39	5	-	2	-
16	Bihar*	3,962	9	8,463	-	-	-	-
17	Jharkhand	n.a	n.a	n.a	n.a	n.a	n.a	n.a
18	Odisha	1,861	2,630	1,709	616	10	1	365
19	West Bengal*	4,036	145	3,929	2,257	576	408	232
	Central Region	**4,664**	**3,221**	**12,413**	**2,430**	**393**	**172**	**70**
20	Chhattisgarh	421	1,382	1,141	192	-	-	-
21	Madhya Pradesh*	2,129	1,782	3,663	720	4	-	70
22	Uttarakhand*	146	41	494	249	7	9	-
23	Uttar Pradesh*	1,968	15	7,115	1,269	382	163	-
	Western Region	**13,576**	**548**	**20,979**	**8,129**	**642**	**153**	**74**
24	Goa	17	13	60	9	9	1	-
25	Gujarat	1,820	456	4,862	3,157	579	132	74
26	Maharashtra	11,739	79	16,057	4,963	54	20	-
	Southern Region	**4,929**	**41,244**	**10,383**	**2,969**	**275**	**169**	**525**
27	Andhra Pradesh	679	2,584	1,538	436	6	-	70
28	Telangana	231	1,238	798	-	-	-	-
29	Karnataka	1,470	460	3,657	1,143	132	80	325
30	Kerala	514	6,312	1,464	142	26	12	3
31	Puducherry	34	166	19	34	-	-	-
32	Tamil Nadu	2,001	30,484	2,907	1,214	111	77	127
	All India	**36,695**	**64,521**	**62,050**	**18,615**	**2,638**	**1,478**	**8,586**

-: Nil / negligible. n.a. = not applicable, N.A. = Not Available.
Notes: 1.*: Data relate to previous year.
2. Data are provisional for 2015-16.
Source: NAFSCOB.

Appendix Table VI.6: Major Financial Indicators of State Co-operative Agriculture and Rural Development Banks - State-wise
(As at end-March)

(Amount in ₹ million)

Sr. No.	Region/State	Branches	Profit/Loss		NPA to Loans ratio (per cent)		Recovery Ratio@@ (per cent) (at End-June)	
		2016	2015	2016**	2015	2016	2015	2016
1	2	3	4	5	6	7	8	9
	Northern Region	**84**	**-113**	**307**	**32.4**	**34.8**	**45.1**	**44.8**
1	Haryana @	0	-431	-	63.4	73.0	28.2	28.2
2	Himachal Pradesh #	33	96	-	37.2	26.4	53.4	54.7
3	Jammu & Kashmir*	51	-64	-	13.0	11.5	41.7	50.6
4	Punjab @	0	249	254	1.4	3.6	84.2	86.2
5	Rajasthan @	0	37	52	39.7	38.5	39.1	35.8
	North-Eastern Region	**5**	**-3**	**7**	**60.7**	**41.4**	**50.7**	**44.0**
6	Assam*	-	-2	-	91.4	-	13.5	-
7	Tripura*	5	-2	7	50.7	41.4	62.3	44.0
	Eastern Region	**2**	**-451**	**6**	**36.8**	**25.0**	**28.2**	**38.1**
8	Bihar*	-	-205	-	100.0	-	7.8	-
9	Odisha@	-	-3	-	100.0	-	0.0	-
10	West Bengal #	2	-242	6	26.9	25.0	57.2	38.1
	Central Region	**323**	**-1,776**	**152**	**50.3**	**42.5**	**41.8**	**44.4**
11	Chhattisgarh @	-	-	-	-	-	-	-
12	Madhya Pradesh @	-	-1,976	-	86.3	-	3.7	-
13	Uttar Pradesh *	323	200	152	38.1	42.5 ^	60.1	44.4
	Western Region	**181**	**-1,807**	**241**	**80.9**	**48.9**	**15.3**	**42.5**
14	Gujarat*	181	241	241	46.5	48.9	43.2	42.5
15	Maharashtra @	-	-2,048	-	99.9	-	0.0	-
	Southern Region	**40**	**256**	**271**	**6.9**	**6.4**	**75.8**	**83.0**
16	Karnataka @	25	1	1	23.3	23.5	42.1	35.0
17	Kerala @	14	234	243	1.1	0.5	98.7	98.8
18	Puducherry*	1	-6	-	9.1	5.5	74.9	94.9
19	Tamil Nadu @	0	27	27	5.5	9.1	94.9	74.9
	All India	**635**	**-3,894**	**982**	**30.3**	**16.6**	**46.7**	**63.6**

- : Nil / negligible @ Federal structure. # Mixed structure. * Unitary structure ^ Data taken from NAFCARD.

Notes: 1. Components may not add up to the exact total/s due to rounding off.
2. In Chhattisgarh the Short-term co-operative credit structure merged with Long-term during 2014-15. Also Assam, Bihar, Odisha, Madhya Pradesh and Maharashtra are no longer functional SCARDBs.
3. @@: Recovery for the year 2015-16 is taken as on 30th June 2015.
4. In Tamil Nadu, branches were closed in 2014-15.
5. **: In 2016, figures were reported only for the profit-making institutions.

Source: NABARD.

Appendix Table VI.7: Major Financial Indicators of Primary Co-operative Agriculture and Rural Development Banks – State-wise

(As at end-March)

(Amount in ₹ million)

State	2014-15				2015-16				NPAs to Loans ratio (per cent)		Recovery ratio (per cent) (At end-June)	
	Profit		Loss		Profit		Loss					
	Number	Amount	Number	Amount	Number	Amount	Number	Amount	2015	2016	2015	2016
1	2	3	4	5	6	7	8	9	10	11	12	13
Northern Region	**86**	**360**	**59**	**2,593**	**58**	**467**	**106**	**2,769**	**43.2**	**46.8**	**40.1**	**41.4**
Haryana	1	32	18	1,465	1	10	18	1,007	67.1	62.3	59.2	29.3
Himachal Pradesh	1	2	0	0	9	139	11	-	5.5	58.3	60.7	60.0
Punjab	65	249	24	717	31	254	58	1,280	28.8	38.7	32.6	61.7
Rajasthan	19	77	17	411	17	64	19	482	43.0	43.0	40.1	35.3
Central Region	**7**	**11**	**31**	**503**	**-**	**-**	**-**	**-**	**68.4**	**-**	**8.4**	**-**
Chhattisgarh	-	-	-	-	-	-	-	-	-	-	-	-
Madhya Pradesh	7	11	31	503	-	-	-	-	68.4	-	8.4	-
Eastern Region	**6**	**48**	**64**	**401**	**9**	**54**	**15**	**218**	**43.2**	**43.4**	**57.6**	**38.5**
Odisha	0	0	46	91	-	-	-	-	100.0	0.0	6.1	-
West Bengal	6	48	18	310	9	54	15	218	42.0	43.4	60.0	38.5
Western Region	**11**	**675**	**18**	**433**	**-**	**-**	**-**	**-**	**100.0**	**0.0**	**15.4**	**-**
Maharashtra	11	675	18	433	-	-	-	-	100.0	0.0	15.4	-
Southern Region	**209**	**664**	**209**	**1,649**	**239**	**657**	**174**	**1,649**	**23.2**	**22.0**	**72.0**	**69.0**
Karnataka	50	117	127	514	80	110	92	514	17.9	16.6	80.8	67.5
Kerala	40	236	21	919	40	236	21	919	26.5	26.5	76.3	76.3
Tamil Nadu	119	311	61	216	119	311	61	216	14.3	14.3	32.1	32.1
All India	**319**	**1,758**	**381**	**5,579**	**306**	**1,178**	**295**	**4,636**	**36.2**	**37.0**	**44.6**	**43.6**

-: Not applicable.

Notes: 1. Components may not add up to the exact total due to rounding off.

2. In Chhattisgarh the Short-term co-operative credit structure merged with Long-term during 2014-15. Also Maharashtra, Madhya Pradesh and Odisha structures are no longer functional.

3. Recovery for the year 2015-16 is taken as on 30th June, 2016.

Source: NABARD.

Appendix Table VII.1: Credit to Various Sectors by NBFCs
(End-March)

(Amount in ₹ billion)

Items	2016	2017	Share in 2017 (Per cent)	Percentage variation
1	2	3	4	5
I. Gross advances	**13,169**	**14,846**	**100**	**12.7**
II. Non-food credit (1 to 5)	**13,167**	**14,846**	**100**	**12.8**
1. Agriculture and allied activities	**392**	**346**	**2.3**	**-11.7**
2. Industry	**8,063**	**8,940**	**60.2**	**10.9**
2.1 Micro and small	326	508	3.4	55.8
2.2 Medium	154	172	1.2	11.7
2.3 Large	3,726	4,375	29.5	17.4
2.4 Others	3,857	3,885	26.2	0.7
3. Services	**1,865**	**2,224**	**15.0**	**19.2**
3.1 Transport operators	162	173	1.2	6.8
3.2 Computer software	11	6	0	-45.5
3.3 Tourism, hotel and restaurants	49	60	0.4	22.4
3.4 Shipping	11	7	0.1	-36.4
3.5 Professional services	47	71	0.5	51.1
3.6 Trade	279	230	1.6	-17.6
3.6.1 Wholesale trade (other than food procurement)	99	60	0.4	-39.4
3.6.2 Retail trade	180	170	1.1	-5.6
3.7 Commercial real estate	566	958	6.5	69.3
3.8 NBFCs	208	198	1.3	-4.8
3.9 Aviation	5	6	0	20.0
3.10 Other services	526	514	3.5	-2.3
4. Retail loans	**2,047**	**2,490**	**16.8**	**21.6**
4.1 Housing loans (incl. priority sector housing)	147	106	0.7	-27.9
4.2 Consumer durables	31	57	0.4	83.9
4.3 Credit card receivables	92	138	0.9	50.0
4.4 Vehicle / auto loans	1,150	1,035	7.0	-10.0
4.5 Education loans	32	44	0.3	37.5
4.6 Advances against fixed deposits (incl. FCNR (B), etc.)	1	2	0	100.0
4.7 Advances to individuals against shares, bonds, etc.	78	124	0.8	59.0
4.8 Other retail loans	516	984	6.6	90.7
5. Other non-food credit	**801**	**847**	**5.7**	**5.7**

Notes: 1) This format of reporting of credit to various sectors was introduced from March 31, 2016. Hence, the comparable data for previous years are not available.
2) Food credit in 2015-16 was approximately ₹ 1 billion and nil in 2016-17.

Source: RBI Supervisory Returns.

Appendix Table VII.2: Financial Assistance Sanctioned and Disbursed by Financial Institutions (*Continued*)

(Amount in ₹ billion)

Institutions	Loans*				Underwriting and direct subscription			
	2015-16		2016-17		2015-16		2016-17	
	S	D	S	D	S	D	S	D
1	2	3	4	5	6	7	8	9
A. All India Financial Institutions (1 to 4)	**3,332**	**2,874**	**3,822**	**3,043**	**6**	**1**	**12**	**3**
1. NABARD	1,695	1,582	2,401	1,977	0	0	0	0
2. SIDBI	555	558	394	392	6	1	12	3
3. EXIM Bank	726	518	648	447	0	0	0	0
4. NHB**	357	217	379	228	0	0	0	0
B. Specialised Financial Institutions (5, 6 and 7)	**11**	**7**	**13**	**7**	**1**	**1**	**2**	**2**
5. IVCF	4	3	3	2	0	0	0	0
6. ICICI venture	–	–	–	–	–	–	–	–
7. TFCI	6	4	10	5	1	1	2	2
C. Investment Institutions (8 and 9)	**21**	**12**	**3**	**8**	**392**	**381**	**684**	**329**
8. LIC	21	12	3	8	391	381	683	328
9. GIC	0	0	0	0	0	0	0	0
D. Financial Institutions (A+B+C)	**3,363**	**2,893**	**3,837**	**3,058**	**398**	**383**	**698**	**333**
E. State Level Institutions (10 and 11)								
10. SFCs	..	..	..	..	..	..	..	..
11. SIDCs	..	..	..	..	..	..	..	..
F. Total Assistance by All Financial Institutions (D+E)	**3,363**	**2,893**	**3,837**	**3,058**	**398**	**383**	**698**	**333**

Appendix Table VII.2: Financial Assistance Sanctioned and Disbursed by Financial Institutions (*Concluded*)

(Amount in ₹ billion)

Institutions	Others#				Total				Percentage Variation	
	2015-16		2016-17		2015-16		2016-17		2016-17	
	S	D	S	D	S	D	S	D	S	D
1	10	11	12	13	14	15	16	17	18	19
A. All India Financial Institutions (1 to 4)	**27**	**35**	**61**	**91**	**3,366**	**2,912**	**3,895**	**3,137**	**15.7**	**7.7**
1. NABARD	0	0	0	0	1,695	1,582	2,401	1,977	41.7	25.0
2. SIDBI	1	1	0	0	561	559	406	395	-27.7	-29.4
3. EXIM Bank	27	33	61	85	753	552	709	531	-5.8	-3.6
4. NHB**	0	2	0	6	357	219	379	234	6.2	6.8
B. Specialised Financial Institutions (5, 6 and 7)	**0**	**0**	**0**	**0**	**11**	**8**	**14**	**9**	**28.5**	**17.2**
5. IVCF	0	0	0	0	4	3	3	2	-31.0	-32.1
6. ICICI venture	–	–	–	–	–	–	–	–	–	–
7. TFCI	0	0	0	0	7	4	12	7	63.3	49.3
C. Investment Institutions (8 and 9)	**1**	**1**	**1**	**1**	**413**	**394**	**687**	**337**	**66.3**	**-14.4**
8. LIC	1	1	1	1	413	394	687	337	66.3	-14.5
9. GIC	0	0	0	0	0	0	0	0	16.1	16.1
D. Financial Institutions (A+B+C)	**29**	**37**	**62**	**92**	**3,790**	**3,313**	**4,597**	**3,483**	**21.3**	**5.1**
E. State Level Institutions (10 and 11)										
10. SFCs	..	..	..	..	..	..	..	..	..	..
11. SIDCs	..	..	..	..	..	..	..	..	..	..
F. Total Assistance by All Financial Institutions (D+E)	**29**	**37**	**62**	**92**	**3,790**	**3,313**	**4,597**	**3,483**	**21.3**	**5.1**

S: Sanctions. D: Disbursements. _: Nil .. : Not Available.
*: Loans include rupee loans and foreign currency loans.
**: End-June for NHB.
#: Others include guarantees.
Notes: 1. Data for 2016-17 are provisional.
2. Components may not add up to the whole due to rounding off.
Source: Respective financial institutions.

Appendix Table VII.3: Financial Performance of Primary Dealers (*Continued*)

(Amount in ₹ million)

Sl. No.	Name of the Primary Dealers	Year	Income			
			Interest income (including discount income)	Trading profit	Other income	Total income
1	2	3	4	5	6	7
1	STCI Primary Dealer Ltd.	2014-15	2,902	1,182	50	4,133
		2015-16	3,591	-174	25	3,441
		2016-17	3,595	2,413	18	6,027
2	SBI DFHI Ltd.	2014-15	3,545	780	44	4,369
		2015-16	3,608	648	43	4,300
		2016-17	3,753	2,223	33	6,009
3	ICICI Securities Primary Dealership Ltd.	2014-15	9,103	3,528	458	13,088
		2015-16	10,305	2,890	425	13,619
		2016-17	10,479	5,192	599	16,270
4	PNB Gilts Ltd.	2014-15	3,329	755	22	4,107
		2015-16	3,596	-184	31	3,443
		2016-17	3,132	1,858	17	5,007
5	Morgan Stanley India Primary Dealer Pvt. Ltd.	2014-15	2,489	252	31	2,773
		2015-16	2,433	338	43	2,814
		2016-17	1,914	500	25	2,439
6	Nomura Fixed Income Securities Pvt. Ltd.	2014-15	1,733	812	9	2,554
		2015-16	1,894	-110	9	1,794
		2016-17	3,084	1,260	7	4,351
7	Goldman Sachs (India) Capital Markets Pvt. Ltd.	2014-15	1,022	406	10	1,437
		2015-16	1,117	-324	12	805
		2016-17	1,369	824	7	2,200
	Total	**2014-15**	**24,122**	**7,716**	**624**	**32,461**
		2015-16	**26,545**	**3,083**	**588**	**30,216**
		2016-17	**27,325**	**14,271**	**705**	**42,302**

Appendix Table VII.3: Financial Performance of Primary Dealers *(Concluded)*

(Amount in ₹ million)

Sl. No.	Name of the Primary Dealers	Year	Expenditure			Profit before tax	Profit after tax	Return on net worth (per cent)
			Interest expenses	Other expenses	Total expenditure			
1	2	3	8	9	10	11	12	13
1	STCI Primary Dealer Ltd.	2014-15	2,502	319	2,822	1,311	801	21.5
		2015-16	3,057	249	3,306	136	92	2.4
		2016-17	2,920	349	3,269	2,757	1,784	36.4
2	SBI DFHI Ltd.	2014-15	2,681	284	2,965	1,404	935	9.4
		2015-16	2,918	291	3,209	1,090	723	7.1
		2016-17	2,973	350	3,322	2,687	1,757	16.0
3	ICICI Securities Primary Dealership Ltd.	2014-15	8,643	1,090	9,733	3,355	2,180	26.3
		2015-16	9,451	1,148	10,598	3,021	1,955	21.9
		2016-17	8,659	1,279	9,938	6,332	4,114	40.3
4	PNB Gilts Ltd.	2014-15	2,605	176	2,781	1,326	888	11.9
		2015-16	2,756	172	2,929	515	345	4.6
		2016-17	2,257	214	2,471	2,535	1,653	19.1
5	Morgan Stanley India Primary Dealer Pvt. Ltd.	2014-15	2,075	210	2,285	488	321	6.7
		2015-16	1,971	194	2,165	649	422	8.0
		2016-17	1,327	166	1,492	946	618	10.6
6	Nomura Fixed Income Securities Pvt. Ltd.	2014-15	1,231	321	1,553	1,002	663	11.6
		2015-16	1,381	341	1,722	72	46	0.8
		2016-17	2,249	454	2,704	1,647	1,056	16.3
7	Goldman Sachs (India) Capital Markets Pvt. Ltd.	2014-15	649	308	956	481	313	6.5
		2015-16	741	252	993	-188	-128	-2.7
		2016-17	981	310	1,291	909	654	12.4
	Total	**2014-15**	**20,387**	**2,707**	**23,094**	**9,367**	**6,099**	**13.6**
		2015-16	**22,275**	**2,647**	**24,922**	**5,294**	**3,455**	**7.5**
		2016-17	**21,367**	**3,122**	**24,489**	**17,813**	**11,634**	**22.2**

Notes: 1. Deutsche securities had surrendered its PD license *w.e.f.* March 28, 2014.
2. All amounts are rounded off to the nearest million.

Source: Returns submitted by the Primary Dealers.

Appendix Table VII.4: Select Financial Indicators of Primary Dealers *(Continued)*

(Amount in ₹ billion)

Sr. No.	Name of the Primary Dealers	Capital funds (Tier I + Tier II + Eligible Tier III)				CRAR (Per cent)			
		2013-14	2014-15	2015-16	2016-17	2013-14	2014-15	2015-16	2016-17
1	2	3	4	5	6	7	8	9	10
1	SBI DFHI Ltd.	9	10	10	10	95	75	38	91
2	ICICI Securities Primary Dealership Ltd.	12	12	12	13	42	27	25	26
3	Nomura Fixed Income Securities Pvt. Ltd.	5	6	6	7	34	26	53	52
4	STCI Primary Dealer Ltd.	3	4	4	5	21	24	24	39
5	Morgan Stanley India Primary Dealer Pvt. Ltd.	5	5	5	6	69	97	143	82
6	PNB Gilts Ltd.	7	7	7	8	49	65	70	51
7	Goldman Sachs (India) Capital Markets Pvt. Ltd.	5	5	5	5	52	39	164	155
	Total	**45**	**48**	**49**	**55**	**46**	**40**	**42**	**47**

Appendix Table VII.4: Select Financial Indicators of Primary Dealers *(Concluded)*

(Amount in ₹ billion

Sr. No.	Name of the Primary Dealers	Stock of government securities and treasury bills (Market value)				Total assets (Net of current liabilities and provisions)			
		2013-14	**2014-15**	**2015-16**	**2016-17**	**2013-14**	**2014-15**	**2015-16**	**2016-17**
1	2	11	12	13	14	15	16	17	18
1	SBI DFHI Ltd.	25	29	42	20	9	10	10	30
2	ICICI securities Primary Dealership Ltd.	60	99	123	66	94	139	145	108
3	Nomura Fixed Income Securities Pvt. Ltd.	11	9	19	12	5	6	6	27
4	STCI Primary Dealer Ltd.	14	31	42	36	3	4	4	53
5	Morgan Stanley India Primary Dealer Pvt. Ltd.	19	32	19	20	11	31	20	34
6	PNB Gilts Ltd.	24	31	34	32	7	7	7	44
7	Goldman Sachs (India) Capital Markets Pvt. Ltd.	13	18	23	11	13	18	24	15
	Total	**165**	**249**	**301**	**196**	**142**	**214**	**216**	**312**

Note: Amount rounded off to the nearest billion.
Source: Returns submitted by the Primary Dealers.