Peer Review of India

Review Report

17 August 2016

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Table of Contents

Foreword

Financial Stability Board (FSB) member jurisdictions have committed, under the FSB Charter and in the *FSB Framework for Strengthening Adherence to International Standards,*[1] to undergo periodic peer reviews. To fulfil this responsibility, the FSB has established a regular programme of country and thematic peer reviews of its member jurisdictions.

Country reviews focus on the implementation and effectiveness of regulatory, supervisory or other financial sector standards and policies agreed within the FSB, as well as their effectiveness in achieving desired outcomes. They examine the steps taken or planned by national authorities to address International Monetary Fund (IMF)-World Bank Financial Sector Assessment Program (FSAP) and Report on the Observance of Standards and Codes (ROSC) recommendations on financial regulation and supervision as well as on institutional and market infrastructure that are deemed most important and relevant to the FSB's core mandate of promoting financial stability. Country reviews can also focus on regulatory, supervisory or other financial sector policy issues not covered in the FSAP that are timely and topical for the jurisdiction itself and for the broader FSB membership. Unlike the FSAP, a peer review does not comprehensively analyse a jurisdiction's financial system structure or policies, or its compliance with international financial standards.

FSB jurisdictions have committed to undergo an FSAP assessment every 5 years; peer reviews taking place 2-3 years following an FSAP will complement that cycle. As part of this commitment, India volunteered to undergo a peer review in 2015.

This report describes the findings and conclusions of the India peer review, including the key elements of the discussion in the FSB's Standing Committee on Standards Implementation (SCSI) on 27 June 2016. It is the seventeenth country peer review conducted by the FSB, and it is based on the objectives and guidelines for the conduct of peer reviews set forth in the *Handbook for FSB Peer Reviews.*[2]

The analysis and conclusions of this peer review are based on the Indian financial authorities' responses to a questionnaire and reflect information on the progress of relevant reforms as of March 2016. The review has also benefited from dialogue with the Indian authorities as well as discussion in the FSB SCSI.

The draft report for discussion was prepared by a team chaired by Masamichi Kono (vice Minister for International Affairs, Japan Financial Services Agency) and comprising Francesco Columba (Bank of Italy), Glenn Hoggarth (Bank of England), Jose Luis Luz Lara (National Banking and Securities Commission, Mexico) and Robert Skinkle (Office of the Comptroller of the Currency, United States). Ricardo Moura and Costas Stephanou (both FSB Secretariat) provided support to the team and contributed to the preparation of the peer review report.

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[1] See http://www.fsb.org/2010/01/r_100109a/.

[2] See http://www.fsb.org/2015/03/handbook-for-fsb-peer-reviews/.

Abbreviations

AFC	Asset Finance Company
AFS	Available for Sale
AFI	Annual financial inspection
AMPF	Agreement on Monetary Policy Framework
ASM	Available Solvency Margin
BCBS	Basel Committee on Banking Supervision
BFS	Board for Financial Supervision (RBI)
BIS	Bank for International Settlements
CC	Clearing corporation
CCIL	Clearing Corporation of India
CCP	Central counterparty
CCyB	Countercyclical capital buffer
CICI	Core Investment Company
COR	Certificate of Registration
CRAR	Capital adequacy ratio
CRE	Commercial real estate
CRILC	Central Repository of Information on Large Credits
CPMI	Committee on Payments and Market Infrastructures
DCCB	District Central Cooperative Bank
DEA	Department of Economic Affairs (Ministry of Finance)
DFS	Department of Financial Services (Ministry of Finance)
D-SIB	Domestic Systemically Important Bank
ECB	External Commercial Borrowings
EoL	Exchange of Letters
EPFO	Employees’ Provident Fund Organisation
EWG	Early Warning Group (under FSDC-SC)
FATF	Financial Action Task Force
FC	Financial conglomerate
FDMC	Financial Data Management Centre
FII	Foreign institutional investor
FMI	Financial market infrastructures
FPI	Foreign portfolio investor
FSAP	Financial Sector Assessment Program
FSB	Financial Stability Board
FSDC	Financial Stability and Development Council
FSDC-SC	Financial Stability and Development Council Sub-Committee
FSLRC	Financial Sector Legislative Reforms Commission
FSR	Financial Stability Report
FSU	Financial Stability Unit (RBI)
FPI	Foreign Portfolio Investor
FX	Foreign exchange
GDP	Gross domestic product
HFC	Housing Finance Company
HTM	Held to maturity
IAIS	International Association of Insurance Supervisors
IC	Investment Company
IDF	Infrastructure Debt Fund
IFC	Infrastructure Finance Company
IMF	International Monetary Fund
INR	Indian Rupee
IOSCO	International Organization of Securities Commissions
IRDAI	Insurance Regulatory and Development Authority of India

IRF	Inter Regulatory Forum for financial conglomerates (under FSDC-SC)
IRTG	Inter Regulatory Technical Group (under FSDC-SC)
IT	Information technology
LC	Loan Company
LCR	Liquidity Coverage Ratio
LIC	Life Insurance Corporation of India
LTV	Loan-to-value
MCA	Ministry of Corporate Affairs
MFI	Micro Finance Institution
MGC	Mortgage Guarantee Company
MMF	Money market fund
MoF	Ministry of Finance
MoU	Memorandum of Understanding
MSME	Micro, small and medium enterprises
NBFC	Non-Banking Financial Company
NBFC-D	Non-Banking Financial Companies Deposit accepting
NBFC-ND	Non-Banking Financial Companies Non-Deposit accepting
NBFC-ND-SI	Non-Banking Financial Companies Non-Deposit accepting Systemically Important
NBFEs	Non-bank financial entities
NHB	National Housing Bank
NOF	Net owned funds
NOFHC	Non-Operative Financial Holding Company
NPA	Non-performing asset
NPS	National Pension System
NSFR	Net Stable Funding Ratio
NTO	No Technical Obstacle
PFMIs	Principles for Financial Market Infrastructures
PFRDA	Pension Fund Regulatory and Development Authority
PSB	Public Sector Bank
RBI	Reserve Bank of India
RBS	Risk-based supervision
RC	Resolution Corporation
RRB	Regional Rural Bank
RSM	Required Solvency Margin
SBI	State Bank of India
SBIG	Shadow Banking Implementation Group
SCB	Scheduled Commercial Bank
SDL	State Development Loan
SEBI	Securities and Exchange Board of India
SGF	Settlement Guarantee Fund
SLCC	State Level Coordination Committee
SLR	Statutory Liquidity Ratio
SME	Small and medium enterprises
SoC	Statement of Cooperation
SPARC	Supervisory Program for Assessment of Risk and Capital
StCB	State Cooperative Bank
UCB	Urban Cooperative Bank

Executive summary

Background and objectives

The main purpose of this peer review is to examine two topics that are relevant for financial stability and important for India: the macroprudential policy framework, and the regulation and supervision of non-banking finance companies (NBFCs) and housing finance companies (HFCs). The peer review focuses on the steps taken by the Indian authorities to implement reforms in these areas, including by following up on relevant FSAP and FSB recommendations.

Main findings

Progress has been made in developing the macroprudential policy framework and in strengthening the regulation and supervision of NBFCs and HFCs in recent years. However, there is additional work to be done in both areas. On the macroprudential framework, this involves fleshing out institutional and operational arrangements, strengthening risk analysis and more closely linking it to decision-making, and enhancing public communication. On NBFCs and HFCs, this involves additional data collection and analysis, enhanced risk assessments, a regular review of the regulatory perimeter, and a more activity-based and risk-sensitive framework for these entities. All of these tasks are not unique to India, reflecting challenges faced by many other jurisdictions, and need to be considered as part of managing the transition to a more diverse and interconnected financial system.

Macroprudential policy framework

The authorities have taken important steps in recent years to develop the macroprudential policy framework and to address relevant FSAP recommendations. The Financial Stability and Development Council (FSDC), its sub-committee (FSDC-SC) and technical groups are well bedded down and discuss a range of financial stability issues, which has helped improve inter-agency coordination. A Memorandum of Understanding (MoU) was signed between relevant regulatory authorities in 2013 to forge greater cooperation in consolidated supervision and monitoring of financial conglomerates. The Reserve Bank of India (RBI) has expanded the use of quantitative techniques and stress tests to gauge systemic risks, especially to the commercial banking sector, while the main findings (reflecting the contributions of various authorities) are reviewed by the FSDC-SC and published in the Financial Stability Report (FSR). Progress has also been made in addressing data gaps, for example via the creation of a Central Repository of Information on Large Credits and collection of data on corporates' foreign currency exposures and their hedging; steps are underway by the FSDC to form a Financial Data Management Centre to facilitate information sharing and analysis. Finally, the RBI has a wide range of time-varying and structural tools for macroprudential purposes and has used them to deal with financial stability risks, such as in the housing market and from capital flow volatility.

Building on these accomplishments, as with most countries, additional work is needed to flesh out and operationalise a comprehensive macroprudential policy framework. Much of this work relates to making macroprudential policy-setting more explicit, with clearer boundaries between authorities and with other policies, as well as in balancing the objectives of promoting financial development and inclusion. Experience from other countries indicates a variety of institutional arrangements for macroprudential policy, which take into account country-specific circumstances and preferences. It is beyond the scope of this review to prescribe the specific institutional configuration that may be appropriate for India. As such, the recommendations primarily focus on desired objectives and tasks rather than on specific institutional design.

- ***Institutional and operational arrangements:*** There is at present no single authority or body that is explicitly tasked with macroprudential policy for the financial system as a whole. The FSDC is a forum for enhancing inter-agency coordination for financial stability, but it does not have legal underpinnings and has a broader mandate that includes financial sector development and inclusion. Setting regulatory policy is done by individual regulatory authorities. Given the largely bank-based system, macroprudential analysis and policy is mainly carried out by the RBI. The RBI has a legal mandate to secure monetary stability, but since 2004 it has voluntarily included financial stability as an additional objective in view of its contribution to the conduct of monetary policy and to price stability.

  The macroprudential policy at the RBI has developed organically from micro-prudential regulation and supervision, and the same internal processes are used for decision making purposes. Financial stability analysis is not closely linked to decision-making and, with the exception of the countercyclical capital buffer and additional capital requirements for domestic systemically important banks, there is no formal regular process to review whether changes in the overall macroprudential policy stance are required. It would be useful if the systemic risk analysis and possible options to address identified risks were considered simultaneously so as to ensure policy coherence and analytical focus on the implications of macroprudential decisions on the financial system and the economy. Consideration could therefore be given to having an explicit and distinct process for macroprudential policy centred around regular meetings within the RBI.

  The FSDC and its sub-committee have played a useful role in identifying and discussing possible financial system risks, although policy responses remain the responsibility of its member authorities. As the system develops and becomes less centred on banks, there will be a need to extend coverage of macroprudential policy to financial markets and non-bank financial entities. This would require more analysis on the financial system as a whole, the interaction of its constituent parts and how they respond to changes in macroprudential policy. This suggests the need to clarify expectations on the way that different authorities can contribute to the macroprudential policy framework via the FSDC, while ensuring the leading role of the RBI given its prudential mandate and technical expertise.

- ***Analysis and data*:** Going forward, it would be useful for the RBI's systemic risk analysis to become more policy-oriented so that it can support decision-making for macroprudential purposes. This would involve producing a regular integrated assessment of risks backed by 'chart packs' for policy meetings, with risk heat maps and tables that map financial stability objectives into a set of key indicators. This standardized set of indicators could also be used by the FSDC and its sub-committee to discuss systemic risks and policy responses.

  The RBI currently carries out banking system stress tests mainly applying scenarios directly to banks' balance sheets. These could be enhanced in various ways. First, models could be further developed to assess the impact of adverse macro scenarios on banks' borrowers – especially those most at risk – and then, in turn, how a deterioration in their balance sheets would feed back to banks' own balance sheets. At present, such adverse scenarios could be applied to highly indebted corporates and include their foreign currency maturity mismatches. Moreover, the authorities should continue to develop techniques that assess financial stability risks outside the banking sector, including linkages between banks and other financial institutions and markets and the impact of external shocks on capital flows.

It would also be useful to continue to increase the coverage and consistency of data on corporate balance sheets. At present, information on corporates' foreign currency hedging is collected by banks, which incur incremental provisioning and capital requirements for loans to entities with unhedged foreign exposures. The quality of this information is expected to improve significantly since the Institute of Chartered Accountants of India has recently mandated corporates to disclose their unhedged foreign currency exposures in their annual accounts. However, one missing data point that has become significant in a number of other large emerging markets is foreign exchange debt raised abroad by subsidiaries of domestically-owned companies. Focusing solely on domestic resident entities may lead to an understatement of overall group foreign exchange leverage and risks.

As in most countries, corporate sector and macro data more generally tends to be available only on an infrequent basis and after a time lag. As a result, the financial stability function within the RBI relies on quarterly (or less frequent) data in preparing the FSR, and it is not generally involved in more regular surveillance. Financial market information can help to fill data gaps, especially on timeliness. Aside from data on financial market prices, it may be useful to make more use in the FSR of the information gathered from meetings and contacts with the private sector to complement the in-house desk-based analysis.

- ***Tools for macroprudential policy*:** Most regulatory tools fall within the purview of the RBI, which has broad powers to issue directions to banks under the Banking Regulation Act. The RBI has used a wide range of time-varying (differentiated by sector) cross-sectional and structural tools for macroprudential purposes. At present there is no explicit quantitative analysis of the cost-benefit implications of different macroprudential actions, either on an *ex ante* or *ex post* basis, including in terms of their overall impact and potential spillovers or leakages. This is a challenge faced by regulatory authorities in many other countries, but having such analysis is an important prerequisite to be able to judge whether an appropriate and commensurate policy response is being adopted.

  Both the FSDC and some of the individual regulators (such as the RBI) have quite broad mandates that go beyond financial stability. While it is understandable that financial development and inclusion are key policy objectives, they could in principle occasionally come into conflict with maintaining financial stability. At present there is no explicit mechanism in place within the RBI or FSDC to consider potential trade-offs between financial stability and financial development or inclusion. The authorities report that, in practice, there has been no conflict thus far and that they view a deeper financial system as contributing to increased financial stability. On the other hand, as noted by the IMF in its 2016 Article IV report, India experienced high credit growth of around 25% per year between 2005-06 and 2010-11, but no aggregate countercyclical macroprudential measures (other than sector-specific tools for commercial real estate and residential housing loans) were applied. This could point to the need for a framework to assess the speed and extent to which this form of financial deepening is sustainable from a financial stability perspective, given the associated build-up of vulnerabilities via corporate sector leverage and bank credit risks. It is therefore important for the authorities – as they flesh out their macroprudential framework – to consider potential policy trade-offs in the future.

- ***Communication:*** There are reasons for keeping some information related to financial stability confidential, since its publication may cause adverse market reaction. But, in general, a public communication strategy can represent a 'soft' tool for macroprudential purposes that conveys the intended messages to financial market participants. It also can introduce more accountability and educate the public on financial stability issues.

  The current channels of communication on financial stability have varying degrees of transparency. The assessment of risks in the FSR is quite extensive and its publication is accompanied by a press briefing chaired by the Head of the Department of Communication. Senior RBI officials sometimes give speeches on financial stability issues. Changes in the RBI's tools for macroprudential purposes are disclosed on the RBI website and in an annual publication, but focus mainly on the change itself rather than the policy context and its implications (if any) in the macroprudential stance. There is only a limited integration in the FSR between the discussion on risks and policy actions that have been taken or are being considered. There is no comprehensive periodic report on the activities or decisions of the FSDC, while communication of the FSDC/FSDC-SC meetings on the MoF/RBI websites tends to be brief and often does not describe the judgements considered or the decisions made. It may be useful to market participants and the public if communication on the deliberations of the authorities on macroprudential policy was enhanced.

Regulation and supervision of NBFCs and HFCs

The non-bank financial sector in India encompasses a broad range of entities regulated by a number of authorities (see Table below). Rather than covering all the entities in the sector, the focus of analysis in this peer review is limited to NBFCs and HFCs. These entities collectively represent the largest part of non-bank credit intermediation and their activities – as well as their risks and prudential framework – resemble in some ways those of banks.

Table: Types of NBFEs in India

Regulator	**Category of Companies**
RBI	Non-Banking Finance Companies
National Housing Bank (NHB)	Housing Finance Companies
Securities and Exchange Board of India (SEBI)	Merchant Banking Companies, Venture Capital Fund Companies, Stock broking, Collective Investment Schemes
Ministry of Corporate Affairs (MCA)	Nidhi Companies, Mutual Benefit Companies
State Governments	Chit Fund Companies
Insurance Regulatory and Development Authority of India (IRDA)	Insurance Companies

The authorities have taken a number of steps to strengthen data collection, risk analysis, and the regulation and supervision of NBFEs in recent years. In particular, the revisions to the regulatory framework for NBFCs in 2014 streamlined reporting and enhanced prudential requirements, focusing on the larger and most important entities; reduced the potential for regulatory arbitrage with banks (which are the NBFCs' main competitors); and promoted the development of specialized types of finance (e.g. infrastructure finance and microfinance). Efforts to enhance analyses and risk assessments since the FSAP include the development of early warning indicators for NBFCs (which is still underway) and the implementation of a new supervisory rating system for HFCs by the NHB. Concerns about unregulated financial entities and unauthorised financial activities giving rise to consumer protection issues (which may also have a systemic risk dimension) have strengthened the coordination of efforts to survey the regulatory perimeter. Finally, the authorities have a broad range of tools at their disposal for NBFEs and have begun to deploy them for macroprudential purposes, such as in the case of a loan-to-value (LTV) ceiling for NBFC lending against gold and for HFC residential mortgages.

At the same time, however, further steps can be taken to strengthen the regulation and supervision of NBFEs in a number of areas. These steps are not unique to India, as many other jurisdictions are in the process of improving their risk assessment capacity and developing appropriate policy tools to ensure sustainable market-based finance. In that context, it is important to find the right balance between promoting financial inclusion to support economic development and ensuring that financial stability risks are adequately taken into account.

- ***Enhance data collection and analysis**:* There is still limited information for non-deposit taking NBFCs (NBFCs-ND) with assets of less than INR 5 billion (USD 75 million), which are not subject to prudential norms and only file basic returns. There is even less information for other entities that undertake financial activities but whose assets or income do not reach the '50-50 business criteria' rule and are hence not registered with the RBI.[3] The MCA database, which can provide a broader perspective on the number and nature of these entities, is only available annually and subject to a significant time lag.

  Data availability is also limited for unregulated financial entities and for other entities overseen by the MCA or state-level bodies. This is one of the main areas of focus of the Shadow Banking Implementation Group (SBIG) under the FSDC-SC, and it is important for this work to address identified gaps in the availability of such data, taking into account the potential materiality of related risks given limited resources.

  Currently, macro level analysis for NBFCs focuses on aspects such as growth and trends in the sector and their drivers as well as regulatory compliance. As the components of the financial system become increasingly interlinked, the analysis should go beyond individual types of entities and capture the breadth of activity across a particular market segment. Doing so would help enhance supervision of the relevant entities, contribute to a broader understanding of the linkages within the system, and help identify common emerging risks (e.g. excessive growth, asset bubbles or deteriorating underwriting). For example, it would be useful to undertake periodic reviews of activities in individual market segments that cover all types of entities involved in that segment. This would involve the sharing of information and joint analysis by the relevant authorities (e.g. RBI: banks and NBFCs for consumer lending or asset finance, RBI-NHB: banks and HFCs for housing finance).

- ***Strengthen risk assessments:*** One of the lessons from previous financial crises is that while the NBFC sector is typically small compared to banks, problems in the sector can propagate and become systemic due to interconnectedness with the banking sector as well as due to their social and political ramifications.

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[3] The RBI Act leaves some discretion to the RBI to set the regulatory perimeter based on the extent to which a company engages in financial activities as its principal business. The test applied by RBI was articulated in 1999 and is based on the so-called '50-50 business criteria' rule, wherein financial activities should constitute more than 50% of the overall assets and gross income of an entity. Companies that undertake both financial and non-financial activities but fall under the threshold are regulated by the MCA; companies above the threshold are subject to registration and regulation by the RBI.

At present, risk assessments of RBI-regulated NBFCs are confined to network analysis (primarily used to monitor the exposures of banks to the rest of the system) and credit risk sensitivity analysis. A more comprehensive and integrated risk assessment for NBFCs would contribute to a better understanding of their vulnerabilities and implications for the rest of the financial system. This is motivated by the large and growing dependence of NBFCs on the rest of the financial system for funding purposes and the fact that experience (both in India and elsewhere) suggests that such funding tends to dry up in the event of external or sector-specific events, potentially leading to a liquidity crunch and creating a negative feedback loop.[4] While authorities indicate that liquidity risk for the NBFC sector is mitigated by the fact that most funding is longer-term, incorporating such risk in a stress testing program – for example, to non-deposit taking systemically important NBFCs (NBFCs-ND-SI) that access funds from the public through capital markets in addition to bank finance – would help support such conclusions. Contingency planning for such a downside scenario could also be incorporated to risk management expectations for NBFCs.

Risk assessments should also be extended to HFCs, since they are an important component of the housing market and have become increasingly interconnected with the banking sector. While the NHB has improved its off-site surveillance of HFCs, it does not currently conduct any stress tests of the sector. HFCs are not included in the FSR analysis and the NHB is not a member of the FSDC or its Sub-Committee. Moreover, according to the NHB, the top 5 HFCs account for around 86% of total HFC assets and problems at one of them could have systemic ramifications. Consideration should therefore be given to extending the risk assessment framework, including via stress testing for these entities, which could also be used to enhance risk management for the entire housing finance segment.

In addition, many NBFCs and some HFCs are subsidiaries of financial conglomerates (FCs) or mixed-activity economic groups. While seemingly stable on their own, these entities could be vulnerable to contagion or reputational risks should the parent company experience a shock or face adverse business conditions. This is particularly important given those companies' reliance on wholesale funding sources, and the associated dependence on group support (including the parent's credit rating) for their own credit rating. At present, the only relevant work in this area is carried out by a group under the FSDC-SC for a limited set of FCs. Going forward, the analysis of potential risks stemming from the ownership structure and interconnectedness of NBFCs and HFCs should be included in both ongoing supervision and in risk assessments.

- ***Review the regulatory perimeter:*** The regulatory perimeter for NBFCs is based on the principal business criteria used by the RBI to define if an institution that engages in financial activities should be registered with it. There is a need to continuously review the perimeter to ensure that the threshold remains appropriate and does not give rise to perverse incentives or encourage risky activities to migrate outside the perimeter. In particular, the RBI should evaluate the business criteria definition periodically to determine if it adequately captures activities that could affect financial stability. There may be merit, for example, in adopting a more flexible approach that would allow the RBI to selectively bring

[4] The NBFC sector came under pressure during the 2008 financial crisis due to asset-liability mismatches and funding inter-linkages, which led to several NBFCs having to downsize abruptly or enter into distressed sale of their loan portfolios. The RBI took several measures to enhance the availability of liquidity to NBFCs.

within the perimeter a large NBFC that does not meet the 50-50 criteria but engages in financial activities with potentially systemic ramifications.

Strengthening the enforcement of the perimeter is also important to monitor and assess activities that may give rise to systemic risk, as well as to reduce opportunities for regulatory arbitrage or avoid a non-level playing field. Concerns about the perimeter have arisen in recent years from unregulated financial entities and unauthorised financial activities giving rise to consumer protection issues that may also have a systemic risk dimension. Further work by the SBIG to map the universe of NBFEs and by the relevant authorities to jointly enforce the perimeter (e.g. through State Level Coordination Committees) would help allay some of these concerns.

Another facet of reviewing the perimeter relates to the taking of deposits from the public by non-financial companies. At present, the MCA is the oversight authority for these companies, but it sees its role mainly as a repository of corporate information rather than a regulator *per se*. While these companies' deposit-taking activities are subject to a number of restrictions, information on the extent and nature of those activities is limited and the practice appears *prima facie* inconsistent with the RBI's policy to discourage deposit mobilisation activities outside banks. It may therefore be useful for the authorities to examine the benefits and costs of this activity from a financial stability perspective.

Finally, it should be noted that some entities within the regulatory perimeter are subject to exemptions; in particular, government-owned NBFCs are not subject to prudential norms as other RBI-regulated NBFCs. There does not seem to be a strong rationale for the continuation of this policy, and it would be desirable to have a level playing field in this sector (as is the case for banks and HFCs).

- ***Move towards more activity-based and risk-sensitive framework:*** At present, the RBI follows a tiered approach to prudential norms applying to NBFCs-D and NFBCs-ND-SI, with 10 distinct categories each with its own particular norms depending on asset size or activities. This structure, while providing flexibility, is rather complex and may generate challenges for the monitoring and supervision of those NBFCs (around 400 in total). At the same time, there remain important differences in certain rules vis-à-vis banks, such as with respect to risk weights, ability to take deposits, priority lending requirements and other terms. It may be useful for RBI to rationalise the number of NBFC categories and further harmonise their regulatory treatment vis-à-vis banks, while ensuring that the regulation is effectively aligned to riskiness of business models (e.g. varying risk weights by asset class). The RBI is already considering how to proceed with the rationalisation of NBFC categories.

  In addition, the RBI has been using the term 'systemically important' for large non-deposit-taking NBFCs since 2007, and 209 entities are currently included in this category. Use of this term differs from that in the banking sector, where only 2 banks were labelled as D-SIBs by the RBI in 2015. In the banking sector, this term means that the failure of a bank would pose risk to the functioning of the financial system that may in turn negatively impact the real economy, but in the context of NBFCs it means that the entity is subject to a more intensive form of regulation and supervision. The inconsistency in the meaning of the same term between banks and NBFCs can create confusion among the public. The RBI should therefore consider aligning the meaning of this term for NBFCs with that for banks by identifying criteria other than asset size (e.g. interconnectedness, substitutability and complexity) to determine whether a particular NBFC is systemically important and by revising its regulatory and supervisory framework for those entities accordingly.

Recommendations

In response to the aforementioned findings and issues, the peer review has identified the following recommendations for consideration by the Indian authorities:

Macroprudential policy framework

1. The authorities should further flesh out the macroprudential policy framework by explicitly setting out the individual and collective roles and responsibilities of the relevant bodies and by more closely integrating systemic risk analysis and decision making.
2. The RBI should continue to deepen its financial stability analysis by: (a) expanding its regular set of standardised risk indicators to support policy making; (b) examining further (including through stress tests) the linkages between the corporate and banking sectors as well as risks from financial markets, non-banks and the external sector; and (c) using information from market intelligence to complement desk-based analysis.
3. The authorities should undertake ex ante cost-benefit analysis on the use of tools for macroprudential purposes, including with respect to their interactions with other policies, and assess their effectiveness on an ex post basis.
4. The authorities should consider enhancing public communication on macroprudential policies, including through more detailed press releases of the outcome of FSDC/FSDC-SC meetings and greater use of the FSR to explain macroprudential policy decisions. In addition, the authorities should consider issuing a comprehensive periodic (e.g. annual) report or summary on the FSDC's activities.

Regulation and supervision of non-banking finance entities

5. The authorities should continue to improve the timeliness and granularity of data collected from NBFEs, and enhance their analysis by carrying out horizontal reviews across different types of entities (such as banks, NBFCs and HFCs) operating in the same market segment.
6. The authorities should enhance their assessment of risks stemming from NBFEs by extending the scope of coverage to HFCs and by broadening the analysis to other material risks (e.g. liquidity and contagion).
7. The RBI should continue to review the business criteria definition for NBFCs on a regular basis to ensure the thresholds remain appropriate, and to work with other authorities to strengthen enforcement of the regulatory perimeter. The authorities should also review the merits of continuing to allow deposit-taking activities by non-financial firms, and eliminate regulatory exemptions for government-owned NBFCs.
8. The RBI should consider rationalising the number of NBFC categories and continue to harmonise NBFC prudential rules with those for banks. The RBI should also consider revising the use of the term "systemically important" NBFCs in order to align its meaning with that for banks.

1. Introduction

India underwent an assessment update under the Financial Sector Assessment Program (FSAP) in 2011-12. The FSAP Update included assessments of the Basel Committee for Banking Supervision (BCBS) *Basel Core Principles for Effective Banking Supervision,* International Association of Insurance Supervisors (IAIS) *Insurance Core Principles,* International Organization of Securities Commissions (IOSCO) *Principles and Objective of Securities Regulation* and Committee on Payments and Market Infrastructures (CPMI)-IOSCO *Recommendations for Securities Settlement Systems and Central Counterparties.*[5, 6]

The FSAP concluded that India had made remarkable progress towards developing a stable financial system but that it confronted a build-up of financial sector vulnerabilities and that the system had become more complex, with interlinkages across institutions and borders. It found that the main near-term risks to the financial system – bank asset quality and renewed pressures on systemic liquidity – were worsening, but that the banking system was resilient to a range of adverse shocks. It also noted that the prominent role of the state in the financial sector contributes to a build-up of fiscal contingent liabilities and creates a risk of capital misallocation that may constrain economic growth. It recommended gradually reducing mandatory holdings of government securities by financial institutions, and allowing greater access to private (domestic and foreign) sources of capital in order to provide more room for the financial sector to intermediate funds toward productive economic activities, thereby improving prospects for sustained growth. The FSAP also found that the regulatory and supervisory regime for banks, insurance and securities markets was well developed and largely in compliance with international standards. It identified some areas for improvement[7] and noted that further steps were needed to promote deeper fixed income markets and upgrading the corporate insolvency framework.

The IMF's 2016 Article IV report[8] noted that the Indian economy is on a recovery path, helped by a large terms of trade gain, positive policy actions, improved confidence and reduced external vulnerabilities. Nonetheless, given slower global growth and heightened financial market volatility, risks to growth were on the downside. Moreover, high inflation expectations and large fiscal deficits remain key macroeconomic challenges, resulting in limited policy space to support growth through demand management measures. On the financial system, the

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[5] See "India: Financial System Stability Assessment" (January 2013, IMF Country Report No. 13/8, http://www.imf.org/external/pubs/ft/scr/2013/cr1308.pdf). The ROSC assessments have been published and are available on the IMF website (http://www.imf.org/external/np/fsap/fsap.aspx).

[6] In June 2015, the BCBS published its assessment of the consistency with the Basel framework of the Basel III risk-based capital and Liquidity Coverage Ratio (LCR) regulations in India. See http://www.bis.org/bcbs/publ/d320.pdf and http://www.bis.org/bcbs/publ/d321.pdf for details.

[7] These included *inter alia* greater operational independence of regulatory agencies; consolidated supervision of financial conglomerates; reductions in the large exposures and related-party lending limits in banks; stronger valuation and solvency requirements in insurance; and the monitoring of corporations' compliance with reporting, auditing, and accounting requirements for issuers.

[8] See "India: Staff Report for the 2016 Article IV Consultation" by the IMF (March 2016, available at https://www.imf.org/external/pubs/ft/scr/2016/cr1675.pdf).

report found that the Reserve Bank of India (RBI) and other regulators have made further progress in financial reforms. However, a further weakening of corporate and bank balance sheets, particularly for public sector banks (PSBs), could pose risks to economic recovery and weigh on financial stability. To address these strains, the report recommended that non-performing assets (NPAs) on PSBs' balance sheets should be fully recognised;[9] banking sector structural reforms continued; banks' loss absorbing buffers increased; monitoring of corporate vulnerabilities, especially in foreign currency, strengthened; and banks' debt recovery mechanisms further enhanced.

The main purpose of the peer review is to examine two topics that are relevant for financial stability and important for India: the macroprudential policy framework, and the regulation and supervision of non-banking finance companies (NBFCs) and housing finance companies (HFCs). The peer review focuses on the steps taken by the authorities to implement reforms in these areas, including by following up on FSAP and FSB recommendations. In particular, the review evaluates progress to draw conclusions and policy implications as well as identify remaining impediments and lessons that could be of benefit to India and its FSB peers.

The report has two main sections, corresponding to the two topics being reviewed. Section 2 focuses on the macroprudential policy framework, while Section 3 covers the regulation and supervision of NBFCs and HFCs. In addition, Annex 1 presents an overview of the regulatory framework in India; Annex 2 provides background information on the structure and performance of the Indian financial system; Annex 3 describes the use by the RBI of time-varying macroprudential measures; Annex 4 classifies the categories of NBFCs that are regulated by the RBI; and Annex 5 summarises the prudential requirements for NBFCs vis-à-vis banks. Annex 6 presents the follow-up actions reported by the authorities to other key FSAP recommendations; these actions have not been analysed as part of the FSB peer review and are presented solely for purposes of transparency and completeness.

2. Macroprudential policy framework

Background

In 2010, the Financial Stability and Development Council (FSDC) was set up by the Government with the aim of strengthening and institutionalising the mechanism for maintaining financial stability, enhancing inter-regulatory coordination and promoting financial sector development. The 2012 FSAP noted that India had long-standing experience in the use of macroprudential instruments to counter credit cycles and that continued efforts to strengthen systemic oversight were taking place, including through the FSDC. The FSAP recommended that the RBI enhances its monitoring of corporate indebtedness, refinancing risk and foreign exchange exposures. It also recommended that the authorities continue to strengthen coordination and information sharing mechanisms among domestic supervisors

[9] According to the 2016 Article IV report, the share of PSBs' stressed assets – NPAs plus restructured assets – increased from 12.9% to 14.1% of total advances in the year to September 2015, while only around 40% of NPAs (6.2% of total advances at end-September 2015) are, on average, provisioned against.

through Memorandums of Understanding (MoUs) and formal frameworks to avoid regulatory gaps, identify emerging risks, and facilitate crisis response.

This section focuses on the objectives, scope, powers, accountability and governance arrangements underpinning India's macroprudential policy framework. Based on international guidance in this area,[10] it also analyses the application of that framework (including the selection and use of specific tools) to address identified risks to financial stability.

Steps taken and actions planned

Institutional arrangements*:* The FSDC is a non-statutory, apex-level body whose mandate is to strengthen and institutionalise the mechanism for maintaining financial stability by enhancing inter-agency coordination, promoting financial sector development and inclusion, and by monitoring macroprudential supervision of the economy, including of large financial conglomerates.[11] It serves as a forum through which the regulatory authorities (see Annex 1 for an overview) and the Ministry of Finance (MoF) can exchange views and flag risks on their respective sectors and coordinate their actions. It also coordinates India's interface with international financial sector bodies, such as the FSB and the Financial Action Task Force.

The FSDC Chair is the Finance Minister and its members comprise the heads of the RBI, the Securities and Exchange Board of India (SEBI), the Pension Fund Regulatory and Development Authority (PFRDA), the Insurance Regulatory and Development Authority of India (IRDA), the Finance Secretary and/or Secretary of the Department of Economic Affairs (DEA), the Secretary of the Department of Financial Services (DFS), and the Chief Economic Adviser of the MoF.[12] The Chair schedules the meetings as and when deemed necessary, and he can invite others to those meetings as appropriate. The FSDC has met 14 times since its inception and meets about twice a year.

The executive arm of the FSDC is its sub-committee (FSDC-SC), whose mandate is to aid the Council in carrying out its agenda. It has met 17 times so far, with the time between meetings ranging from one to six months. The FSDC-SC is chaired by the RBI Governor, with Secretariat support (including follow-up of the action points that emanate from meetings)

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[10] See "Macroprudential Policy Tools and Frameworks – Progress Report to the G20" by the FSB, IMF and BIS (October 2011, http://www.financialstabilityboard.org/wp-content/uploads/r_111027b.pdf); "Macroprudential Policy: An Organizing Framework" (March 2011, http://www.imf.org/external/np/pp/eng/2011/031411.pdf), "Institutional Models for Macroprudential Policy" (November 2011, http://www.imf.org/external/pubs/ft/sdn/2011/sdn1118.pdf), "Key aspects of macroprudential policy" (June 2013, http://www.imf.org/external/np/pp/eng/2013/061013b.pdf) and "Staff Guidance on Macroprudential Policy" (December 2014, http://www.imf.org/external/np/pp/eng/2014/110614.pdf) by IMF staff; and "Macroprudential instruments and frameworks: A stocktaking of issues and experiences" (May 2010, http://www.bis.org/publ/cgfs38.pdf) and "Operationalising the selection and application of macroprudential instruments" (December 2012, http://www.bis.org/publ/cgfs48.pdf) by the Committee on the Global Financial System (CGFS).

[11] An important rationale for the creation of the FSDC was to coordinate the work of individual regulators to reduce the risk of silo regulation as firms' financial activity increasingly covers more than one regulator and changes in regulation by one authority may prompt the relevant activity to migrate to other parts of the system.

[12] See http://finmin.nic.in/fsdc/GazNote31122010.pdf and http://finmin.nic.in/fsdc/fsdc_index.asp. The Secretariat of the FSDC is within the DEA and led by the Additional Secretary.

provided by RBI's Financial Stability Unit (FSU), and has senior representation from the MoF and regulatory authorities.[13] It regularly discusses potential threats to financial stability and signs off the half-yearly Financial Stability Report (FSR). The report is approved by the FSDC-SC and published by the RBI, with contributions from all other members of the sub-committee. Prior to publication, the draft FSR is discussed and approved by the FSDC-SC, so it represents the collective views on financial stability risks of the members of the sub-committee.

There are also a number of permanent technical groups under the aegis of the FSDC-SC (see Figure 1), which were set up just before or since the FSAP:[14]

- Inter Regulatory Technical Group (IRTG) was created in September 2011 to discuss issues relating to financial stability risks and inter-regulatory coordination. It meets once a quarter, and is chaired by RBI's Executive Director of Banking Regulation.
- Inter Regulatory Forum for monitoring financial conglomerates (IRF) was set up in August 2012. The IRF is chaired by RBI's Deputy Governor for Supervision and has high level representation from member regulators. The IRF meets as and when required (it has met 4 times so far) but has convened 15 meetings with financial conglomerates (FCs). It is tasked with monitoring and coordinating policies on FCs.[15]
- Early Warning Group (EWG) was set up in June 2012. It is chaired by RBI's Deputy Governor of Financial Markets and includes the MoF and regulatory authorities. The group's mandate includes analysis of early warning signals and coordination of the response of the government and the regulators in the occurrence of a crisis situation.
- Technical group on financial inclusion and literacy, which is chaired by RBI's Deputy Governor in charge of the Department of Financial Inclusion and Development (and also includes the MoF).

Other working groups have also been set up on a temporary basis to examine and report on particular issues (e.g. on the resolution regime for financial institutions) as well as to implement the financial reform measures recommended by the FSB.[16]

The authorities note that the FSDC and the various bodies under it are non-statutory in nature and so have no explicit powers of direction or comply-or-explain. As a result, all decisions are reached through consensus after detailed deliberation. If a consensus is not reached, detailed information is collected as appropriate to examine the issue further. If consensus is reached, the participating member on whom the action falls carries it out. The FSDC Secretariat

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[13] Other than the Minister of Finance, all the other members of the FSDC are also members of the sub-committee, together with all four Deputy Governors of the RBI and the Additional Secretary of the DEA of the MoF. An Executive Director from the RBI is a member and the Secretary of the FSDC-SC.

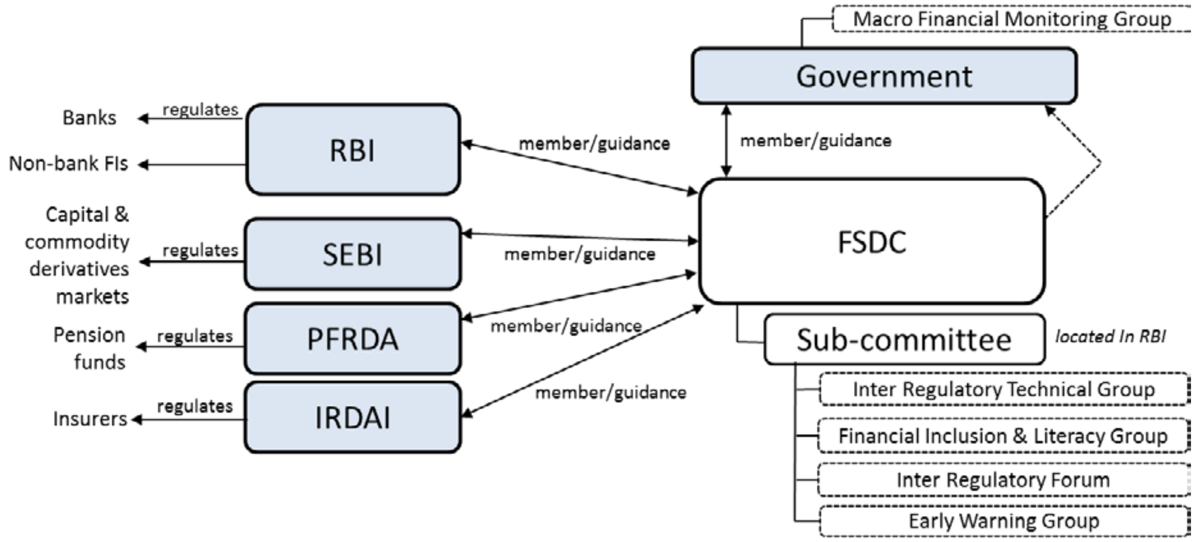
[14] See http://finmin.nic.in/fsdc/StrucFSDC.pdf.

[15] A FC is identified on the basis of its significant presence – as determined by the respective regulator – in two or more market segments (banking, insurance, securities, non-banking finance, pension funds). Each FC has a 'designated entity' within the group to act as the nodal entity. The principal regulator for that FC (who is the regulator of the designated entity) is mandated to develop supervisory cooperation for effective consolidated supervision and assess the risk to systemic stability due to the FC's activities.

[16] These include, for example, strengthening the regulation and monitoring of the shadow banking system, reducing reliance on credit rating agencies, implementation of the Legal Entity Identifier system, over-the-counter derivative market reforms, framework for dealing with domestic systemically important banks etc.

monitors actions taken and reports back to members in subsequent meetings. A similar process is followed by the RBI's FSU for decisions reached by the FSDC-SC.

Figure 1: Organisational structure of the FSDC



Notwithstanding its broad mandate, there is no explicit mechanism in place within the FSDC to consider potential trade-offs between financial stability and financial development or inclusion. The authorities report that, in practice, there has been no conflict thus far and that they view a deeper financial system and a more literate general public as contributing to increased financial stability.

The agendas for FSDC and FSDC-SC meetings cover standing conjunctural items on the macro economy and on financial stability, reports by various working groups, progress on decisions made in previous meetings and any other issues raised by members. Although the FSDC has no formal responsibility for setting regulatory tools, it has sometimes identified and discussed risks that have resulted in subsequent changes in policy by the respective authorities. For example, the FSDC-SC discussed asset quality in the Indian banking system; management and governance issues in PSBs; and deposit raising from outside the regulatory perimeter (see section 3). This has facilitated the adoption of policies by the respective authorities in each of these areas.[17] The FSDC also discusses financial sector issues between the regulatory authorities and the MoF – for example, the implications of planned budget measures on the financial system.

Given that the financial system in India is dominated by banks (see Annex 2) and that the RBI regulates both banks and other types of financial institutions, macroprudential policies are

[17] Other areas that have been discussed include margin financing against shares, regulation of investment advisors/analysts, development of corporate bond markets, national strategy on financial education etc.

mainly set within the RBI. The RBI has a legal mandate to secure monetary stability,[18] but since 2004 it has voluntarily taken on financial stability as an additional (albeit not legally binding) objective in view of the fast growing size and importance of the financial system.[19] While there is an established formal process to review changes in the CCyB and additional capital requirements for domestic systemically important banks (D-SIBs), there is at present no other regular process within the RBI to review whether changes in the overall macroprudential policy stance are required. Relevant action may be triggered top-down from senior management or bottom-up from staff. Any proposed action would be taken by the Banking Supervision Department to the Senior Management Committee – which covers a broad range of non-monetary policy issues – and to the monthly Board for Financial Supervision (BFS), both of which are chaired by the RBI Governor. The government would be consulted bilaterally where necessary before significant planned changes in policy, and there are also draft regulations issued for consultation with the banking industry and the public.

In terms of changes to institutional arrangements, the Government is currently considering the detailed recommendations made in the Indian Financial Code[20] to give the FSDC a statutory basis and a narrower remit focused solely of financial stability (see Box 1).

Analytical framework and risk assessments: Most systemic risk assessment work is carried out by the FSU in the RBI, although other regulatory authorities have also begun in recent years to build up their capacity to carry out such analysis for their respective sectors.

Since the FSAP, the RBI has taken a number of steps to enhance its systemic risk assessments. To measure changes in risk over time, the RBI has developed stability indicators and stress testing. It has also introduced an aggregate financial stability indicator that amalgamates a range of macro, financial market and banking stability indicators. Macroeconomic stress tests have been expanded to include interest rate and liquidity risk and, for a sample of banks, the separate impact of interest rates and exchange rates on derivatives portfolios. Most stress tests are top-down in nature, but bottom-up methodology is used in the stress testing of top 20 banks' derivatives portfolios.[21] Most tests are limited to the commercial banking sector, although the sensitivity analysis also covers cooperative banks and NBFCs. The RBI also carries out a half-yearly survey of external experts, including market participants ('Systemic Risk Survey'). More recently, the RBI has started to carry out detailed stress analysis of highly leveraged corporates and their impact on the health of the banking system.

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[18] The RBI Act 1934 states the objective of the RBI is "to regulate the issue of bank notes and keeping of reserves with a view to securing monetary stability in India, and generally, to operate the currency and credit system of the country to its advantage".

[19] The RBI's role in financial stability was first referred to by Governor Reddy in his 2004-05 mid-term review of annual policy (https://www.rbi.org.in/Upload/Notification/Pdfs/62538.pdf). See also the speeches by Deputy Governors Sinha on "Macroprudential Policies: Indian experience" (June 2011, https://www.rbi.org.in/scripts/BS_SpeechesView.aspx?Id=576) and Chakrabarty on "Framework for the conduct of macroprudential policy in India: experiences and perspectives" (April 2014, https://rbi.org.in/Scripts/BS_SpeechesView.aspx?Id=890).

[20] See http://finmin.nic.in/fslrc/fslrc_report_vol1.pdf.

[21] In addition to macro stress tests, supervisory stress testing has been carried out by the RBI since 2013 focusing on vulnerabilities in individual banks with a 1-year horizon to assess the impact of assumed shocks on profitability and capital. The results are used as inputs in the supervisory assessment of individual banks.

Box 1: The Indian Financial Code

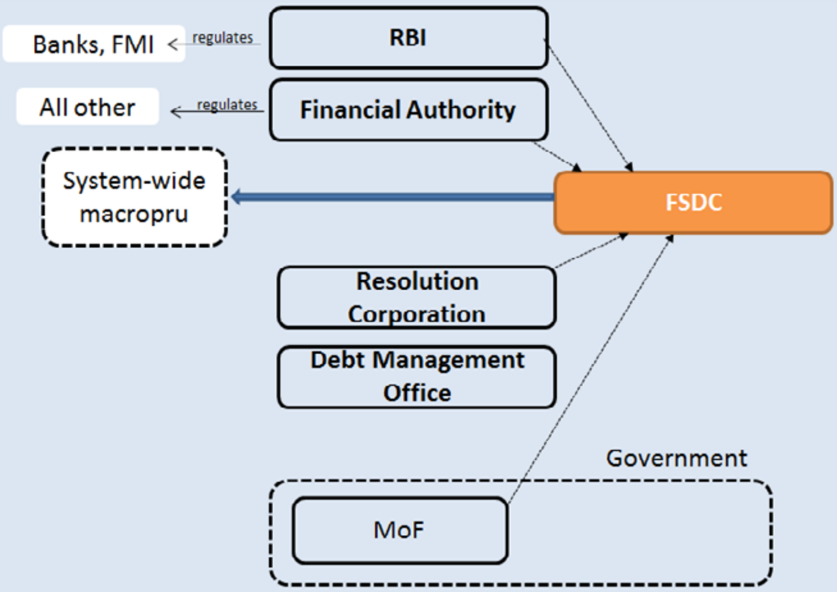
In conjunction with earlier financial sector reform proposals by four expert committees, the MoF established a Financial Sector Legislative Reform Commission in 2011, which in March 2013 proposed a draft law – the Indian Financial Code – to improve the financial regulatory framework. Following initial feedback, a new version of the code was issued for consultation, which ended in August 2015. The code is now under consideration by the government. If fully implemented, it would consolidate and reorganise regulatory responsibilities in India. The main aims of the code are to: improve separation of regulatory powers; increase the independence of regulatory institutions; and increase the accountability of regulatory institutions.

The Indian Financial Code proposes a 'twin peaks' approach to the structure of regulation. A new 'Financial Authority' would regulate all financial services except banks, systemically important payment systems and authorised foreign exchange dealerships, which would be regulated by the RBI. It also proposes that debt management and banking resolution – currently the responsibility of the RBI – are carried out by separate new authorities (see Figure 1.1).

The FSDC would be given a statutory basis and a narrower remit solely of financial stability. Time-varying macroprudential policy would be set by a new sub-committee of the FSDC – the Systemic Risk Committee – with system-wide powers. The Systemic Risk Committee would consist of 5 members: the RBI Governor as Chair, another RBI member, the head of the newly established Financial Authority, and 2 independent external members nominated by the Government. The Government itself would have one member with observer status. The SRC would meet quarterly.

Some elements of the proposals have already been adopted or initiated: the Forward Markets Commission was merged with SEBI in September 2015; an Insolvency and Bankruptcy Code was passed in 2016; efforts are underway to enact a Comprehensive Code on Resolution of Financial Firms; an amendment of the RBI Act to provide a statutory basis for the monetary policy framework and a Monetary Policy Committee was introduced; and a Financial Data Management Centre (FDMC) was set up under the aegis of the FSDC to facilitate integrated data collation and analysis of the financial system.

Figure 1.1: The regulatory framework proposed by the IFC



To analyse the linkages between different parts of the financial system, various techniques have been developed. Cross-sectional regression analysis is used on bank stock prices to assess banks' common distress, and thereby identify the number of banks that may get distressed if one bank initially fails ('Banking Stability Index'). A 'contagion simulator' assesses the loss of capital to the banking sector as a whole due to the failure of one or more banks as well as the liquidity and solvency impact on the rest of the banking sector. More broadly, network analysis is used to measure the linkages between individual financial institutions, including NBFCs, insurance companies, mutual funds and specialised financial institutions.

Most of this analysis is carried out quarterly, although the derivatives position of banks and the bottom-up sensitivity analysis are done twice and once a year respectively. The outputs are published in the FSR.[22] A comprehensive internal assessment of financial stability risks is also made by the FSU in its 'Systemic Risk Monitor', which is prepared in-between FSR publication dates (i.e. in March and September) and is sent directly to RBI senior management. This analysis is not shared with other authorities or discussed by the FSDC or its sub-committee.

Other authorities, particularly SEBI, have also begun to carry out systemic risk analysis. In October 2015, the Systemic Stability Unit of SEBI developed a Systemic Risk Monitoring Template to monitor on a monthly basis the emerging systemic risks in the Indian securities market,[23] feeding some of this information into the EWG and the FSR. Enhanced monitoring takes place when there are signs of particularly high volatility in a market. Additionally, a RBI-SEBI standing committee was established in 2008 to examine the trading of currency and interest rate derivatives on exchanges and coordinate the regulatory roles of the two authorities. Finally, SEBI requires that all liquid fund and money market fund (MMF) schemes carry out stress tests at least on a monthly basis on their interest rate, credit, liquidity and redemption risks. The MoF has set up an internal Macro Financial Monitoring Group that meets quarterly and is chaired by the Chief Economic Adviser. It carries out internal analysis on the interaction between the real economy and the financial system, including risks from the external sector.

Some of the above analyses is shared between authorities in the FSDC-SC, primarily as part of preparing and signing off on the FSR. Additional analysis on *ad hoc* risk issues is also prepared on occasion by the relevant authorities. However, there is currently no standardised set of analyses, indicators and charts to assess in an integrated manner the evolution of systemic risks over time, such as a risk dashboard that feeds into an overall financial stability map with a rating and a priority ranking for various types of internal and external risks.

Information collection and sharing: Data used for risk assessments is collected mainly from regulated financial institutions. The authorities report that, while they do not have legal powers to request data from non-regulated entities, the government can ask for information from entities outside the regulatory perimeter. Work is underway by an FSDC-SC working group to map the shadow banking system and identify data gaps (see section 3).

The FSAP recommended that the RBI enhance its monitoring of corporate indebtedness, refinancing risk and foreign exposures. The RBI has taken a number of steps in this area. In 2013 it established a Central Repository of Information on Large Credits (CRILC) to collect

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[22] See https://rbi.org.in/Scripts/FsReports.aspx.

[23] The Systemic Risk Monitoring Template *inter alia* monitors the trends in interconnectivity, market sentiment, concentration, risk management, volatility, high frequency trading and liquidity so as to identify any abnormal developments in the market that may potentially pose systemic risks.

borrower data on bank, NBFC, HFC and insurance company exposures above Rupee 100 million (later lowered to Rupee 50 million).[24] Banks, HFCs and NBFCs also report to the database whether – and the extent to which – these loans are overdue and can access this information for their own lending decisions.

The RBI has also increased its coverage of data on the corporate sector. Its previous analysis was based on its own quarterly database of around 3,000 private limited companies. It is now also making use of a much wider database of corporates collected by the Ministry of Corporate Affairs (MCA) that covers 19,500 private limited companies and 255,500 private companies, albeit only on an annual basis.[25] Currently these data are being migrated to RBI's data warehouse to use for research, with the aim of measuring individual company and sectoral probability of defaults and expected potential losses.

The RBI has also taken steps to improve its collection of data on corporates' foreign exposures and the extent to which this is hedged. Authorised dealer banks report to the RBI on a quarterly basis consolidated data on corporates' foreign currency borrowing (above a threshold of USD 25 million), including from abroad. Also, corporates report to banks their intention of whether to hedge their foreign borrowing at the time a loan is taken out, and this information is reported to the RBI on a mandatory basis every month. According to the RBI, corporates reported in 2015 that they intended to hedge around 50% of their borrowing from abroad.[26]

The Institute of Chartered Accountants of India has recently mandated a standardised disclosure by corporates on their foreign currency exposures in their annual accounts, including details of any hedges. This is expected to provide a more comprehensive and consistent estimate of domestic resident companies' unhedged foreign exchange exposures. The RBI does not, however, collect any information (e.g. via surveys) on foreign currency exposure of affiliates of Indian companies abroad.

Going forward, the FSDC plans to support its decision making processes by collecting data in a Financial Data Management Centre (FDMC) created in the DEA. As a first step, data on financial institutions will be provided by the relevant regulatory authorities. This should over time result in a comprehensive common and consistent database on the entire financial system that can be accessed by all regulators as well as the MoF. The longer-term aim is that the FDMC digitises such data and standardises it for research and analysis in support of its work, although initially the aim will be only to collate it.

The FSAP also recommended that the authorities should continue to strengthen coordination and information sharing mechanisms, including through MoUs. An MoU was signed in March 2013 between IRF members (RBI, SEBI, IRDA and PFRDA) to forge greater cooperation in consolidated supervision and monitoring of FCs.[27] Under the MoU, each authority endeavours

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[24] See https://rbi.org.in/Scripts/NotificationUser.aspx?Id=8405&Mode=0 and https://rbi.org.in/Scripts/NotificationUser.aspx?Id=8744&Mode=0.

[25] See the analysis of the corporate sector in Chapter 1 of the December 2015 FSR (https://rbidocs.rbi.org.in/rdocs/PublicationReport/Pdfs/0FSR6F7E7BC6C14F42E99568A80D9FF7BBA6.PDF).

[26] In March 2016 the RBI mandated that selected firms involved in the infrastructure sector that borrow foreign currency from abroad with average maturity of 5 years or more need to fully hedge those borrowings.

[27] See the March 2013 RBI press release (https://rbi.org.in/Scripts/BS_PressReleaseDisplay.aspx?prid=28278).

to share information with the other regulators on the financial condition, risk management systems, internal controls, capital base, liquidity and funding resources of the FCs under its respective supervisory jurisdiction. Bilateral MoUs were also signed by SEBI and by IRDAI with the Financial Intelligence Unit to share information on anti-money laundering. Aside from these, there are no other formal data sharing arrangements between the financial regulatory authorities, but all members of the FSDC can request information bilaterally from each other. The authorities report that there are active bilateral and multilateral channels that facilitate information and data sharing among regulators both inside and outside the FSDC.

Tools for macroprudential purposes: Regulatory tools, as well as the decision when to activate them, reside with the sectoral authorities rather than with the FSDC. Most of those tools fall within the purview of the RBI, which has broad powers to issue directions to banks under Section 35A of the Banking Regulation Act.[28]

As previously noted, other than in the case of the CCyB and of additional capital requirements for D-SIBs, there is at present no explicit framework for regularly assessing overall macroprudential policy as distinct from micro-prudential regulation and supervision. After the FSR is published, the Department of Banking Regulation analyses identified banking sector risks and may prepare a note on possible policy actions on them, which is discussed by the BFS. The analysis is based on a mixture of qualitative and quantitative indicators, including measures of aggregate and sectoral credit growth and feedback from the supervisory process.[29] However, there is no explicit quantitative *ex ante* analysis of the potential impact of macroprudential policies, or any formal *ex post* assessment of the overall effects (both direct and indirect) of those measures.[30]

Time-varying or cyclical tools have been used by RBI over the past 10 years to target the build-up of risks related to cyclical fluctuations in the provision of credit; the interdependence across institutions; and cross-border spillovers (see Annex 3).[31] Tools deployed to date have been mostly capital-based and sector-specific, including time-varying risk weights, loan loss provisioning and reserve requirements; a statutory liquidity ratio; LTV caps; and sectoral limits. Countercyclical measures have largely targeted sectors subject to credit procyclicality, such as capital markets, housing, and commercial real estate (CRE). These measures have often been complemented with changes in monetary policy aimed at affecting overall macroeconomic conditions. Many of these measures pre-date the global financial crisis and were unwound, jointly with monetary policy easing, in October 2008 to mitigate the economic downturn in the aftermath of the crisis. While they have been effective in reducing bank credit

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[28] See https://rbidocs.rbi.org.in/rdocs/Publications/PDFs/BANKI15122014.pdf.

[29] For example, in the context of the CCyB the RBI proposes to use the credit gap as the main indicator but complemented by the growth in gross non-performing assets and a number of other indicators, such as the previous 3 years' credit-deposit ratio, the Industry Outlook Survey and the corporate sector interest coverage ratio (the ratio of corporate earnings before tax and interest expenses to interest expenses). See the July 2014 RBI Report of the Internal Working Group on Implementation of the CCyB (https://www.rbi.org.in/Scripts/PublicationReportDetails.aspx?UrlPage=&ID=797).

[30] A qualitative analysis of the costs and benefits of introducing new regulations is performed by the RBI.

[31] See "Macroprudential policies in India" in the Selected Issues paper by the IMF (March 2016, Country Report No. 16/76, available at http://www.imf.org/external/pubs/ft/scr/2016/cr1676.pdf).

growth to the residential and CRE sectors, these policies have not prevented the marked increase in corporate sector leverage and associated bank credit risks in recent years.[32]

The RBI has also implemented measures to reduce financial stability risks caused by capital flow volatility, particularly borrowing from abroad that increases foreign currency or liquidity mismatch risks. To contain such risks, in January 2014 the RBI issued guidelines on higher provisioning and capital requirements for bank loans to corporates that have unhedged foreign currency exposures. This is expected to incentivise banks and their corporate clients to better monitor such exposures. More recently, the RBI announced a framework allowing corporates to issue rupee-denominated bonds abroad and also adopted a more liberal framework for external borrowing in rupees and in longer term foreign currency debt, which aim at encouraging more stable forms of capital inflows to finance domestic investment; these funds can also be used for direct investment abroad and working capital.

A number of structural (cross-sectional) macroprudential measures are also used by the RBI to limit the linkages and spillovers within the banking system and between banks and other financial institutions. These include: prudential limits on banks' total interbank liabilities; caps on uncollateralised funding and lending; and limits on banks' exposures to capital markets, capital instruments of other banks and other financial institutions, exposures to NBFCs, banks' borrowing from abroad and on their open foreign exchange positions. Banks also have caps on their investments in liquid schemes of debt-oriented mutual funds as those funds lend short-term in the overnight lending markets and buy banks' certificates of deposit. The RBI also published in August 2015 a list of D-SIBs that are subject to a capital surcharge from 2016.[33]

SEBI also has tools that can be used for macroprudential purposes, including circuit breakers and variation margins that are introduced if there are large daily movements in market wide prices. At a firm level, SEBI also uses capital adequacy requirements for brokers, as well as restrictions on maturity, concentration, investments, leverage and derivatives for MMFs.[34]

Communication: There are various communication channels that the authorities use on financial stability issues. First, immediately after each FSDC and FSDC-SC meetings a press release is published by the MoF and RBI respectively, which consists of the agenda and a brief summary of the main issues discussed.[35] However, any decisions and recommendations are only circulated among the members of the Council and the Sub-Committee. Second, the FSR is published on the RBI's website, and is accompanied by a press release and a press briefing chaired by the Head of the Department of Communications. Third, RBI representatives have

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[32] See the IMF's 2016 Article IV report (ibid). As noted in the accompanying Selected Issues paper (ibid), "past countercyclical measures were less effective in averting a rise in broader corporate sector vulnerabilities".

[33] See https://rbi.org.in/scripts/BS_PressReleaseDisplay.aspx?prid=34862.

[34] For more details, see "Peer Review of Regulation of Money Market Funds: Final Report" by IOSCO (September 2015, https://www.iosco.org/library/pubdocs/pdf/IOSCOPD502.pdf).

[35] The press releases from the most recent FSDC and FSDC-SC meetings are at http://finmin.nic.in/fsdc/Press_release_14th_meeting_FSDC.pdf and https://rbi.org.in/Scripts/BS_PressReleaseDisplay.aspx?prid=36817 respectively.

regular meetings with parliamentary committees, including on any prudential actions taken. And fourth, senior RBI officials also give speeches covering financial stability issues.[36]

In addition, when the RBI is contemplating changes in its prudential tools or other regulatory policies, it consults the public by issuing drafts on the RBI website for feedback.[37] Similarly to micro-prudential policies, macroprudential actions are published by the RBI in press releases and circulars once enacted.[38]

Lessons learned and issues to be addressed

The authorities have taken important steps in recent years to develop the macroprudential policy framework and to address relevant FSAP recommendations. The FSDC, its sub-committee and technical groups are well bedded down and discuss a range of financial stability issues, which has helped to improve inter-agency coordination. An MoU was signed between member regulators of the IRF to forge greater cooperation in consolidated supervision and monitoring of financial conglomerates. The RBI has expanded the use of quantitative techniques and stress tests to gauge systemic risks, especially to the commercial banking sector, while the main findings (reflecting the contributions of various authorities) are reviewed by the FSDC-SC and published in the semi-annual FSR. Progress has also been made in addressing identified data gaps (e.g. on corporate leverage and foreign currency mismatches), while steps are underway to form a Financial Data Management Centre to facilitate information sharing and analysis. Finally, the RBI has a wide range of time-varying and structural tools at its disposal for macroprudential purposes and has used them to deal with financial stability risks, such as in the housing market and from capital flow volatility.

Building on these accomplishments, as with most countries, additional work is needed to flesh out and operationalise a comprehensive macroprudential policy framework. This includes, in particular, enhancing the institutional and operational arrangements; further strengthening systemic risk analyses and policy assessments, including with respect to the effectiveness of policies; and developing a comprehensive communication strategy. Much of this work relates to making macroprudential policy-setting more explicit, with clearer boundaries between authorities and with other policies (such as micro-prudential and monetary policies) as well as in terms of balancing the broader objectives of promoting financial development and inclusion. Experience from other countries indicates a variety of institutional arrangements for macroprudential policy, which take into account country-specific circumstances and preferences.[39] It is beyond the scope of this review to prescribe the specific institutional

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36 See, for example, the speeches by Deputy Governors Chakrabarty on the macroprudential policy framework (April 2014, ibid) and Gandhi on financial stability (February 2016, https://rbi.org.in/Scripts/BS_SpeechesView.aspx?Id=988).

37 For example, see the December 2013 press release seeking public comments on the draft framework for dealing with D-SIBs (https://rbi.org.in/Scripts/BS_PressReleaseDisplay.aspx?prid=30102).

38 See, for example, the change in risk weights for housing loans (https://rbi.org.in/Scripts/NotificationUser.aspx?Id=10063&Mode=0) and changes in policies for NBFC lending against gold jewellery (https://www.rbi.org.in/scripts/NotificationUser.aspx?Id=8418&Mode=0).

39 In a number of other countries, the central bank, or an inter-agency body with the central bank playing a leading role, has been explicitly tasked with macroprudential policy making. See Annex 2 of the August 2015 FSB China peer review report (http://www.fsb.org/wp-content/uploads/China-peer-review-report.pdf).

configuration that may be appropriate for India. As such, the recommendations primarily focus on desired objectives and tasks rather than on specific institutional design.

Institutional and operational arrangements: There is at present no single statutory authority or body in India that is explicitly tasked with macroprudential policy for the financial system as a whole. The FSDC is a forum for enhancing inter-agency coordination for financial stability, but it does not have legal underpinnings and has a much broader mandate that includes financial sector development and inclusion. Setting regulatory policy is done by the individual regulatory authorities. Given the largely bank-based financial system, macroprudential analysis and policy is therefore mainly carried out by the RBI. The RBI has a legal mandate to secure monetary stability, but since 2004 it has voluntarily included financial stability as an additional (albeit not legally binding) objective in view of its contribution to the conduct of monetary policy and to price stability.

The macroprudential policy at the RBI has developed organically from micro-prudential regulation and supervision, and the same internal processes are used for decision making purposes. Micro- and macroprudential polices, however, have different objectives: the former is concerned with the risk to individual financial institutions and takes the macro economy as given, whereas the latter is concerned with the risks to and from the financial system as a whole and its interaction with the macro economy. Within the RBI, the FSU carries out financial stability analysis, but its work is not closely linked to policy decision-making. Moreover, with the exception of the CCyB and capital requirements for D-SIBs, there is no formal regular process to review whether changes in the overall macroprudential policy stance are required. It would be useful if the systemic risk analysis was more closely integrated to policy setting (e.g. by considering risks identified in the analysis and possible options to address them simultaneously) so as to ensure policy coherence and analytical focus on the implications of macroprudential decisions on the financial system and the economy. Consideration could also be given to having an explicit and distinct process for macroprudential policy centred around regular meetings within the RBI.

The FSDC and its sub-committee have played a useful role in identifying and discussing possible financial system risks, although policy responses remain the responsibility of its member authorities. As the system develops and becomes less centred on banks, there will be a need to extend coverage of macroprudential policy to financial markets and NBFEs.[40] This would require more analysis on the financial system as a whole, the interaction of its constituent parts and how they respond to changes in macroprudential policy, with the coordination and involvement of various authorities. This suggests the need to clarify expectations on the way that different authorities can contribute to the macroprudential policy framework via the FSDC, while ensuring the leading role of the RBI given its prudential mandate and technical expertise.

- ***Recommendation 1: The authorities should further flesh out the macroprudential policy framework by explicitly setting out the individual and collective roles and responsibilities of the relevant bodies and by more closely integrating systemic risk analysis and decision making.***

[40] For example, given that HFCs are significant lenders to the household sector, consideration should be given to including their regulator – the National Housing Bank (NHB) – in FSDC meetings (see section 3).

***Analysis and data*:** As noted above, the RBI has improved data collection and enhanced its assessment of financial stability risks in recent years. Going forward, it would be useful for systemic risk analysis to become even more policy-oriented so that it can support decision-making for macroprudential purposes. This would involve producing a regular detailed integrated assessment of risks backed by 'chart packs' on risk indicators for policy meetings, with risk heat maps and tables that map financial stability objectives into a set of key indicators.[41] This standardized set of indicators could also be used by the FSDC and its sub-committee to discuss systemic risks and policy responses.

The RBI currently carries out a range of banking system stress tests mainly applying scenarios directly to banks' balance sheets. These could be enhanced in various ways. First, models could be further developed to assess the impact of adverse macro scenarios on banks' borrowers – especially those most at risk[42] – and then, in turn, how a deterioration in their balance sheets would feed back to banks' own balance sheets. At the current conjuncture, such adverse scenarios could be applied to highly indebted corporates and include their foreign currency maturity mismatches. The severity of the stress tests could also vary with the stage of the economic cycle, with more severe stress tests in periods of high credit growth. Such time-varying stress tests would be helpful, for example, in setting the CCyB. Data permitting, analysis could also be developed to include the spillback of how a deterioration in banks' balance sheets would affect the supply of credit to the economy.

Moreover, given the growth of non-bank finance and the linkages between banks and other financial institutions, the authorities should continue to develop techniques that assess financial stability risks outside the banking sector (see section 3). The assessment of financial markets could be enhanced by, for example, analysing developments and risks in asset prices, bond spreads and asset price volatility;[43] and by assessing the impact of external shocks on capital flows, especially on potentially sensitive categories such as borrowing from foreign banks and from international debt markets in foreign currency or at shorter maturities.

On data, notwithstanding the important progress made, there are still a number of gaps relating to the corporate and non-bank financial sectors. It would be useful to continue to increase the coverage and consistency of data on corporate balance sheets, including with respect to their aggregate foreign exchange liabilities. At present, information on the extent of corporates' foreign currency hedging is collected by banks, which incur incremental provisioning and capital requirements for loans to entities with unhedged foreign exposures. The quality of this

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[41] See, for example, the US Office of Financial Research's *Financial Stability Monitor* (https://financialresearch.gov/financial-stability-monitor/) and the European Systemic Risk Board's *ESRB Risk Dashboard* (https://www.esrb.europa.eu/pub/pdf/dashboard/20150324_risk_dashboard.pdf) and the *ESRB Handbook on Operationalising Macro-prudential Policy in the Banking Sector* (https://www.esrb.europa.eu/pub/pdf/other/140303_esrb_handbook_mp.en.pdf). The Bank of England also produces and publishes in the annex of its FSR updates on a regular set of indicators to help inform macroprudential policy making (http://www.bankofengland.co.uk/publications/Documents/fsr/2015/dec.pdf).

[42] For example, the IMF's 2016 Selected Issues paper (ibid) finds that the corporate sector would be very vulnerable to a combined sharp rise in interest rates and decline in the rupee, since the share of corporate debt owed by firms with an interest coverage ratio below one would rise from around 10.8% to 42%.

[43] See, for example, the various measures of risks in financial markets found in the March 2016 BIS Quarterly Bulletin (http://www.bis.org/publ/qtrpdf/r_qt1603.pdf).

information is expected to improve significantly since the Institute of Chartered Accountants of India has recently mandated corporates to disclose their unhedged foreign currency exposures in their annual accounts. However, one missing data point that has become significant in a number of other large emerging markets is foreign exchange debt raised abroad by subsidiaries of domestically-owned companies.[44] Focusing solely on domestic resident entities may lead to an understatement of overall group foreign exchange leverage and risks.

As in most countries, corporate sector and macro data more generally tends to be available only on an infrequent basis and after a time lag. As a result, the FSU relies on quarterly (or less frequent) data in preparing the FSR, and it is not generally involved in more regular surveillance. Financial market information can help to fill data gaps, especially on timeliness. Aside from data on financial market prices, it may be useful to make more use in the FSR of the information gathered from meetings and contacts with the private sector (including by other RBI departments) to complement the in-house desk-based analysis.[45]

- ***Recommendation 2*: The RBI should continue to deepen its financial stability analysis by: (a) expanding its regular set of standardised risk indicators to support policy making; (b) examining further (including through stress tests) the linkages between the corporate and banking sectors as well as risks from financial markets, non-banks and the external sector; and (c) using information from market intelligence to complement desk-based analysis.**

***Tools for macroprudential policy*:** Regulatory tools, as well as the decision when to activate them, reside with the sectoral authorities rather than with the FSDC. Most of those tools fall within the purview of the RBI, which has broad powers to issue directions to banks under the Banking Regulation Act. The RBI has used a wide range of time-varying (differentiated by sector) and structural tools for macroprudential purposes. Recently, some measures have been taken to reduce risks to financial stability stemming from non-banks and from capital flow volatility, including with respect to unhedged corporate foreign currency exposures.

At present there is no explicit quantitative analysis of the cost-benefit implications of different macroprudential actions, either on an *ex ante* or *ex post* basis, including in terms of their overall impact and potential spillovers or leakages.[46] The authorities note that such analysis is not always quantifiable and that it is more difficult to undertake when more than one tool is used concurrently (as the RBI has generally tended to do). This is a challenge faced by regulatory authorities in many other countries, but having such analysis is an important prerequisite to be able to judge whether an appropriate and commensurate policy response is being adopted.

In India, cost-benefit analysis of taking – or deciding not to take – financial stability measures may be especially important. Both the FSDC and some of the individual regulators (such as the

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[44] Outstanding international debt securities issued by Indian-owned companies (including Indian affiliates abroad) was US$47 billion at end-2014, compared with only US$20 billion by Indian resident companies. See Chui, Kuruc and Turner, "A new dimension to currency mismatches in the emerging markets: non-financial companies" (March 2016, BIS Working Paper No 550, http://www.bis.org/publ/work550.htm).

[45] As an example of how the role of market intelligence is carried out and evolving at another central bank, see http://www.bankofengland.co.uk/publications/Documents/speeches/2015/speech801.pdf.

[46] Leakages refer to the migration of financial activity outside the scope of application and enforcement of the macroprudential tool, potentially undermining its effectiveness.

RBI) have quite broad mandates that go beyond financial stability. While it is understandable that financial development and inclusion are key policy objectives, they could in principle occasionally come into conflict with maintaining financial stability. At present there is no explicit mechanism in place within the RBI or FSDC to consider potential trade-offs between financial stability and financial development or inclusion. The authorities report that, in practice, there has been no conflict thus far and that they view a deeper financial system as contributing to increased financial stability.

On the other hand, as noted by the IMF, India experienced high credit growth of around 25% per year between 2005-06 and 2010-11, but no aggregate countercyclical macroprudential measures (other than sector-specific tools for CRE and residential housing loans) were applied. This could point to the need for a framework to assess the speed and extent to which this form of financial deepening is sustainable from a financial stability perspective, given the associated build-up of vulnerabilities via corporate sector leverage and bank credit risks. Experience from other countries highlights that financial stability risks can arise from episodes of rapid financial deepening even if the starting point is one of a relatively low stage of development.[47] It is therefore important for the authorities – as they flesh out their macroprudential framework – to consider potential policy trade-offs in the future.

Ex post policy evaluation would seek to assess not only the extent to which macroprudential measures have had the desired impact on the resilience of financial institutions, but also the impact on the macro economy and the extent to which the measures may have led to leakages or other unintended consequences such as regulatory arbitrage. Such an evaluation can rely on both qualitative and quantitative indicators.[48]

- ***Recommendation 3:* *The authorities should undertake ex ante cost-benefit analysis on the use of tools for macroprudential purposes, including with respect to their interactions with other policies, and assess their effectiveness on an ex post basis.***

Communication: The general aim of macroprudential policy communication strategies is to clearly convey financial stability assessments, link them logically to any policy actions taken, and manage public expectations about what can be achieved with those policies.

There are reasons for keeping some information related to financial stability confidential, since its publication may cause adverse market reaction. But, in general, a public communication strategy can represent a 'soft' tool for macroprudential purposes that conveys the intended messages to financial market participants and the broader public. It also can introduce more accountability and educate the wider public on financial stability issues.

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[47] See, for example, Dell'Ariccia et al, "Policies for Macrofinancial Stability: How to Deal with Credit Booms," (2012, IMF Staff Discussion Note 12/06, https://www.imf.org/external/pubs/ft/sdn/2012/sdn1206.pdf), and Laeven and Valencia, "Systemic banking crises database: an update", (2012, IMF Working Paper No. 12/163, https://www.imf.org/external/pubs/ft/wp/2012/wp12163.pdf).

[48] See, for example, Lim et al, "Macroprudential Policy: What Instruments and How to Use Them, Lessons from Country Experiences" (2011, IMF working paper 11/238, available at https://www.imf.org/external/pubs/ft/wp/2011/wp11238.pdf); CGFS, "Operationalising the Selection and Application of Macroprudential Instruments," (ibid); and Arregui et al, "Evaluating the Net Benefits of Macroprudential Policy: A Cookbook" (2013, IMF Working Paper 13/167, available at http://www.imf.org/external/pubs/ft/wp/2013/wp13167.pdf).

Currently there are various channels of communication on financial stability issues in India with varying degree of transparency. The assessment of risks in the FSR is quite extensive and its publication is accompanied by a press briefing chaired by the Head of the Department of Communications. Senior RBI officials sometimes give speeches on financial stability issues.

Communication of policy actions is more varied. Changes in the RBI's regulatory tools for macroprudential purposes are disclosed on the RBI website and in an annual publication,[49] but focus mainly on the change itself rather than the policy context and its implications (if any) in the macroprudential stance. A lot of detail centres around the practical implementation of the measure rather than the economic rationale for the decision or the various judgments that were considered in changing policy. As previously noted, there is only a limited integration in the FSR between the discussion on financial stability risks and the policy actions that have been taken or are being considered. There is not currently any comprehensive periodic report on the activities or decisions of the FSDC.[50] And communication of the FSDC/FSDC-SC meetings on the MoF/RBI websites tends to be brief and often without describing the judgements being considered or the decisions made. It may, therefore, be useful to market participants and the public more broadly if communication on the deliberations of the authorities on macroprudential policy was enhanced.[51]

- ***Recommendation 4*: The authorities should consider enhancing public communication on macroprudential policies, including through more detailed press releases of the outcome of FSDC/FSDC-SC meetings and greater use of the FSR to explain macroprudential policy decisions. In addition, the authorities should consider issuing a comprehensive periodic (e.g. annual) report or summary on the FSDC's activities.**

3. Regulation and supervision of finance companies

Background

As demonstrated by the global financial crisis, non-bank financing can give rise to bank-like risks through maturity or liquidity transformation, imperfect credit risk transfer or the use of leverage, which can affect financial stability both directly and through its interconnectedness with the banking sector. To address these risks, the FSB has been working to transform shadow banking into resilient market-based finance as a core element of its reform agenda.[52]

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[49] See the RBI's "Report on Trend and Progress of Banking in India" (available at https://www.rbi.org.in/scripts/AnnualPublications.aspx?head=Trend%20and%20Progress%20of%20Banking%20in%20India). This publication was merged with the FSR as from December 2014.

[50] The RBI's annual report includes a short mention of FSDC-SC activities, while the MoF annual report includes a brief section pertaining to the FSDC. Neither of these two publications, however, provides a comprehensive account of the deliberations, conclusions and actions that took place by these bodies during the year.

[51] See for example, Annex 3 of the November 2015 FSB peer review report of Turkey, which describes the communication strategies of financial stability bodies in some other countries (http://www.fsb.org/wp-content/uploads/Turkey-peer-review-report-19Nov15.pdf).

[52] In particular, the FSB's 2013 Policy Framework for strengthening the oversight and regulation of non-bank financial entities sets forth key overarching principles that authorities should adhere to in their oversight of

While the overall non-bank financial sector in India is relatively small,[53] non-bank financial entities (NBFEs) have been growing fast and their activities may give rise to some shadow banking risks. At the same time, NBFEs have been largely involved in serving borrowers who are generally excluded from the formal banking sector, so there is broad recognition that they bring diversity and contribute to financial inclusion and economic growth.

The 2012 FSAP found that interconnectedness and complexity are increasing in the financial system in India, and that banks, NBFCs and mutual funds are linked through the wholesale funding market. While deposit-taking NBFCs had been shrinking in number and importance, many of these were large, regularly accessed public funds and were interconnected with the rest of the system. The FSAP noted that the RBI was planning to focus its regulatory efforts on deposit-taking and large non-deposit-taking NBFCs.

This section provides a high-level overview of the institutional framework for the NBFE sector. Rather than covering all of the entities in the sector, the focus of analysis in this peer review is limited to NBFCs and HFCs. These types of entities collectively represent the largest part of non-bank credit intermediation and their activities – as well as their risks and prudential framework – resembles in some ways those of banks. Based on international guidance and experience in this area, the section examines the processes used by the authorities to: collect/share information and monitor their activities; identify and assess associated shadow banking risks; and determine appropriate regulatory and supervisory actions.

Regulatory perimeter

Institutional framework: The non-bank financial sector in India encompasses a broad range of corporate entities regulated by a number of authorities (see Table 1). Only money lenders and pawn brokers are not currently regulated, although the authorities are of the view that they do not appear to pose a risk to financial stability given their small size. In terms of non-corporate entities, the relevant authorities are: state governments for unincorporated bodies; MCA for limited liability partnership firms; the Registrar of Cooperative Societies for cooperative societies; and the Central Registrar of Cooperatives for multi-state cooperative societies.

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non-bank financial entities identified as posing shadow banking risks that threaten financial stability. See http://www.fsb.org/wp-content/uploads/r_130829c.pdf. See also "Transforming Shadow Banking into Resilient Market-based Finance: An Overview of Progress" by the FSB (November 2015, http://www.fsb.org/wp-content/uploads/shadow_banking_overview_of_progress_2015.pdf).

[53] According to the authorities, banks in India correspond to almost two-thirds of financial system assets. The December 2014 RBI FSR notes that, according to the FSB methodology and classification, the size of the shadow banking sector in India is estimated to be around USD 190 billion, which is the 15th largest in the world (https://rbi.org.in/scripts/PublicationReportDetails.aspx?UrlPage=&ID=806). See also the FSB's Global Shadow Banking Monitoring Report 2015 (http://www.fsb.org/wp-content/uploads/global-shadow-banking-monitoring-report-2015.pdf).

Table 1: Types of NBFEs in India

Regulator	Category of Companies
RBI	Non-Banking Finance Companies
National Housing Bank	Housing Finance Companies
SEBI	Merchant Banking Companies, Venture Capital Fund Companies, Stock broking, Collective Investment Schemes
Ministry of Corporate Affairs (MCA)	Nidhi Companies,[54] Mutual Benefit Companies
State Governments	Chit Fund Companies[55]
IRDA	Insurance Companies

In most cases, the legal framework explicitly classifies an entity based on its activities into one of these categories and thereby brings it under the ambit of a regulatory authority.[56] However, in the case of NBFCs, the RBI Act leaves some discretion to the RBI to set the regulatory perimeter based on the extent to which a company engages in financial activities as its principal business. The test applied by the RBI was articulated in 1999 and is based on the so-called '50-50 business criteria' rule, wherein financial activities should constitute more than 50% of the overall assets and gross income of an entity (see Box 2). Companies that undertake both financial and non-financial activities, but whose assets or income fall below the threshold, are regulated by the MCA; companies above the threshold are subject to registration and regulation by the RBI. Information on the distribution of RBI-registered NBFCs by business criteria 'buckets' (e.g. 50%-60%, 60-80%, 80-100%) is not currently available.[57]

Box 2: NBFC definition and classification

According to the 1934 RBI Act, a company is considered as a NBFC if it carries on as its business, or part of its business, any of the following activities: making loans/advances or acquisition of shares/ securities, etc. or hire purchase finance or insurance business or chit fund activities or lending in any manner. This classification applies provided the principal business of such a company does not constitute any of the following non-financial activities: (a) agricultural operations; (b) industrial activity; (c) trading in goods (other than securities); (d) providing services; and (e) purchase, construction or sale of immovable property. The RBI Act specifies that a company would also be an NBFC if its principal business is that of receiving deposits under any scheme or arrangement.

54 A Nidhi company has the objective of receiving deposits from and lending to its members only, for their mutual benefit, and it must comply with sector rules and regulations as prescribed by the Central Government. As per the MCA database, there are 955 registered Nidhi companies.

55 According to the Chit Funds Act 1982, Chit means a transaction (whether called chit, chit fund, chitty, kuri or by any other name) under which a person enters into an agreement with a specified number of persons that every one of them shall subscribe a certain sum of money by way of periodical instalments over a definite period and that each such subscriber shall, in his turn, as determined by lot or by auction or by tender or in such other manner as may be specified in the chit agreement, be entitled to the prize amount. As per the MCA database, there are 5,744 registered Chit fund companies.

56 Given the broad scope of the RBI Act that includes provisions relating to "non-banking institutions", the RBI has provided notifications granting exemption from the Act's provisions to various NBFE types that are regulated by other authorities.

57 Prior to July 2015, no returns were prescribed for small-sized NBFCs (see below). The RBI only recently started collecting data on these entities and is still in the process of ensuring their consistency and accuracy.

The Act has, however, remained silent on the definition of 'principal business' and has thereby conferred on the regulator the discretion to define this for companies that carry on multiple activities that are both financial and non-financial. Accordingly, the test applied by RBI to determine the principal business of a company was articulated in its Press Release 99/1269 dated 8 April 1999. According to the press release, a company is treated as an NBFC if its financial assets are more than 50% of its total assets (netted off by intangible assets) and income from these financial assets is more than 50% of its gross income. Both of these tests are required to be satisfied in order for the principal business of a company to be determined as being financial for the purpose of RBI regulation.

This so-called '50-50 business criteria' rule was reviewed by a 2011 RBI working group examining issues and concerns in the NBFC sector".[58] In its report, the group recommended that the RBI gradually moves to a '75-75' rule in order to ensure that RBI-registered NBFCs focus primarily on financial business. In the end, it was decided to maintain the threshold as it was thought that it would leave a number of companies undertaking financial activity outside the regulatory perimeter – particularly given the fact that RBI registration and oversight is perceived to increase market participants' confidence in those companies and thereby enhances their ability to access borrowings from the market.

The RBI has established different classifications for NBFCs as follows (see Annex 4 for more details):

a) In terms of type of liabilities into deposit (NBFCs-D) and non-deposit accepting (NBFC-ND);

b) Non-deposit taking NBFCs by asset size into 'systemically important' and other non-deposit holding companies (NBFC-ND-SI and NBFC-ND);

c) By the type of activity they conduct. Within this broad categorization the different types of NBFCs include Asset Finance Companies, Investment Companies, Loan Companies, Infrastructure Finance Companies, Core Investment Companies, Infrastructure Debt Funds, Micro Finance Institutions, Factor, Mortgage Guarantee Companies and Non-Operative Financial Holding Companies.

In the case of HFCs, the National Housing Bank Act of 1987 established the NHB as a wholly owned subsidiary of the RBI. The NHB's objectives include the promotion of a sound and healthy housing finance system for all segments of the population and the integration of housing finance with the overall financial system. The NHB registers, regulates and supervises companies that transact or have as one of their principal objects the business of providing finance for housing, whether directly or indirectly;[59] the NHB has not, however, defined the "principal business" of HFCs thus far. In addition to its regulatory role, the NHB promotes development of the housing finance market via financing initiatives for affordable housing as well as the development and promotion of housing market infrastructure.

Concerns about the regulatory perimeter have arisen in recent years from unregulated financial entities and unauthorised financial activities giving rise to consumer protection issues that may also have a systemic risk dimension.[60] These concerns and policy responses were discussed by the FSDC and its Sub-Committee in recent years, and a number of authorities have taken action in this regard. For example, SEBI has issued orders against errant schemes/entities and has

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[58] See https://www.rbi.org.in/Scripts/PublicationReportDetails.aspx?UrlPage=&ID=647.

[59] See http://www.nhb.org.in/Regulation/RegisteredCompanies.php.

[60] As noted in the June 2015 FSR, "Such issues… may take the shade of a systemic stability issue through the 'trust' channel. These events may have significant other socioeconomic implications, especially when they affect sections of the lower-income strata of the population and may compromise the success of efforts towards financial inclusion."

advised investors through caution notes to avoid investing in illegal collective investment schemes.[61] The RBI surveys the NBFCs perimeter using market intelligence, complaints from affected parties, industry sources and reports by statutory auditors in order to ensure that each entity satisfying the business criteria rule is registered and to prevent unauthorised activities (i.e. collection of public deposits).[62] In addition, the RBI convenes State Level Coordination Committees (SLCC)[63] that share information on a quarterly basis and agree to take actions against entities conducting unauthorized and suspect businesses, involving funds mobilization from the public; the FSDC-SC takes stock of SLCC activities on a half-yearly basis.[64]

Relatedly, it bears noting that not all deposit-taking activities are currently regulated by the RBI. Industrial, manufacturing and other non-financial companies are allowed to take deposits – both from their employees and others – under certain conditions specified in the Companies Act 2013.[65] The deposit-taking activities of these companies are overseen by the MCA.

Planned reforms: A Shadow Banking Implementation Group (SBIG) under the FSDC-SC was set up to assess the extent to which the regulatory framework for NBFCs is aligned with the FSB's Policy Framework; to use gap analysis to identify any necessary reforms; to set up a roadmap indicating the timelines for implementation of reforms together with the identification of the responsible regulatory/agency; and to set up a data repository for the shadow banking sector. The SBIG has analysed the various types and risk profiles of NBFEs in the organised (including the entities not registered with any of the regulators) as well as the unorganised (informal) sector; its draft report is currently being reviewed by RBI management.

In addition, the Indian Financial Code currently considered by the Government includes proposed changes in the institutional arrangements for macroprudential policy setting and the establishment of a new financial authority (see Box 1 in section 2), both of which are relevant for the assessment of risks stemming from, as well as the regulation and supervision of, NBFCs.

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61 See, for example, http://www.sebi.gov.in/cms/sebi_data/pdffiles/32726_t.pdf and http://www.sebi.gov.in/cms/sebi_data/pdffiles/32257_t.pdf.

62 As noted in the December 2014 FSR, "From a preliminary reconciliation of the [MCA] database… it is observed that many of these companies though not registered with the Reserve Bank might be carrying on (nonbanking) financial activities. Financial statements… reveal that a significant number of them could be termed as NBFCs as per the Principal Business Criteria specified by the Reserve Bank. A preliminary exercise to map the universe of 'finance' companies currently not registered with the Reserve Bank shows that the relative proportion of the segment of un-registered companies in terms of asset size may be much lower than companies under Reserve Bank's regulation. Thus, a large number of small companies populating the NBFC sector do not appear to be posing a major risk to systemic stability... Nonetheless, they give rise to issues with regard to consumer protection as well as reputational risks for the regulators".

63 Each SLCC is chaired by the Chief Secretary/Administrator of the concerned State/Union Territory and has as its members relevant regulatory authorities (e.g. RBI and SEBI) and central/state government authorities.

64 The RBI has also been advising and encouraging states to pass legislation that protects the interests of depositors from unauthorized activities. Many such states have adopted laws based on an RBI model act.

65 See http://www.mca.gov.in/Ministry/pdf/CompaniesAct2013.pdf and the 2014 acceptance of deposits rules. Conditions include: being profitable for the last 3 years and having a positive net worth; obtaining a credit rating annually; depositing at least 15% of the amount of deposits maturing by the next financial year in a separate bank account as a repayment reserve; taking deposits only up to a proportion of net owned funds; and offering an interest rate prescribed by the RBI.

NBFCs

Sector overview: Many NBFCs have been traditionally involved in serving borrowers excluded from the formal banking sector. Over time the lines of operation between banks and NBFCs became increasingly blurred and, more recently, NBFCs emerged as an important alternative source of credit intermediation. Many NBFCs nowadays compete with banks across a range of consumer financing segments, such as small business lending, asset finance and infrastructure finance. Major growth areas in recent years include credit to micro, small and medium-sized enterprises; microfinance loans; gold loans; and second hand vehicle financing.

As of March 2015, 11,842 NBFCs were registered with the RBI, of which 195 were NBFCs-D and 209 were NBFCs-ND-SI. These two NBFC types had total assets of INR 15.7 trillion (around US$240 billion, or 12% of GDP), 87% of which belonged to NBFCs-ND-SI. Collectively, NBFCs-D and NBFCs-ND-SI represented the equivalent of 13% of assets, 3% of deposits and 18% of loans of SCBs. In addition to these two categories, there is a large number of smaller NBFCs-ND (see Table 2) as well as other finance companies that do not fulfil the '50-50 business criteria' rule and are therefore not registered with the RBI.

Table 2: Size-wise distribution of NBFCs registered with the RBI

Assets size category (in ₹)	Number of companies	Total Assets size (in ₹ billion)	Proportion of Number of Companies (%)	Proportion of Total Asset Size (%)
Above 1 billion	454	11621	3.8	89.6
500 Million to 1 billion*	686	490	5.7	3.8
Up to 500 million	9555	854	79.4	6.6
Data not available	1334	NA	11.1	

* Data pertains to 384 reporting companies

Source: RBI (December 2014 FSR).

While the sector does not seem highly concentrated,[66] it is worth noting that different NBFCs specialise in particular market segments and that the largest privately-owned ones operate as conglomerates across sectors such as insurance, broking and mutual fund management. Several of them also form part of economic groups with a broad range of business interests.[67]

Some of the NBFCs registered with the RBI are (central and state) government-owned, and they account for a significant proportion of the total assets of the sector.[68] As noted in the December 2014 FSR, these NBFCs are highly leveraged (leverage ratio of 6.4 compared to 3.3 for the entire sector). Currently, there are 43 government-owned NBFCs registered with the RBI, but only 17 of them (the larger ones) submit basic returns on a voluntary basis. These NBFCs account for around 50% of all public deposits in this sector.

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[66] Based on RBI data, the top 5 (in terms of assets) concentration ratio for NBFCs as of March 2015 was 25%.

[67] For example, 4 of the 10 largest NBFCs by asset size as of March 2015 were government-owned, while the remaining 6 belonged to FCs that formed part of larger mixed-activity groups.

[68] As of March 2015, the assets of the 17 (larger) government-owned NBFCs that submit returns to the RBI were INR 5.9 trillion, which represented 28% of the combined total assets of NBFC-D and NBFCs-ND-SI.

Regulatory and supervisory framework: The RBI focuses its efforts on deposit-accepting and large non-deposit accepting NBFCs. These entities are subject to prudential regulation and supervision, including reporting requirements and on-site inspection on a periodic basis.

The regulation of NBFCs has been progressively tightened and become more aligned to that of banks. Amendments to the RBI Act in 1997-99 placed stricter and more detailed regulations on licensing and deposit acceptance, and the RBI issued prudential norms for NBFCs-D. In 2007 the RBI developed different prudential norms for NBFCs-D and NBFCs-ND, adopted a size threshold for identifying NBFCs-ND-SI and imposed additional prudential regulations on them.[69] In 2014, the regulations for NBFCs were revised significantly[70] in order to migrate towards a more activity-based framework and reduce gaps and arbitrage opportunities by aligning them more closely to those of banks (see Box 3, Table 3 and Annex 4).[71] In July 2015, the RBI issued specific norms for NBFCs-ND-SI to further harmonize regulations with those applied to commercial banks.[72] However, government-owned NBFCs are excluded from the RBI's prudential rules, and are only subject to the norms of the relevant Government department/ministry or the Bureau of Public Enterprises to which such companies are attached.

In coming up with the revisions to the regulatory framework for NBFCs, the RBI sought to strike a balance between a number of guiding principles – namely: preserving the innovative and dynamic nature of the sector in providing 'last mile connectivity' for parts of the economy; addressing possible sources of risk; conserving regulatory resources; dealing with regulatory arbitrage; and providing adequate transition period so as to minimise disruption to the sector.

The current regulatory framework for NBFCs is subject to a significant level of tiering. In particular, some regulations differ by NBFC type to reflect their particular nature and thereby incentivise the development of the specific market segment (see Figure 1).[73] Moreover, NBFCs-ND with asset size of less than INR 5 billion, that do not access any public funds and do not have a customer interface, are only subject to reporting requirements. There also remain important differences in certain rules vis-à-vis banks (see Annex 5), such as with respect to risk weights, ability to take deposits, priority lending requirements and other terms.

Unlike banks, NBFCs-D are only permitted to accept time deposits with a minimum maturity of one year. Since 1997, the RBI has not licensed any new deposit-taking NBFCs to deliberately discourage deposit mobilisation activities in this sector, with a view to protecting depositors' interests and fostering financial stability. Even though there were 208 NBFCs-D as

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69 It should be noted that the label of "systemically important" in this context (which is based solely on asset size) does not mean that the failure of any of those entities would pose risk to the financial system, but rather that they are subject to a more intensive form of regulation and supervision compared to smaller NBFCs.

70 See https://rbidocs.rbi.org.in/rdocs/notification/PDFs/RRFNC101114F.PDF.

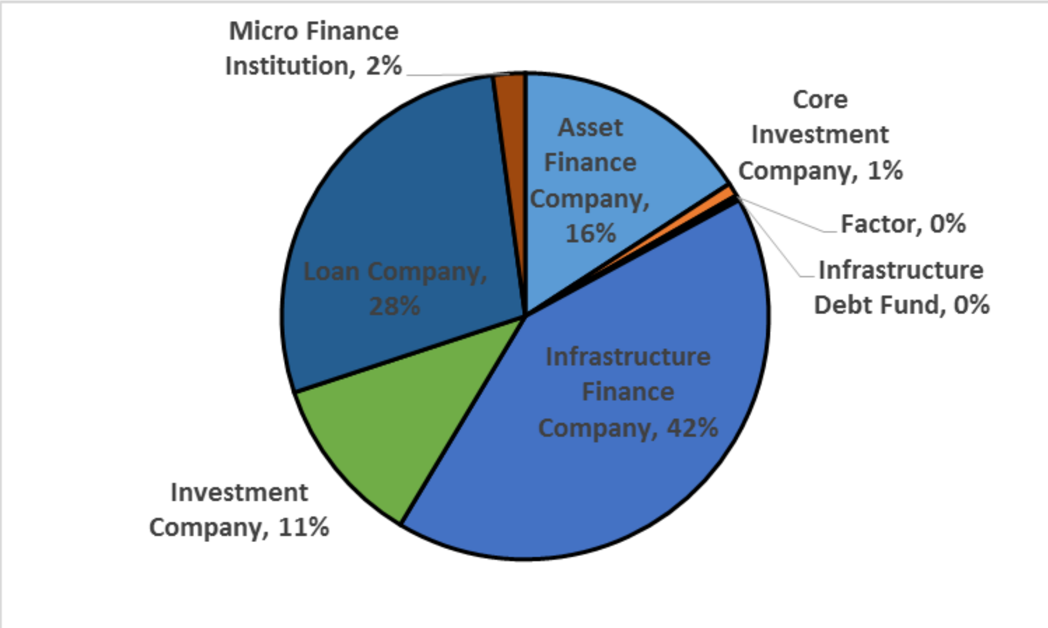
71 A number of these measures were introduced in response to the recommendations of RBI working groups – see the August 2011 "Report of the Working Group on the Issues and Concerns in the NBFC Sector" (ibid) and the January 2014 report of the "Committee on Comprehensive Financial Services for Small Business and Low Income Households" (https://rbidocs.rbi.org.in/rdocs/PublicationReport/Pdfs/CFS070114RFL.pdf).

72 https://rbidocs.rbi.org.in/rdocs/notification/PDFs/13MCEC349BEDA00A41A8B2E7440AF653A4B3.PDF.

73 For example, IFCs have various advantages vis-à-vis other NBFCs in terms of ability to issue infrastructure bonds, relaxations in single/group borrower limits, and access to external commercial borrowings.

of end-2015,[74] both their number and the quantum of public deposits they take (in absolute terms and as a proportion of bank deposits) has dropped significantly in the past 20 years.

Figure 1: Share of different NBFC types by asset size (as of March 2015)



Source: RBI.

Table 3: RBI requirements by NBFC type

NBFC type (in brackets: asset size)	Reporting requirements	Prudential requirements	Onsite inspections
NBFC-D (irrespective of size)	Quarterly (and more granular)	Yes (customised)	Yes
NBFC-ND (below or equal to INR 5 billion)[75]	Annual (and less granular)	None	No
NBFC-ND-SI (above INR 5 billion)	Quarterly (and more granular)	Yes (customised by type of NBFC)	INR 5-10 bn: rotation basis INR 10-20 bn: every 2 years above INR 20 bn: annually

[74] See https://rbidocs.rbi.org.in/rdocs/Publications/PDFs/59260.pdf.

[75] Starting in July 2015, all NBFCs are required to submit supervisory returns. Prior to 2015, NBFCs with asset size more than INR 1 billion (USD 75 million) submitted detailed returns and NBFCs with asset size of INR 0.5-1 billion submitted returns with basic information (e.g. name of company, address, NOF, profit/loss during the last 3 years); no returns were prescribed for NBFCs that were smaller in size.

Box 3: Salient features of the RBI regulatory framework for NBFCs

i) The minimum Net Owned Fund (NOF) criterion for existing NBFCs (those registered prior to April 1999) has been increased to INR 20 million (USD 295 thousand). NBFCs have been allowed till March 2017 to achieve the required minimum levels.

ii) In order to harmonize and strengthen deposit acceptance regulations across all NBFCs-D, a credit rating has been made compulsory for unrated asset finance companies (AFCs) by 31 March 2016. Maximum limit for acceptance of deposits has been harmonized across the sector to 1.5 times of NOF.

iii) In view of the overall increase in the growth of the NBFC sector, the threshold for defining systemic significance for NBFC-NDSI has been revised to INR 5 billion (USD 75 million) from the previous limit of INR 1 billion (USD 15 million). NBFCs-ND will be exempt from capital adequacy and credit concentration norms, while a leverage ratio of 7 has been introduced for them.

iv) For NBFCs-NDSI and all NBFCs-D categories, tighter prudential norms have been prescribed, such as a minimum Tier I capital requirement raised to 10% from 7% (in a phased manner by end of March 2017), asset classification norms from 180 days to 90 days (in a phased manner by the end of March 2018) in line with that of banks, and increase in provisioning requirement for standard assets to 0.4% (in a phased manner by March 2018). The exemption provided to AFCs from the prescribed credit concentration norms of 5% has been withdrawn with immediate effect. Additional corporate governance standards and disclosure norms have been issued for NBFCs-D and NBFCs-ND.

v) NBFCs with assets of less than INR 5 billion shall not be subjected to prudential norms if they are not accessing public funds. Those not having customer interface will also not be subjected to conduct of business regulations.

vi) The assets of multiple NBFCs in a group shall be aggregated to determine if such consolidation falls within the asset sizes of the two categories. Regulations applicable to each category will be applicable to each of the NBFC-ND within the group. The reporting regime has been rationalized and only an annual return is required from NBFCs with assets less than INR 5 billion.

Source: December 2014 FSR (https://rbidocs.rbi.org.in/rdocs/PublicationReport/Pdfs/7FISEREI241214.pdf).

Data collection and analysis: Data on NBFCs is primarily sourced from periodical regulatory returns (submitted online),[76] which have been augmented by the recently adopted revisions to the framework. As previously noted, starting in July 2015, all NBFCs are required to submit returns with a frequency and level of detail defined by their asset size. This data[77] covers some key parameters such as: size; growth in sector and key funding sources; deployment of funds (i.e. credits and investments); asset quality; profitability; compliance with regulatory guidelines; and company-level exposure of NBFCs that have significant access to public funds.

The RBI's Non-Bank Supervision department is responsible for analysing trends, including risks, by the NBFCs under its purview, prescribing rules on financial indicators such as income recognition, asset classification and provisioning requirements, exposure limits, capital adequacy, as well as statutory liquidity and LTV ratio requirements.

At a macro level, the offsite analysis broadly focuses on three aspects: growth in the sector and its drivers; regulatory compliance; and exposure of NBFCs to sensitive sectors (e.g. capital market, real estate and commodities). The analysis also includes *ad hoc* thematic studies such

[76] More information is collected from on-site inspections and periodic meetings with top management of large NBFCs, as well as in the process of issuing specific types of regulatory approval.

[77] https://rbidocs.rbi.org.in/rdocs/notification/PDFs/87MC43DCA4068A214370AB963DB842A5E5D5.PDF.

as, for example, a recent study of the loan-against-property portfolios of 14 NBFCs that is leading to the development of guidelines to curb undesirable practices. However, there is as yet no segment-wide analysis across relevant entities, which would require data from both NBFCs and banks given their participation in most lending segments. The RBI is in the process of developing early warning indicators to monitor and prevent possible deterioration in this sector; these are still being tested and have not yet been finalised.

Risk assessments: At present, risk assessments for NBFCs take two forms. First, NBFCs are subject to credit sensitivity shocks, both collectively and individually for some of the larger ones.[78] Second, a sample of large NBFCs are included in the financial system network analysis for the purpose of assessing interconnectedness. The evolution of prudential and performance indicators in the NBFC sector, credit sensitivity shocks and network analysis are included in FSRs, drafts of which are discussed by the FSDC-SC (see section 2). Technical groups under the FSDC, such as the IRTG and IRF, also occasionally discuss NBFC-related issues.

NBFCs-D do not offer demand deposits and do not therefore incur depositor run risks, while most NBFCs typically borrow long-term and do not assume maturity mismatch risks. The prudential rules also serve to mitigate risks from leverage, concentration, maturity and liquidity transformation. However, NBFCs are subject to important funding risks.[79] The December 2015 FSR concludes that NBFCs are the largest net receiver of funds from the rest of the financial system (see Table 4).[80] Wholesale funding sources comprise bank borrowings, bonds/debentures and commercial paper, representing 19%, 34% and 5% respectively of the combined total assets of NBFCs-D and NBFCs-SI as of March 2015; the relative importance of these has shifted in recent years in response to market and regulatory developments.

As previously noted, another potentially important source of risk analysis for some NBFCs is their ownership structure and, in particular, the extent to which they belong to FCs or mixed-activity economic groups. At present, the IRF under the FSDC-SC (see section 2) monitors big financial groups identified as FCs, some of which include NBFCs.[81] Identified FCs are subject to additional oversight through offsite analysis of quarterly group returns (submitted by a

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78 In the December 2015 FSR, a stress test on the credit risk for the NBFC sector for end-September 2015 was carried out under three scenarios reflecting different size of shocks to their Gross Non Performing Assets. The results indicate that the CRAR of the sector would remain significantly above the regulatory minimum for the sector (15%). However, the sensitivity test on credit risk for individual NBFCs for the same period under these scenarios shows that between 6%-12% of NBFCs would not be able to comply with the minimum regulatory capital requirements. Details of the methodology are found in Annex 2 of the FSR.

79 The NBFC sector came under pressure during the 2008 financial crisis due to asset-liability mismatches and funding inter-linkages, which led to several NBFCs having to downsize abruptly or enter into distressed sale of their loan portfolios. The RBI took several measures to enhance the availability of liquidity to NBFCs. See Box 3 of the FSB-IMF-World Bank report to the G20 on "Financial Stability Issues in Emerging Market and Developing Economies" (October 2011, http://www.fsb.org/wp-content/uploads/r_111019.pdf), and the March 2010 FSR (https://rbidocs.rbi.org.in/rdocs/PublicationReport/Pdfs/IFSR250310F.pdf).

80 A number of FSRs mention the interconnectedness risks of NBFCs for banks and mutual funds. For example, the December 2014 FSR (ibid) notes: "given the significant interconnectedness of NBFCs with the rest of the financial system, especially banks, they could impact banks under conditions of stress and may face difficulties if banks show reluctance to lend to them in case of a liquidity crunch."

81 Twelve FCs have been identified by the authorities: five are bank-led, four are insurance company-led, and three are securities company-led. Four of the ten largest privately-owned NBFCs belong to the identified FCs.

designated entity in each FC) and periodic meetings among IRF member regulators and other authorities with the heads of major group entities.

Table 4: Exposure of other financial institutions to NBFCs (2012-15)

(₹ billion)

	Mar-12	Mar-13	Mar-14	Mar-15	Sep-15
SCBs	1513	1453	1516	1595	1927
AMC-MFs	425	624	756	1008	1376
Insurance Companies	780	880	965	1080	1064

Source: RBI supervisory returns (December 2015 FSR).

Policy actions: The RBI has a broad range of policy tools at its disposal for NBFCs, most of which are similar to those for commercial banks (see Annex 5). The authorities identify two recent instances in which they took action vis-à-vis NBFCs for financial stability purposes.

First, in the years leading up to 2012 and amidst a rapid increase in gold prices, NBFCs lending against gold jewellery as collateral expanded at a very rapid pace. The RBI noted that such growth rates were out of line with their NBFC peers and past experience. In response to concerns about operational controls and potential vulnerabilities to a correction in gold prices, the RBI imposed in March 2012 a 60% LTV ratio on these companies as a prudential ceiling. It also required them to seek permission from the RBI for opening additional branches/outlets if the entity already had more than 1,000 branches; and to maintain a higher Tier I capital ratio of 12% by March 2014. Some of these measures were subsequently loosened as gold prices corrected, with the LTV ceiling increased to 75% in January 2014.[82]

Second, the rapid growth in 2010 among Micro Finance Institutions (MFIs) in several states, particularly Andhra Pradesh, resulted in excessive debt among clients and a repayment crisis. Ultimately some MFIs went bankrupt due to geographic concentration and funding constraints. In response to this crisis, the RBI implemented a set of regulatory guidelines for the microfinance sector (thereby creating a separate NBFC category for such firms) and advised MFIs to enhance governance and controls, including fixing internal exposure limits so as to avoid any undesirable concentration in specific geographies.[83] More recently, the RBI has licensed 8 MFIs as a new category of banks (so-called "small finance banks"), which can raise deposits and undertake other banking activities subject to additional prudential requirements.

[82] See also the "Report of the Working Group to Study the Issues Related to Gold Imports and Gold Loans NBFCs in India" by the RBI (February 2013, available at https://rbidocs.rbi.org.in/rdocs/PublicationReport/Pdfs/RSIS060213FLS.pdf).

[83] See the "Report of the Sub-Committee of the Central Board of Directors of Reserve Bank of India to Study Issues and Concerns in the MFI Sector" by the RBI (January 2011, available at https://rbidocs.rbi.org.in/rdocs/PublicationReport/Pdfs/YHMR190111.pdf).

HFCs

Sector overview: As of March 2015, there were 64 HFCs with INR 6.1 trillion in total assets (around US$150 billion, or 4.5% of GDP), which represented the equivalent of 5% of SCB assets. Housing loans account for around 75% of total HFC loans, and these have grown roughly around 20% annually over the last 5 years; other types of loans primarily consist of loans-against-property, non-resident premises loans and top-up loans. There are 18 HFCs that are in principle allowed to accept deposits from the public (i.e. similar to NBFCs-D), although 6 of them must obtain prior written permission from the NHB to undertake this activity. HFC borrowing sources are diverse and include: debentures, including those subscribed by banks (33% of total liabilities); direct bank borrowing (22%); commercial paper and other debt instruments (13%); public deposits (11%); and NHB refinance schemes, including the schemes to promote financing of the low-income housing segments (4%).

According to the NHB, HFCs have a roughly 35% share of the retail housing finance market, mainly catering to borrowers of the formal sector, with the remainder belonging primarily to commercial banks.[84] The market share of HFCs has dropped over time as banks have leveraged on their funding base and distribution networks to expand in this segment. The top five HFCs account for around 86% of total HFC assets. Of these, four are privately owned and publicly-listed, while the other one is government owned. The largest HFC, which is privately owned, forms part of a financial conglomerate monitored by the IRF. According to the authorities, failure of any of these 5 HFCs may lead to systemic risk due to their concentrated structure.

Regulatory and supervisory framework: HFCs are either deposit-accepting or non-deposit accepting, as per the Certificate of Registration (COR) granted to them. The regulations prescribed by the NHB are uniformly applicable to all HFCs, including government-owned ones. Most norms are similar to those for NBFCs except in the case of the minimum capital adequacy ratio (CRAR) (12% for HFCs vs 15% for NBFCs) and risk weights for housing finance (these range from 50%-100% and are the same as for banks), which incentivise NBFCs to solicit an HFC license if their main focus is on this market segment. Other provisions like maintenance of a Statutory Liquidity Ratio (SLR) on public deposits, credit rating of deposits, ceiling on the rate of interest and brokerage and interest on overdue public deposits etc. are generally applicable only for deposit-accepting HFCs.[85]

Data collection and analysis: The NHB collects information from HFCs on a periodic basis through various returns prescribing parameters such as: financial and business indicators; prudential returns; information on loans and deposits; top 10 exposures; and asset-liability management measures. The type and periodicity of these returns varies from monthly to annual, depending also on whether the HFC is deposit-taking or large in size.

The NHB analyses information collected from off-site surveillance, market intelligence and on-site inspections.[86] Around three-quarters of all HFCs (covering more than 90% of HFC

[84] As on March 2014, there were five HFCs sponsored or promoted by commercial banks, and one HFC by a multi-state cooperative bank.

[85] The NHB has put a restriction on total borrowing (inclusive of public deposits) of 16 times of an HFC's NOF. Within this limit, HFCs eligible to accept public deposits can have public deposits up to 5 times of their NOF.

[86] HFCs are also advised by NHB to become members of all credit bureaus and submit credit information.

assets), including all deposit-taking ones, are subjected to an annual inspection. The NHB follows a 'CAMELS' supervisory rating system to assess individual HFCs' performance, risk management and compliance. The NHB has recently reviewed the supervisory model and made it more granular.

The NHB also publishes an annual report on the trend and progress of housing in India. The report assesses the overall condition of the housing sector, details policy developments, the role of the NHB in promoting housing development as well as the operations and performance of HFCs and those commercial banks that provide housing finance.[87]

Risk assessments and policy actions: While the NHB has improved its off-site surveillance and shares some offsite information with the RBI on the evolution of large HFCs, it does not currently conduct any stress tests of the HFC sector. No HFC data is included in the financial system description or risk analysis of the FSR. Moreover, the NHB participates in the IRF and IRTG, but not (unless invited) in the FSDC or its Sub-Committee. The NHB has sought to follow RBI rules for banks by changing LTV caps for HFC loans against residential mortgages.

Lessons learned and issues to be addressed

The Indian authorities have taken a number of steps to strengthen data collection, risk analysis, and the regulation and supervision of NBFEs in recent years. In particular, the revisions to the regulatory framework for NBFCs in 2014 streamlined reporting and enhanced prudential requirements, focusing on the larger and most important entities; reduced the potential for regulatory arbitrage with banks (which are the NBFCs' main competitors); and promoted the development of specialized types of finance (e.g. infrastructure finance and microfinance). Efforts to enhance analyses and risk assessments since the FSAP include the development of early warning indicators for NBFCs (which is still underway) and the implementation of a new supervisory rating system for HFCs by the NHB. Concerns about unregulated financial entities and unauthorised financial activities giving rise to consumer protection issues (which may also have a systemic risk dimension) have strengthened the coordination of efforts to survey the regulatory perimeter. Finally, the authorities have a broad range of tools at their disposal for NBFEs and have begun to deploy them for macroprudential purposes, such as in the case of an LTV ceiling for NBFC lending against gold and for HFC residential mortgages.

At the same time, however, further steps can be taken to strengthen the regulation and supervision of NBFEs in a number of areas. These can be categorised under the headings of: enhancing data collection and analysis; strengthening risk assessments; reviewing the regulatory perimeter; and moving towards a more activity-based and risk-sensitive framework for these entities. These steps are not unique to India, as many other jurisdictions are in the process of improving their risk assessment capacity and developing appropriate policy tools to ensure sustainable market-based finance. In that context, it is important for the authorities to find the right balance between promoting financial inclusion to support economic development and ensuring that financial stability risks are adequately taken into account.

Enhance data collection and analysis*:* The RBI's revised regulatory framework for NBFCs has enhanced data reporting, but this may not be sufficient to fully assess potential sources of risk in this sector. In particular, there is limited information at present for NBFCs-ND with

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[87] See http://www.nhb.org.in/publications/trends.php.

assets of less than INR 5 billion, which are not subject to prudential norms and only file basic returns (many of which are being collected for the first time and their quality remains uneven). There is even less information for other entities that undertake financial activities but whose assets or income do not reach the '50-50 business criteria' rule and are hence not registered with the RBI. The MCA database, which can provide a broader perspective on the number and nature of these entities, is only available annually and subject to a significant time lag.[88]

More broadly, there remain a number of potentially important data gaps in the NBFE sector. Data coverage is limited for unregulated financial entities and for other entities overseen by the MCA or state-level bodies. In the 2015 information-sharing exercise that formed part of the FSB Policy Framework, the Indian authorities did not supply all of the data required to calculate relevant risk metrics for assessing shadow banking risks, even for NBFCs and HFCs given limitations in their granularity.[89] This is one of the main areas of focus of the SBIG, and it is important for this work to address identified gaps in the availability of such data, taking into account the potential materiality of related risks given limited resources.

In addition to data collection, there is a need to strengthen the analysis of information collected in this sector. At present, macro level analysis for NBFCs broadly focuses on aspects such as growth/trends in the sector and their drivers as well as regulatory compliance. The development of early warning indicators for NBFCs, once completed, is expected to enhance this analysis. However, as the components of the financial system become increasingly interlinked, the analysis should go beyond individual types of entities (banks, NBFCs, HFCs etc.) and capture the breadth of activity across a particular market segment. Doing so would help enhance supervision of the relevant entities, contribute to a broader understanding of the linkages within the system, and help identify common emerging risks (e.g. excessive growth, asset bubbles or deteriorating underwriting). For example, it would be useful to undertake periodic reviews of activities in individual market segments that cover all types of entities involved in that segment. This would involve the sharing of information and joint analysis by the relevant authorities (e.g. RBI: banks and NBFCs for consumer lending or asset finance, RBI-NHB: banks and HFCs for housing finance).[90] Such joint analyses would also assist the authorities in assessing potential ramifications of regulatory actions beyond the entities that are directly affected – for example, the design of concentration limits for mutual funds and banks for exposures to NBFCs and HFCs.

- ***Recommendation 5:*** ***The authorities should continue to improve the timeliness and granularity of data collected from NBFEs, and enhance their analysis by carrying out horizontal reviews across different types of entities (such as banks, NBFCs and HFCs) operating in the same market segment.***

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[88] The authorities in collaboration with the industry may want to explore the establishment of a trade association for NBFCs, in order to collect supplemental sector-wide data and for the association to act as an interlocutor in terms of identifying and discussing relevant sectoral issues on a timely basis.

[89] See the May 2016 FSB *Thematic Review on the Implementation of the FSB Policy Framework for Shadow Banking Entities* (http://www.fsb.org/2016/05/thematic-review-on-the-implementation-of-the-fsb-policy-framework-for-shadow-banking-entities/).

[90] The authorities note that there is little need for information-sharing mechanisms with regulatory authorities in other jurisdictions for NBFCs, as these entities in general only operate domestically.

Strengthen risk assessments: The 2011 RBI working group report on NBFCs noted an ongoing need to take into account the risks arising from regulatory gaps, arbitrage opportunities and the interconnectedness of various activities and entities in the financial system. It also highlighted the possibility that risks could be transferred from NBFCs to the banking sector. It is important for the assessment of shadow banking risks to continue to evolve in tandem with market developments, so that potential financial stability risks are identified on a timely basis. One of the lessons from the financial crisis is that while the NBFC sector is typically small compared to banks, problems in the sector can propagate and become systemic due to interconnectedness with the banking sector as well as due to their social and political ramifications.[91]

At present, risk assessments of RBI-regulated NBFCs are confined to network analysis (capturing interconnectedness within the financial system) and credit risk sensitivity analysis, with the former primarily used to monitor the exposures of banks to the rest of the system. A more comprehensive and integrated risk assessment that evaluates not just credit shocks but other potentially material risks for NBFCs (e.g. liquidity) would contribute to a better understanding of their vulnerabilities and any implications for the rest of the financial system.

The strengthening of such assessments is important given the large and growing dependence of NBFCs on the rest of the financial system for funding purposes and the fact that experience (both in India and elsewhere) suggests that such funding tends to dry up in the event of external or sector-specific events, potentially leading to a liquidity crunch and creating a negative feedback loop. While authorities indicate that liquidity risk for the NBFC sector is mitigated by the fact that most funding is longer-term, incorporating such risk in a stress testing program – for example, to NBFCs-ND-SI that access funds from the public through capital markets in addition to bank finance – would help support such conclusions. Contingency planning for such a downside scenario could also be incorporated to risk management expectations for NBFCs.

Risk assessments should also be extended to HFCs, since they are an important component of the housing market in India and have become increasingly interconnected with the banking sector. While the NHB has improved its off-site surveillance of HFCs, it does not currently conduct any stress tests of the sector. HFCs are not included in the FSR analysis and the NHB is not a member of the FSDC or its Sub-Committee. Moreover, according to the NHB, the top 5 HFCs account for around 86% of total HFC assets and, given their concentrated structure, problems at one of them could have systemic ramifications. Consideration should therefore be given to extending the risk assessment framework, including via stress testing for these entities, which could also be used to enhance risk management for the entire housing finance segment.

In addition, many NBFCs and some HFCs are subsidiaries of FCs or mixed-activity economic groups. While seemingly stable on their own, these entities could be vulnerable to contagion or reputational risks should the parent company experience a shock or face adverse business conditions. This is particularly important given the NBFCs' reliance on wholesale funding sources, and the associated dependence on group support (including the parent's credit rating) for their own credit rating. At present, the only relevant work in this area is carried out by the IRF under the FSDC-SC for a limited set of FCs. Going forward, the analysis of potential risks

[91] See the October 2011 FSB-IMF-World Bank report to the G20 on "Financial Stability Issues in Emerging Market and Developing Economies" (ibid).

stemming from the ownership structure and interconnectedness of NBFCs and HFCs should be included in both ongoing supervision and in risk assessments.

- ***Recommendation 6:*** ***The authorities should enhance their assessment of risks stemming from NBFEs by extending the scope of coverage to HFCs and by broadening the analysis to other material risks (e.g. liquidity and contagion).***

Review the regulatory perimeter: The regulatory perimeter for NBFCs is based on the principal business criteria used by the RBI to define if an institution that engages in financial activities should be registered with it. There is a need to continuously review the perimeter to ensure that the thresholds remains appropriate and does not give rise to perverse incentives or encourage risky activities to migrate outside the perimeter. In particular, the RBI should evaluate the business criteria definition periodically to determine if it adequately captures activities that could affect financial stability. There may be merit, for example, in adopting a more flexible approach that would allow the RBI to selectively bring within the perimeter a large NBFC that does not meet the 50-50 criteria but engages in financial activities with potentially systemic ramifications.

Strengthening the enforcement of the perimeter is also important to monitor and assess activities that may give rise to systemic risk, as well as to reduce opportunities for regulatory arbitrage or avoid creating a non-level playing field. Concerns about the perimeter have arisen in recent years from unregulated financial entities and unauthorised financial activities giving rise to consumer protection issues that may also have a systemic risk dimension. Further work in this area by the SBIG to map the universe of NBFEs and by the relevant authorities to jointly to enforce the perimeter (e.g. through SLCCs) would help allay some of these concerns.

Another facet of reviewing the perimeter relates to the taking of deposits from the public by non-financial companies. At present, the MCA is the oversight authority for these companies, but its focus is on depositor protection issues (in response to complaints) and as a repository of corporate information rather than as a prudential regulator. While these companies' deposit-taking activities are subject to a number of restrictions, information on the extent and nature of those activities is limited and the practice appears *prima facie* inconsistent with the RBI's policy to discourage deposit mobilisation activities outside banks. It may therefore be useful, as part of reviewing the perimeter, for the authorities to examine the benefits and costs of continuing to allow this activity from a financial stability perspective.

Finally, it should be noted that some entities within the regulatory perimeter are subject to exemptions; in particular, government-owned NBFCs are not subject to all prudential norms as other RBI-regulated NBFCs. The RBI has asked these entities to submit roadmaps for compliance with its regulations, and 12 central government-owned NBFCs are now complying with most prudential norms applicable to NBFCs.[92] There does not seem to be a strong rationale for such differences in the regulatory treatment of NBFCs, and it would be desirable to have a level playing field in this sector (as is the case for banks and HFCs). As noted in the December 2014 FSR, "while these NBFCs have been playing a useful role in financing certain critical infrastructure sectors that would justify a degree of forbearance in the initial stages,

[92] Some special purposes central government-owned NBFCs have been granted specific dispensations by the RBI, given their particular situation and the sector in which they operate.

there is now a need to bring them under the same prudential regulatory framework as applicable to other NBFCs, especially in view of the rationalization of those regulations".[93]

- ***Recommendation 7:*** ***The RBI should continue to review the business criteria definition for NBFCs on a regular basis to ensure the thresholds remain appropriate, and to work with other authorities to strengthen enforcement of the regulatory perimeter. The authorities should also review the merits of continuing to allow deposit-taking activities by non-financial firms, and eliminate regulatory exemptions for government-owned NBFCs.***

Move towards more activity-based and risk-sensitive framework: As in many other countries, the prudential regulation of the financial system in India follows a predominantly sectoral, entity-based approach.[94] The blurring of boundaries between sectors and entities as the financial system develops will increasingly create a need for system-wide approaches to avoid regulatory arbitrage and promote a level playing field.

The RBI has made good progress in aligning the regulatory framework for NBFCs to that for banks, thereby limiting potential arbitrage opportunities.[95] At present, the RBI follows a tiered approach to prudential norms applying to NBFCs-D and NFBCs-ND-SI, with 10 distinct categories each with its own particular norms depending on asset size or activities. This structure, while providing flexibility, is rather complex and may generate challenges for the monitoring and supervision of those NBFCs (around 400 in total). At the same time, however, there are also important differences in certain rules vis-à-vis banks, such as with respect to risk weights, ability to take deposits, priority lending requirements and other terms. It may therefore be useful for RBI to rationalise the number of NBFC categories and further harmonise their regulatory treatment vis-à-vis banks, while ensuring that the regulation is effectively aligned to the riskiness of different business models (e.g. by varying risk weights by asset class). The RBI is already considering how to proceed with the rationalisation of NBFC categories.

In addition, the RBI has been using the term 'systemically important' for large non-deposit-taking NBFCs since 2007, and 209 entities are currently included in this category. Use of this term differs from that in the banking sector, where only 2 banks were labelled as D-SIBs by the RBI in 2015. In the banking sector, this term means that the failure of a bank would pose risk to the functioning of the financial system that may in turn negatively impact the real economy, but in the context of NBFCs it means that the entity is subject to a more intensive form of regulation and supervision. The inconsistency in the meaning of the same term between banks and NBFCs can create confusion among the public. The RBI should therefore consider aligning the meaning of this term for NBFCs with that for banks by identifying criteria other than asset size (e.g. interconnectedness, substitutability and complexity) to determine whether

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[93] Relatedly, one of the 2012 FSAP recommendations was to "improve the performance and financial strength of public financial institutions and subject them to full supervision and regulation".

[94] The norms for entities regulated by SEBI reflect the nature of their particular activity (i.e. broking, merchant banking, mutual funds management).

[95] Another example of harmonising regulatory policies for NBFCs was the development of guidelines in August 2014 by the RBI on lending against shares, which involved inter-regulatory consultation in FSDC groups given the fact that stock brokers engage in similar practices under SEBI's margin trading framework.

a particular NBFC is systemically important and by revising its regulatory and supervisory framework for those entities accordingly.

- ***<u>Recommendation 8:</u> The RBI should consider rationalising the number of NBFC categories and continue to harmonise NBFC prudential rules with those for banks. The RBI should also consider revising the use of the term "systemically important" NBFCs in order to align its meaning with that for banks.***

Annex 1: Overview of the regulatory framework

Reserve Bank of India (RBI): The RBI was created under the RBI Act in 1934 as a private bank and is fully owned by the Government of India since 1949. According to the RBI Act, its objectives are "to regulate the issue of bank notes and keeping of reserves with a view to securing monetary stability in India, and generally, to operate the currency and credit system of the country to its advantage". In 1949, the Banking Regulation Act (BR Act) entrusted the RBI with the responsibility for the regulation and supervision of commercial banks.

The RBI is the monetary authority and, since 2015, targets a flexible inflation objective over the medium term. In addition, it manages the sovereign debt, regulates several financial markets and acts as regulator, supervisor and resolution entity of an extensive segment of the Indian financial system. The RBI regulates commercial banks, urban cooperative banks, NBFCs and the payment and settlement systems.

The RBI has powers to determine "Banking Policy" in the interest of banking system or in the interest of monetary stability or sound economic growth, considering the interests of the depositors, the volume of deposits and other resources of the bank and the need for equitable allocation and the efficient use of the deposits and resources. RBI also defines priority sector guidelines that prioritize lending to excluded or nationally important sectors.

The RBI has taken several initiatives in recent years to promote financial inclusion, combined with consumer protection initiatives and efforts to increase financial literacy. It also oversees policy issues related to Anti-Money Laundering and Combating Financing of Terrorism.

Securities and Exchange Board of India (SEBI): The securities market regulator was established by the Securities and Exchange Board of India Act in 1992. Its objectives are the protection of investors' interests and the development and regulation of securities markets. SEBI regulates the capital markets and has broad regulatory, investigation and enforcement powers, including to investigate and examine companies, to inspect records and personnel and to impose penalties. SEBI derives its regulatory power from four Acts: SEBI Act 1992, Depositories Act 1996, Securities Contracts (Regulation) Act 1956, and Companies Act 2013.

SEBI has issued a number of regulations and guidelines specifically related to corporate governance norms for listed companies. SEBI regulations cover all intermediaries in the securities market, all of whom must be registered with and regulated by SEBI. The regulations also prescribe a code of conduct for each intermediary and for their employees.

On September 2015, the Forward Markets Commission, which earlier regulated the futures market in commodities, was merged with SEBI and consequently the commodity derivatives market is now also regulated by SEBI.

The Securities Laws (Amendment) Ordinance, 2014 empowered SEBI to define innovative schemes and arrangements as collective investment schemes. However, several other forms of fund raising are not regulated by SEBI, but by the Ministry of Corporate Affairs (Central Government) and various State Governments.

Insurance Regulatory and Development Authority of India (IRDAI): The Insurance Regulatory and Development Authority of India (IRDAI), is a statutory body for overall supervision and development of the insurance sector. The mandate of IRDAI is to protect the interests of the policyholders and to ensure the orderly growth of insurance in the country.

The base law covering the insurance sector is the Insurance Act 1938 (as amended from time to time), which provides the legal framework within which the industry operates and the framework for insurance supervision. The IRDAI was formed under the IRDA Act 1999. These two Acts were amended by the Insurance Laws (Amendment) Act 2015, giving wider powers to the IRDAI to frame regulations in various areas and also enhancing the FDI limit from 26% to 49%. There are also other statutes that govern specific lines of insurance business, such as maritime and public liability. The IRDA Act 1999 provides for establishment of the Insurance Advisory Committee, which has representatives from commerce, industry, transport, agriculture, consumers, surveyors, agents, intermediaries, organizations engaged in safety and loss prevention, research bodies and employees' association in the insurance sector. The Committee advises IRDA in the process of making regulation.

IRDAI regulates the following entities: life insurance companies (both from the public and private sector), general insurance companies (both from the public and private sector), re-insurance companies, agency channels and intermediaries (e.g. corporate agents, brokers, third party administrators, surveyors and loss assessors).

Pension Fund Regulatory and Development Authority (PFRDA): The Pension Fund Regulatory and Development Authority (PFRDA) constituted by the Pension Fund Regulatory and Development Authority Act 2013, regulates the pension funds in India. PFRDA has been empowered to regulate, promote and ensure orderly growth of the National Pension System and pension schemes in India and to protect the interests of subscribers of the National Pension System and the pension schemes.

The PFRDA Act 2013 also provides for the establishment of the Pension Advisory Committee to advise the Authority on matters relating to making of regulations.

National Housing Bank (NHB): The National Housing Bank Act of 1987 established the NHB as a wholly owned subsidiary of the RBI. The NHB's objectives include the promotion of a sound and healthy housing finance system that can cater to all segments of the population and the integration of housing finance with the overall financial system. The NHB registers, regulates and supervises companies that transact or have as one of their principal objects the business providing finance for housing, whether directly or indirectly. In addition to its regulatory role, the NHB promotes development of the housing finance market via financing initiatives for affordable housing as well as the development and promotion of housing market infrastructure.

National Bank for Agriculture and Rural Development*:* Supervises regional rural banks and the cooperative banks.

Ministry of Corporate Affairs (MCA), Government of India*:* The MCA oversees the regulatory framework with regard to deposit taking by non-financial non-banking companies and Nidhis. The MCA houses the repository of information for such companies and undertakes regulatory action to address depositors' complaints. The Nidhi Rules of 2014 provide a framework of deposit-taking activities of Nidhis including prudential norms for such companies, while the companies (Acceptance of Deposits) Rules 2014 provide the regulation for raising funds through deposits by corporates.

Annex 2: Structure of the financial system[96]

Financial system structure

Banks dominate the financial system in India. At the apex level are scheduled commercial banks (SCBs), some of which follow a universal banking model. Next, there is the cooperative banking sector divided into rural and urban. In addition to those deposit-taking institutions, there are other financial institutions, such as Non-Banking Financial Companies (NBFCs), Development Financial Institutions, Primary Dealers, other credit institutions, insurance companies, pension funds and Housing Finance Companies (HFCs).

The financial system also includes a range of financial market infrastructures (FMIs), such as payment systems, clearing houses, central counterparties, securities settlement systems, and securities depositories.

Table 2.1: Sectoral composition of the Indian financial system

Institution	**Share in combined financial assets**
Banking system	63%
Insurance companies	19%
Non-banking financial institutions	8%
Mutual funds	6%
Provident and pension funds	4%
Total	**100%**

***Banking institutions**:* The banking system accounts for 63% of assets of the financial system and is dominated by SCBs, which account for 87% of total banking system assets. Among SCBs, public sector banks (PSBs) dominate with 63% market share of assets.

Table 2.2: Indian banking system – share by asset size

Institution	**Market Share of Total Banking Assets (September 2014) (in percentage)**
Scheduled Commercial Banks	87
of which:	
Public Sector Banks	*63*
Private Sector Banks	*18*
Foreign Banks	*6*
Regional Rural Banks (RRBs)	3

96 Based on information provided by the Indian authorities.

Urban Cooperative Banks	3
Rural Cooperative Banks	7
Total	**100**

Rural and Urban Cooperative banks hold a relatively small share of 10% of assets of the banking system. However, they play a key role in providing access to banking services to low and middle income households in both rural and urban areas. RRBs are also important in the financial inclusion effort. In recent decades, competition in the banking system has increased with the entry of new private sector banks.

Foreign banks only have a share of 6% of SCBs' assets. However, they hold a major share in off-balance sheet activities and provide depth to the market in the international trade and off-shore fund raising by Indian corporates.

Table 2.3: Banking group parameters in 2015 (INR million)

	All banks	**Public Sector Banks**	**Private Sector Banks**	**Foreign Banks**
Total Assets	120,364,500	86,787,701	26,030,534	7,546,264
Gross Advances	75,619,839	56,167,175	16,086,575	3,366,090
Of which: Priority Sector	*21,238,359*	*15,937,717*	*4,406,302*	*894,339*
Total Investments	31,701,007	21,688,528	7,472,171	2,540,309
Total Borrowings	11,498,883	6,445,064	3,863,951	1,189,868
Total Deposits	94,371,106	71,954,799	18,364,798	4,051,509
Cost Income Ratio	47	49	44	39
Interest Spread	2.5	2.3	3.2	3.5
Return on Equity	9.9	7.5	14.4	9.6
Return on Total Assets	0.7	0.4	1.5	1.7
Liquidity Coverage Ratio (LCR) #	96.3	92.7	97.2	132.2
Core Capital Ratio (Tier-1)	10.3	8.7	12.8	15.6
Capital Adequacy Ratio (CRAR)	13.0	11.5	15.7	16.8

Source: RBI. # LCR not available for up to Mar-14.

On average, deposits constitute more than three-fourth of the total liabilities of SCBs and have been very stable, while loans and advances are the major component of assets and have steadily grown as a percentage of commercial banks' assets. On an absolute basis, loans and advances have been growing at fast rates in recent years, but the growth rate has dropped recently.

***Financial inclusion initiatives by the RBI*:** In August 2014, the government launched the Pradhan Mantri Jan Dhan Yojana (PMJDY) with the goal of providing universal access to banking facilities with at least one basic banking account for every household, financial literacy, access to credit and insurance. Other initiatives concerning financial inclusion are the creation of the Trade Receivables Discounting System (where small firms can post their receivables from large firms for sale), the Small Finance Banks to facilitate credit flow to small firms, Micro Units Development and Refinance Agency Bank (or MUDRA Bank), a public sector financial institution in India that provides loans at low rates to microfinance institutions and non-banking financial institutions which then provide credit to micro, small and medium-sized enterprises (MSMEs) and Bharatiya Mahila Bank, the first bank in India aimed at providing economic empowerment for women, especially those economically neglected.

The RBI defines priority sector guidelines to emphasise lending to excluded or nationally important sectors. For instance, 8% of adjusted net bank credit must be lent to small and marginal farmers and 7.5% to micro enterprises. Investments in social infrastructure or renewable energy qualify for priority sector credits.

Non-banking financial entities: A set of non-bank financial institutions regulated by the RBI is denominated Non-Bank Financial Companies (NBFCs) and is largely involved in serving those classes of borrowers who are generally excluded from the formal banking sector. However, progressively over the years, the lines of operations between the banks and NBFCs have somewhat blurred. More recently, NBFCs are competing with banks in providing financial services such as infrastructure finance and housing finance among others. NBFCs historically are involved in providing financial services such as offering of small ticket personal loans, financing of two/three wheelers, truck financing, farm equipment financing, loans for purchase of used commercial vehicles/machinery, secured/unsecured working capital financing etc. The characteristics of NBFC financial services include simpler processes and procedures in sanction and disbursement of credit; and more flexible terms of repayment aligned to the unique features of its clientele, albeit at a higher cost.

As of March 2015, 11,842 NBFCs were registered with the Reserve Bank, of which 220 were deposit-accepting (NBFCs-D) and 11,622 were non-deposit accepting (NBFCs-ND). NBFCs-ND with assets of INR 5 billion and above have been classified as systemically important (NBFCs-ND-SI). As of March 2015, there were 200 NBFCs-ND-SI. All NBFC-D and NBFCs-ND-SI are subjected to prudential regulations such as capital adequacy requirements and exposure norms along with reporting requirements.

Table 2.4: Consolidated balance sheet of NBFC sector (INR billion, as at end March)

Item		2014	2015	Percentage Variation
1.	Share Capital	621	668	7.5
2.	Reserves and Surplus	2,241	2,578	15.1
3.	Total Borrowings	8,885	10,545	18.7

4.	Current Liabilities and Provisions	725	774	6.8
Total Liabilities/Assets		**12,472**	**14,565**	**16.8**
1.	Loans & Advances	8,653	10,063	16.3
2.	HP and Lease Assets	914	1,003	9.7
3.	Investments	1,689	2,085	23.5
4.	Other Assets	1,217	1,414	16.2
Memo Items				
1.	Capital Market Exposure (CME)	832	978	17.6
2.	CME to Total Assets (per cent)	6.7	6.7	-
3.	Leverage Ratio	3.4	3.5	-

Source: RBI.

Housing market: HFCs are specialized institutions registered with and supervised by the National Housing Bank (NHB), a subsidiary of the RBI. The majority of HFCs cannot access public deposits and their main source of funding is debentures secured by mortgages or convertible debentures and borrowings from Banks.

As on May 2016, there were 74 HFCs and their total assets exceeded INR 5 trillion. Around 70% of these assets consist of housing loans, while other loans and advances represent 23%. The sector is concentrated as the top 5 institutions hold 86% of the total assets according to the 31 March 2015 statements. Of these, four are privately owned and one is government owned. The biggest HFC, which is privately owned, is also a FC monitored by the IRF.

***Capital markets**:* Capital market institutions include merchant bankers, mutual funds, venture capital funds, stock exchanges, depositories, depository participants, stock brokers, sub-brokers, debenture trustees, credit rating agencies and other intermediaries.

The capital markets is regulated by the Securities and Exchange Board of India (SEBI). Its regulations cover all intermediaries in the securities market, all of whom must be registered. The regulations also prescribe a code of conduct for each intermediary as well as for their employees, and set out standards that stipulate who may be considered a fit and proper person.

Table 2.5: SEBI-registered market intermediaries/institutions

Market Intermediaries	**2014-15**	**2015-16***
Stock Exchanges (Cash Market)	15	5
Stock Exchanges (Equity Derivatives Market)	3	3

Stock Exchanges (Currency Derivatives Market)	3	3
Stock Exchanges (Commodity Derivatives Market)	NA	12
Brokers (Cash Segment)	6,147	3,199
Corporate Brokers (Cash Segment)	3,757	2,780
Brokers (Equity Derivatives Market)	2,990	2,760
Brokers (Currency Derivatives Market)	2,406	1,985
Brokers (Debt Segment)	6	6
Brokers (Commodity Derivatives Market)	NA	295
Sub-brokers (Cash Segment)	42,351	34,942
Foreign Portfolio Investors (FPIs)	1,444	4,311
Deemed FPIs	6,772	4,406
Custodians	19	19
Depositories	2	2
Depository Participants of NSDL & CDSL	854	858
Merchant Bankers	197	189
Bankers to an Issue	60	62
Underwriters	2	2
Debenture Trustees	32	31
Credit Rating Agencies	6	7
KYC Registration Agency (KRA)	5	5
Registrars to an Issue & Share Transfer Agents	72	71
Venture Capital Funds	201	200
Foreign Venture Capital Investors	204	215
Alternative Investment Funds	135	209
Portfolio Managers	188	204
Mutual Funds	47	48
Investment Advisors	271	427
Research Analysts	26	261
Collective Investment Management Company	1	1
Approved Intermediaries (Stock Lending Schemes)	2	2
STP (Centralised Hub)	1	1
STP Service Providers	2	2

** indicates as on March 31, 2016 ; NA – Not Applicable*
Source : SEBI Bulletin, April 2016.

Since 2015, SEBI regulates the commodity derivatives market as a consequence of its merger with the former commodities regulator. Commodity derivatives markets in India, especially in the case of agricultural commodities, have an integrated warehousing sector that is critical to provide a strong linkage with the physical markets of the underlying commodity. The average daily turnover in this market has been between US$ 3.8 to 4.6 billion in the past 2 to 3 years.

Insurance Sector*:* The insurance sector comprises life insurance companies, general insurance companies and one reinsurer company (GIC of India). Other stakeholders in the market include agents (individual and corporate), brokers, surveyors and third party administrators servicing health insurance claims. All participants are regulated by the Insurance Regulatory and Development Authority of India (IRDAI).

Table 2.6: Insurance penetration and density

Year	Life		Non-Life		Industry	
	Density (USD)	Penetration (percentage)	Density (USD)	Penetration (percentage)	Density (USD)	Penetration (percentage)
2012	42.7	3.17	10.5	0.78	53.2	3.96
2013	41	3.1	11	0.8	52	3.9
2014	44	2.6	11	0.7	55	3.3

** Insurance density is measured as ratio of premium (in USD) to total population.*

** Insurance penetration is measured as ratio of premium (in USD) to GDP (in USD).*

Source: Swiss Re Sigma (various issues).

At the end of March 2015, there were 53 insurance companies operating in India: 24 in the life insurance business and 28 in the non-life insurance business. In addition, GIC is the sole national reinsurer.

Table 2.7: Registered insurers (as on 31 March 2015)

Type of business	Public Sector	Private Sector	Total
Life Insurance	1	23	24
Non-life Insurance	*6	**22	28
Reinsurance	1	0	1
Total	8	45	53

* *Includes specialised insurance companies (ECGC and AIC).*

*** Includes five standalone health insurance companies (Star Health & Allied Insurance Co., Apollo Munich Health Insurance Co., Max Bupa Health Insurance Co., Religare Health Insurance Co., and Cigna TTK Health Insurance Co.).*

***Pension Funds Sector**:* The Pension Fund Regulatory and Development Authority (PFRDA) is the regulator and supervisor of the pension fund sector since 2014, but had been functioning as an interim body since 2003.

The launch of the National Pension System (NPS) in 2004 marked a shift from a defined benefit to a defined contribution pension system. Under NPS, each subscriber has its own Permanent Retirement Account Number where his/her contributions are accumulated and invested. Presently, there are eight pension fund managers registered with PFRDA that are allowed to manage the assets of the subscribers following the investment guidelines provided by PFRDA. The number of subscribers reached 8.7 million in March 2015 and the amount of assets under management of the NPS reached INR 809 billion.

The PFRDA also administers the Swavalamban scheme created in 2010-11, to encourage the workers in the unorganized sector (who constitute 88% of the total labour force) to voluntarily save for their retirement. In 2015, a new scheme (Atal Pension Yojana) was launched with focus on citizens in the unorganised sector. This scheme is also administered by PFRDA.

Chit Fund Companies and Nidhi Companies: There are 5,744 companies registered as Chit fund companies. Of these, 2,717 companies had filed their annual returns for 2014-15 as on 11 April 2016; the total assets of these companies were INR 173.8 billion. There are 955 companies registered as Nidhi companies. Of these, 329 companies had filed their annual returns for 2014-15 as on 11 April 2016; the total assets of these companies were INR 4.4 billion.

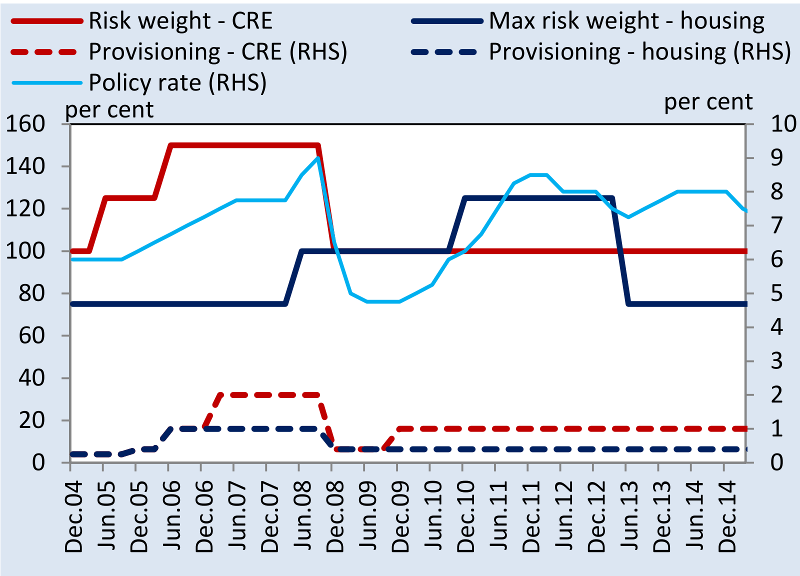
Annex 3: Use by the RBI of time-varying macroprudential measures

Over the past 10 years, the Indian authorities, mainly the RBI, have used a variety of macroprudential interventions aimed at reducing the build-up of risks to the financial system. These tools have primarily targeted banks due to their dominance in the financial system (see Annex 2). Time-varying measures deployed to date have been mostly capital-based and sector-specific, including LTV caps, risk weights and loan loss provisioning requirements.

Before 2008 the RBI used mainly three tools applied to all commercial banks: (i) dynamic provisioning, often differentiated by sector; (ii) reserve requirements; and (iii) risk weights on exposures to certain sectors. The time-varying provisions and risk weights were used to temper what was judged to be disproportionately high growth in housing and commercial real estate in the early 2000s.

In the wake of the financial crisis by the end of 2008, most of these measures were almost fully reversed. In late 2009, as credit growth to the property sector revived, provisioning rates on CRE were increased again in combination with the start of a renewed cycle in monetary policy tightening (see Chart 3a). In late 2010, a higher (2%) provisioning rate was introduced for 'teaser' housing loans, an LTV cap as a function of the loan size was introduced for the first time, and the risk weight for loans of Rs 7.5 million (around US$150,000 at the time) and above was increased. In addition, a banking system-wide provisioning coverage ratio of 70% of gross non-performing advances was prescribed to build up an additional buffer.

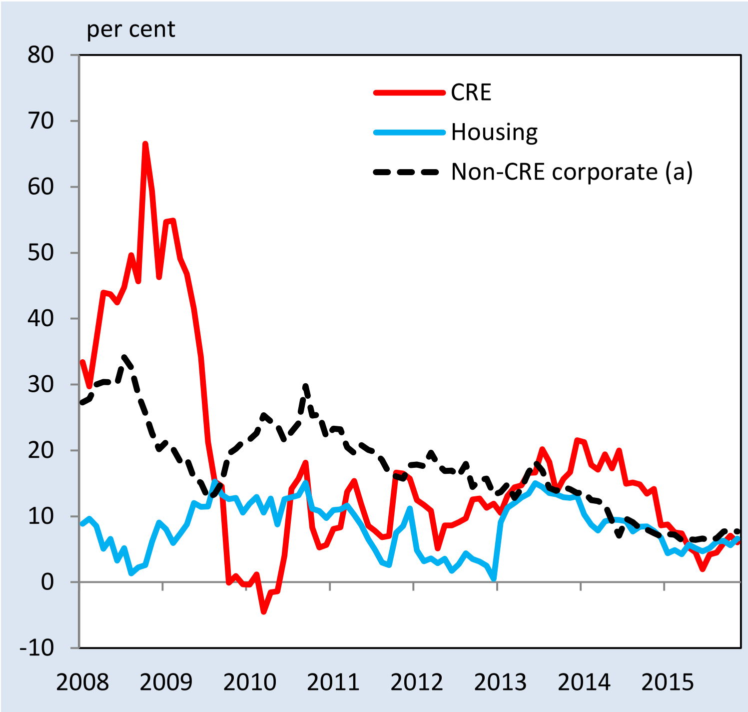
Chart 3a: Selected macroprudential policy measures and policy rate, 2004Q4-2015Q1



Source: Indian authorities, ThomsonReuters Datastream.

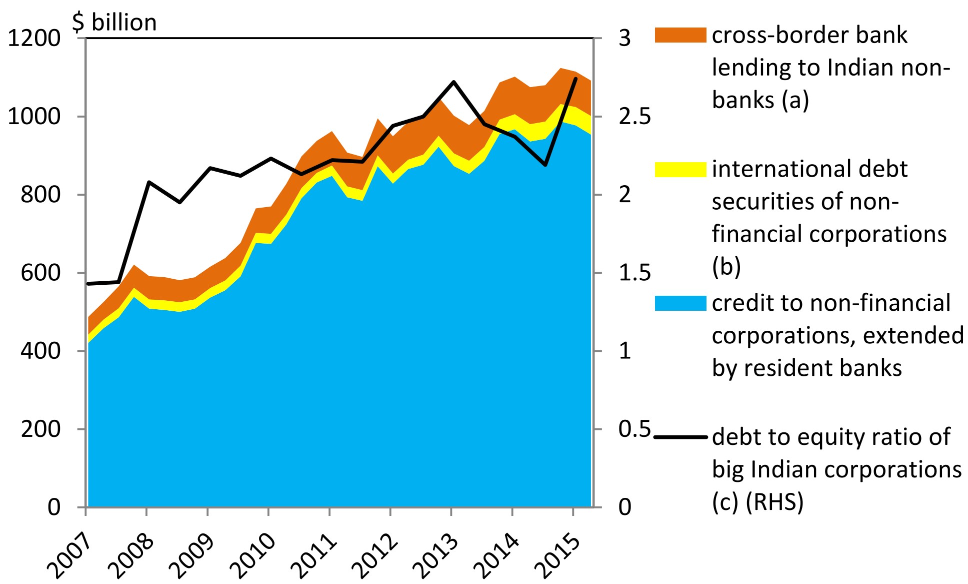
In spite of these sectoral measures, the economy experienced rapid growth in overall credit (25% per annum between 2005-6 and 2010-11), particularly in the non-CRE corporate sector (see Chart 3b). As a result, corporate leverage increased to very high levels (see Chart 3c), especially in the Iron & Steel and Infrastructure sectors.

Chart 3b: Annual growth of domestic bank credit, by borrowing sector[(a)]



(a) Total credit minus CRE and personal loans (including housing). Source: Database On Indian Economy, Banking-Sectoral Statistics, Deployment of Bank Credit by Major Sectors.

Chart 3c: Debt of Indian non-financial corporate sector



(a) On a residency basis. Includes lending to households and government. (b) On a nationality basis; in all currencies. (c) The 30 companies covered in the S&P BSE SENSEX index. Sources: Bank for International Settlements (BIS), Bloomberg.

In recent years, measures have also been taken to reduce the potential financial stability risks caused by capital flow volatility (see section 2).

Annex 4: Categories of NBFCs that are regulated by the RBI

A.	Asset Finance Company (AFC) is a financial institution carrying on as its principal business the financing of physical assets supporting productive/economic activity, such as automobiles, tractors, generator sets, earth moving and material handling equipment, moving on own power and general purpose industrial machines. The aggregate of such financing and of income arising therefrom should not be less than 60% of its total assets and total income respectively.
B.	Investment Company (IC) is a financial institution carrying on as its principal business the acquisition of securities.
C.	Loan Company (LC) is a financial institution carrying on as its principal business the 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.
D.	Infrastructure Finance Company (IFC) is a company that deploys at least 75% of its total assets in infrastructure loans, has minimum net owned funds of INR 3 billion, a minimum credit rating of 'A 'or equivalent, and a capital adequacy ratio of 15%.
E.	Core Investment Company (CICI) is a company carrying on the business of acquisition of shares and securities. A systemically important Core Investment Company (CIC-ND-SI) is a CICI that satisfies the following conditions: i. it holds not less than 90% of its total assets in the form of investment in equity shares, preference shares, debt or loans in group companies; ii. its investments in the equity shares (including instruments compulsorily convertible into equity shares within a period not exceeding 10 years from the date of issue) in group companies constitutes not less than 60% of its total assets; iii. it does not trade in its investments in shares, debt or loans in group companies except through block sale for the purpose of dilution or disinvestment; iv. it does not carry on any other financial activity referred to in Section 45I(c) and 45I(f) of the RBI Act except investment in bank deposits, money market instruments, government securities, loans to and investments in debt issuances of group companies or guarantees issued on behalf of group companies; v. its asset size is Rs1 billion or above; and vi. it accepts public funds.
F.	Infrastructure Debt Fund (IDF) is a company used to facilitate the flow of long term debt into infrastructure projects. An IDF raises resources through issue of rupee or US dollar-denominated bonds of minimum 5 year maturity. Only Infrastructure Finance Companies (IFC) can sponsor an IDF.
G.	Micro Finance Institution (MFI) is a non-deposit taking NBFC having not less than 85% of its assets in the nature of qualifying assets that satisfy the following criteria: a. loan disbursed by an MFI to a borrower with a rural household annual income not exceeding INR 100,000 (USD 1,500) or urban and semi-urban household income not exceeding INR 160,000 (USD 2,350);

	b. loan amount does not exceed INR 50,000 in the first cycle and INR 100,000 in subsequent cycles; c. total indebtedness of the borrower does not exceed INR 100,000; d. tenure of the loan not to be less than 24 months for loan amount in excess of INR 15,000 with prepayment without penalty; e. loan to be extended without collateral; f. aggregate amount of loans, given for income generation, is not less than 50% of the total loans given by the MFIs; and g. loan is repayable on weekly, fortnightly or monthly instalments at the choice of the borrower.
H.	Factor is a non-deposit taking NBFC engaged in the principal business of factoring. The financial assets in the factoring business should constitute at least 50% of its total assets and its income derived from factoring business should not be less than 50% of its gross income.
I.	Mortgage Guarantee Companies (MGC) are financial institutions for which at least 90% of the business turnover is mortgage guarantee business or at least 90% of the gross income is from mortgage guarantee business and net owned funds is INR 1 billion (around USD 15 million).
J.	Non-Operative Financial Holding Company (NOFHC) is a financial institution through which promoter / promoter groups are permitted to set up a new bank. It is a wholly-owned Non-Operative Financial Holding Company (NOFHC) that will act the holding company to the bank as well as all other financial services companies regulated by RBI or other financial sector regulators.

Annex 5: Prudential requirements for NBFCs vis-à-vis banks

Regulation	Banks	NBFCs
Cash reserve ratio	4%	Not applicable
Statutory liquidity ratio	21.25% of all outside liabilities with benefit of netting for bank counterparties	15% for deposit-taking NBFCs on their deposits only
Capital adequacy ratio	9% based on credit, market and operational risk charges	15% based only on credit risk charges
Number of days in arrears for classifying as non-performing asset (NPA)	Non repayment for 90 days	Non repayment for 6 months
Definition of substandard assets	NPA for a period up to 12 months	NPA for a period up to 18 months
Definition of doubtful assets	Remained in the substandard category for a period of 12 months	Remained in the substandard category for a period exceeding 18 months
Provisioning for standard assets	0.25%-1%	0.25%
Target under priority sector lending	40% of adjusted net bank credit	Not mandated but many NBFCs operate exclusively in priority sectors on their own volition
Risk weights under capital adequacy	Risk-based capital charges. For certain asset classes, more than 100% risk weight has been prescribed under Pillar 1. In addition, banks are required to assess additional capital requirement under Pillar 2.	100% for most assets
Entry level capital requirement	INR 5 billion (USD 73.5 million)	INR 20 million (USD 295 thousand) by statute, and INR 50 million (USD 735 thousand) and INR 3 billion (USD 44 million) for some categories
Capital market exposure limits	Caps on aggregate exposure of a bank to the capital markets (both fund based and non-fund based) of 40 per cent of net worth	Limited restriction for deposit taking NBFCs
Statement of Structural Liquidity (SSL)	10 maturity buckets reported	8 maturity buckets reported
Limits on SSL	Net cumulative negative mismatches during the next day, 2-7 days, 8-14 days and 15-28 days buckets should not exceed 5%, 10%, 15% and 20% of the cumulative cash outflows in the respective time buckets	The mismatches (negative gap) during 1-30/31 days in normal course may not exceed 15% of the cash outflows in this time bucket
Stress testing	Stress testing guidelines have been prescribed and banks are required to hold additional capital and liquidity buffers under Pillar 2 of Basel II and Basel III framework	No such requirement

Policy tools	Details
Impose bank prudential regulatory regimes on deposit-taking non-bank loan providers	i)15% maintenance of Liquid Assets on Public Deposits. ii) Implementation of ALM guidelines. (iii) Eligible NBFCs which have obtained requisite credit rating for its fixed deposits and complying with prudential norms are permitted to accept public deposits up to 1.5 times of its NOF. (iv) NBFCs are not permitted to accept or renew any public deposit which is repayable on demand or on notice. (v) NBFCs are permitted to accept public deposits which are repayable after 12 months but before 60 months.
Capital requirements	NBFC needs to maintain a minimum net owned fund of Rs.2 crore stipulated by RBI and also the CRAR of minimum 15%.
Liquidity buffers	NBFCs, which accept/hold public deposits are required to maintain minimum liquid assets of 15% of the public deposits held by them as prescribed under Section 45IB of RBI Act 1934.
Leverage limits	Total outside liabilities is restricted to 7times of NOF for every non-systemic non-deposit-accepting NBFC.
Limits on large exposures	No NBFC is permitted to lend to- (a) any single borrower exceeding 15% of its owned fund; and (b) any single group of borrowers exceeding 25% of its owned fund; NBFCs are also not permitted to invest in- (i) the shares of another company exceeding 15% of its owned fund; and (ii) the shares of a single group of companies exceeding 25% of its owned funds; Further, NBFCs are not permitted to lend and invest(loans/investments together) exceeding – (i) 25% of its owned fund to a single party; and (ii) 40% of its owned fund to a single group of parties.
Restrictions on types of liabilities	Though no such restrictions have been placed on NBFCS, however instructions have been issued to banks by DBR restricting finance to NBFCs for by banks for certain activities. Further, guidelines have been issued by FED wherein only certain categories of NBFCs, viz NBFC-IFCs, NBFC-AFCs and NBFC-MFIs, are allowed to raise ECBs under automatic route subject to certain restrictions.
Other tools	(i) Prudential norms on income recognition, assets classifications and provisioning (ii) Requirement of capital adequacy considering both Tier I and Tier II capital and assignment of risk weight for on-balance sheet and off balance sheet exposures At present NBFCs are required to classify a loan as NPA on 180 days past due basis. This is to be brought down in phases to 90 days past due by March 31, 2018 in order to harmonise the norms with banks. NBFCs are not allowed to invest overseas in non-financial sector and for investment in financial sector. Prior approval of the Bank is required subject to certain conditions.

Annex 6: Follow-up of other key FSAP recommendations

This Annex presents the follow-up actions reported by the Indian authorities to key FSAP recommendations that are not covered in sections 2 and 3. The actions mentioned below have not been evaluated as part of the peer review and are presented solely for purposes of transparency and completeness.

<table>
<tr><th colspan="2">Recommendations</th><th>Steps taken to date and actions planned (including timeframes)</th></tr>
<tr><td></td><td colspan="2">Addressing system-wide risks</td></tr>
<tr><td>1.</td><td>Improve the performance and financial strength of public financial institutions and subject them to full supervision and regulation.</td><td><u>Banks (RBI)</u>
• Historically, banks in India have been assessed through the CAMELS approach (Capital Adequacy, Asset Quality, Management, Earnings, Liquidity, Systems and Controls) for domestic banks and CALCS approach (Capital Adequacy, Asset Quality, Liquidity, Compliance and Systems and Controls) for foreign banks. The CAMELS framework entailed an elaborate structure of offsite surveillance, Annual Financial Inspections (AFIs), Prompt Corrective Action and meetings with Senior Management. The CAMELS/CALCS frameworks are principally performance-oriented in nature and assessed riskiness of banks on a point in time basis.
• Therefore, based on international supervisory practices and lessons learnt from the financial crisis, a need to introduce a risk-focused, forward looking approach to banking supervision was felt in the Indian banking scenario. Moving up the supervisory maturity curve and relevance, and in line with Basel ‘Core Principles for Effective Banking Supervision’, the existing model of supervision was suitably enhanced to establish a Risk Based Supervision (RBS) framework for supervising banks in India. Risk Based Supervision for the banks operating in India was introduced during supervisory cycle 2013-14 and has since been implemented successfully over the last three cycles of assessment covering banks representing more than 65% of the banking system.
• Further, a variant model for the supervision of small banks has been developed and implemented for the relatively small banks imbibing a calibrated supervisory approach. The RBS process in India has been implemented under the Supervisory Program for Assessment of Risk and Capital (SPARC) using a proprietary Integrated Risk and Impact Scoring model. The coverage of RBS has been incrementally increased every year depending upon suitability and preparedness of the banks and it has been planned to bring all the remaining banks too under the SPARC framework from supervisory cycle 2016-17.
• The Indian Basel III framework for bank risk-based capital requirements came into force in April 2013 through the Circular on Implementation of Basel III Capital Regulations in India issued on 2</td></tr>
</table>

May 2012. The framework has since been periodically updated to include amendments and the latest version was published in July 2014.

- During the year 2014-15 significant progress has been made towards implementation of the Basel III LCR and Net Stable Funding Ratio (NSFR) in India. While the LCR became applicable for Indian banks in a phased-in manner at a minimum requirement of 60% from 1 January 2015, a draft guideline issued in May 2015 by RBI has proposed to implement the NSFR at the minimum requirement of 100% from 1 January 2018 without any phase-in arrangement.
- The Reserve Bank has issued revised guidelines on stress testing to banks on 2 December 2013 in tune with BCBS guidelines, after considering the stress experienced by banks in India in the recent past.
- According to the recently concluded Regulatory Consistency Assessment Programme, several aspects of the Indian framework are more conservative than the Basel framework. This includes higher minimum capital requirements and risk weightings for certain types of exposures, as well as higher minimum capital ratios. The RBI also applies certain restrictions to banking activities through its prudential framework.
- A final minimum Tier 1 leverage ratio requirement will be prescribed for banks in India taking into consideration the final rules prescribed by the Basel Committee by end-2017. In the meantime, the guidelines issued are serving the basis for parallel run by banks and also for the purpose of disclosures requirements. Indian banking system is operating at a leverage ratio of more than 4.5%. Therefore, during this period, RBI will monitor banks' leverage ratio against an indicative Tier 1 leverage ratio of 4.5%. This will enable the RBI to calibrate the final minimum leverage ratio requirements to be applicable to Indian banks.
- With rapid changes in regulations, there is an increasing need to go back periodically and revise the entire regulatory handbook. With this in mind, starting 1 January 2016, the RBI plans to come out by with thoroughly revised master documents covering different regulatory issues. Each of these master documents is intended to become a complete user-friendly compendium of applicable regulations on a subject. Each will be updated in real time, and will attempt to streamline and simplify regulations where possible.

Insurance companies

IRDAI asserts that there is complete oversight on all insurance entities with regard to both market conduct and prudential regulations and there is a level playing field. The disparity on account of such issues as the equity capital of the Life Insurance Corporation (LIC) of India has been addressed through the LIC amendment bill whereby its equity capital was enhanced from INR 5 crore to INR 100 crore. Considering compulsory nature of Act only

		liability policy as per the Motor Vehicle Act, and to avoid possible supply side constraints for such insurance covers, the Authority formed Indian Motor Third Party Insurance Pool (IMTPIP) which came into operation from 1 April 2007. Subsequently, this pool was replaced with Indian Motor Third Party Declined Risk Pool (IMTPDRP) for Commercial vehicle (Act only Insurance), commonly called as Declined Risk (DR) pool effective from 01.4.2012. However, with the enactment of Section 32 D of Insurance Act through Insurance Laws (Amendment) Act, 2015 and consequent regulation framed by IRDAI, mandating a minimum obligatory Third Party Insurance, the Declined Risk Pool has also been dismantled. It is further stated that there is complete autonomy with regard to supervision and regulation of insurance sector in general and insurance companies and intermediaries in particular. The enforcement powers of IRDAI are also strengthened with enhancement of penalties for all violations of Insurance Act in Insurance Laws (Amendment) Act 2015. The framework for monitoring of insurance frauds and reporting thereof has been laid down for insurance companies and it is effective from financial year 2013-14. **Pension Funds** All pension fund managers, whether public or private, are subjected to same level of regulation and supervision.
	Financial sector oversight	
2.	Strengthen oversight of banks' overseas operations through Memoranda of Understanding (MOUs) with host countries for information-sharing, onsite inspection programs, and supervisory colleges.	The Reserve Bank of India has been working on strengthening cross-border cooperation mechanisms as the home country supervisor of domestic banks with overseas operations and host country supervisor of foreign banks. On home-host relationships between supervisors of cross-border banking groups, Reserve Bank of India has made significant progress since the completion of the FSAP consultations as detailed below: • In terms of the existing policy on Cross Border Supervision and Exchange of Supervisory Information, RBI has been signing Memoranda of Understanding (MoU) / Exchange of Letters (EoL)/Statement of Co-operation (SoC) with overseas supervisors on supervisory cooperation. The RBI has made considerable progress in the areas of supervisory information sharing and cooperation with Bank's Overseas Counterparts. a) Establishment of MoUs with host supervisors on supervisory co-operation and exchange of supervisory information. b) Setting up supervisory colleges for the potentially global Indian banks c) Inspection of overseas branches/ subsidiaries of Indian banks based on certain criteria. • The Reserve Bank of India has been signing MoUs / EoL / (SoC) with supervisors of other countries to promote greater co-operation and sharing of supervisory information among the authorities. As on

		date, Reserve Bank has signed thirty-two (32) MoUs, one Letter for Supervisory Co-operation and one Statement of Co-operation, with overseas regulators/supervisors. The MoU encompasses supervisory cooperation in areas like sharing of information, coordination during onsite inspections, role of supervisors during crisis management, maintenance of confidentiality of shared information, etc. • MoUs have been signed with regulators/supervisors from China, Dubai, Qatar (Qatar Central Bank and Qatar Financial Centre Regulatory Authority), South Africa, Bahrain, Jersey, UK (separate MoUs with Prudential Regulation Authority and Financial Conduct Authority), Norway, Russia, Vietnam, Mauritius, Fiji, Belgium, France, Germany, Sri Lanka, New Zealand, Australia, Korea, Hong Kong, Kenya, Brazil, Uganda, Seychelles, Maldives, Nepal, Botswana, UAE, Bangladesh and Israel. An EoL on 'Co-operation in the area of Banking Supervision' has been signed with Financial Services Agency, Japan. SoC have been signed with the Board of Governors of the Federal Reserve System, Office of the Comptroller of Currency and Federal Deposits Insurance Corporation of the United States of America. Onsite Inspections at overseas branches and subsidiaries of Indian banks are being conducted every year from 2012 onwards. The branches and subsidiaries are chosen for onsite inspections based on certain parameters such as total assets, problem credits, other supervisory concerns etc. The inputs garnered through the onsite inspections at the overseas branches forms a key input for the risk assessment of the banks concerned. The major findings of the onsite inspections are also shared with the concerned host supervisory authority by RBI. • To promote greater cooperation and information exchange in cross-border supervision, RBI has also set up 'Supervisory Colleges' for six large domestic banks that have overseas operations. In 2012, Supervisory College were formed for State Bank of India (SBI) and ICICI Bank Ltd. In 2014, Supervisory Colleges for four other banks viz., Bank of India (BOI), Bank of Baroda (BOB), Axis Bank Ltd. and Punjab National Bank were formed. With this, supervisory colleges have been set up for all bank led financial conglomerates (FCs) with major overseas presence. The Supervisory Colleges were attended by various host country regulators as well as other domestic regulators such as SEBI, IRDA and PFRDA, where relevant for the bank's operations in these sectors through subsidiaries/associates. The meetings provided a formal platform for exchange of information between the home and host supervisors with regard to the supervised banks, and facilitated discussions of the host supervisors with bank management on relevant issues. The physical meetings of the Supervisory Colleges are held once in two years.
3.	Enhance formal statutory basis for the autonomy	**<u>Reserve Bank of India</u>** • While the Reserve Bank and other regulators lack *de jure* independence, it is felt that *de facto* there has not been government

	of regulators in carrying out their regulatory and supervisory functions.	interference in the functioning of regulators. Further, FSAP team has taken note of the views of the Reserve Bank that principles of natural justice are part of our Indian legal system on account of judicial pronouncements, and Government cannot pass any arbitrary order with respect to removal of Governor, *etc*. However, the FSAP team has suggested clear statutory provisions. Under the extant statutory provisions, the Central Government may remove from office the Governor, or a Deputy Governor. Government may like to examine the possibility of making necessary amendments to the RBI Act for compliance with core principles in this respect. • In the sphere of monetary policy, transparency has been enhanced significantly following the Agreement on Monetary Policy Framework (AMPF) between the RBI and the Government dated February 20, 2015 with the following features i. It clearly defines price stability in terms of CPI-C inflation target(s) for January 2016 and thereafter ii. the minutes of the technical advisory committee on monetary policy are released regularly iii. Following the international best practice, Monetary Policy Reports presenting medium term inflation and growth projections with an assessment of performance of outcomes relative to projections are being released since September 2014, which should be seen as a major aspect of monetary policy transparency. • As regards accountability, the AMPF leaves no scope for ambiguity – if inflation deviates from the target over three consecutive quarters, the RBI would have to write a letter to the Central Government outlining the key reasons for failure; proposing policy measures to be taken by the RBI, and specifying the time frame over which the target will be achieved subject to implementation of the proposed measures. • Inspection of any banking company and its books of accounts can be undertaken by RBI under Section 35 of the Banking Regulation Act 1949. Scrutiny of books and accounts of a bank under RBI's jurisdiction can be conducted under Section 35 (1A) of that Act. Penalties on persons/officers etc. can be levied by RBI under Section 46 of the Act, while Section 47A covers power of Reserve Bank to impose penalty. • On the issue of independence for conduct of monetary policy, the Government has announced in the Union Budget for 2015-16 that it "… will move to amend the RBI Act this year, to provide for a Monetary Policy Committee". In all three aspects – transparency, accountability and independence – India's compliance in respect of monetary policy has improved vastly since the last assessment of the IMF-World Bank.

		<u>Securities and Exchange Board of India</u> Recommendation relates to point 40 of the report (India: Financial System Stability Assessment Update). It points out two references, which are as below: *I - Like the other supervisory agencies, the legal framework limits the de jure independence of SEBI. While SEBI has displayed independence in its functioning in practice, the members of the Board can be removed without cause and the government can supersede the Board and give SEBI directions on matters of policy. Remedying these provisions would further strengthen the credibility of the supervisory process.* **Response**: In terms of section 6 of SEBI Act, a board member shall be removed from office on four grounds- adjudication as insolvent, determined as being of unsound mind, convicted of offence which in the opinion of Central Government involves moral turpitude; and has in the opinion of the Government, abused his position so as to render his continuation in office detrimental to the public interest. However for termination under the last ground, hearing must be provided to the member. Also, under section 5(2) of SEBI Act, termination simpliciter of Chairman and members appointed under section 4(1)(d) is possible after issuance of notice. In terms of section 17, the Central Government may supersede the Board on grounds of grave emergency, persistent default in complying with directions under the Act, or on grounds of public interest. Further under section 16, the Central Government has power to issue directions on policy to SEBI. All of the aforementioned powers exercised by the Central Government, are only done as a measure of last resort and in fact has not been exercised ever in the history of SEBI (which was established statutorily in 1992).The aforementioned powers are a necessary part of democratic control over executive institutions. It is also pertinent to highlight that the findings also mention that "in practice SEBI has acted with a high degree of independence from both governmental and commercial interests." *II - A challenge outside SEBI's control is strengthening criminal enforcement. In the past SEBI has been successful in arranging for dedicated/designated criminal court tribunals to hear cases related to collective investment schemes, and the authorities could explore whether such type of arrangement could be extended to all types of securities offenses.* • **Response**: The recent Securities Law (Amendment) Act, 2014 establishes Special Courts for prosecution of offences under securities laws to provide speedy trial. Further the above Act also designates the counsels representing SEBI in a trial before sessions courts as deemed public prosecutors for prosecution proceedings. **<u>Insurance and Regulatory Development Authority</u>** The FSAP report had recommended for the passage of Insurance Amendment bill in order that IRDAI have wider range of direct powers of intervention and also felt for greater transparency over early departure of senior officers. The report has also raised certain issues such as regulatory

		oversight of LIC and Reserve powers of the Central Government to direct IRDA activities. Insurance Laws (Amendment) Act, 2015 is a major reform in the insurance sector. By Insurance Laws (Amendment) Act, 2015, IRDAI is empowered to frame new regulations in order to exercise direct powers of intervention. IRDAI has already notified a number of regulations to give effect to the various provisions of Insurance Laws (Amendment) Act, 2015 covering Expenses of Management, Assets, Liabilities, Solvency Margin requirements, opening of branches by Foreign Reinsurers, Reinsurance Regulations for Life and General, Corporate Agent Regulations, Other form Capital Regulations, Lloyds syndicate etc. As regards certain reserve powers of the Central Government to direct the activities of IRDAI, it is reiterated that these powers are of the "reserve" nature, with the objective of using them in emergent situations. These do not in any away impinge upon IRDAI's powers and independence. As regards transparency over departure of senior officers, it is to mention that Section 5 & 6 of the IRDA Act provides for the appointment and removal from office of the Chairman and other members of the Authority. There are laid down procedures for the same. All appointments and removals by the Government of India are, as a matter of procedure, notified in the official gazette. Details of all Board level changes are also displayed in the IRDAI's website. The regulatory and supervisory oversight on LIC is comprehensive to the extent that it requires monitoring both prudential and market conduct operations of LIC. Further, LIC Amendment Bill was passed by both houses of Parliament in December, 2011 to address identified gaps. **<u>Pension Fund Regulatory and Development Authority</u>** PFRDA has been granted statutory status by passage of PFRDA Act 2013.
4.	Tighten the definition of large and related party concentration (short-term) and gradually reduce exposure limits to make them more consistent with international practices.	**Banking Sector** • The Reserve Bank is aware that group borrower limit in India is higher than international norms. However, it also needs to be recognized that some of the major corporate groups are key drivers of growth of the Indian economy. As the corporate bond market is not yet matured in India, bank financing is crucial for such corporate groups. Hence keeping the group borrower limit at the level of single borrower limit would severely constrain the availability of bank finance, which could hamper the growth of the economy. • Basel Committee on Banking Supervision (BCBS) has issued revised standards on Large Exposure Framework in April 2014, wherein a global convergence in exposure norms of banks has been proposed to be implemented from 1 January 2019. The proposed exposure norms are based on the banks' Tier I capital and prescribe the same large exposure limit for single as well as a group of inter-connected borrowers.

		• Subsequently, in the Fourth Bi-monthly Monetary Policy Statement issued on September 30, 2014, it was announced that a discussion paper will be issued on large exposures and convergence of exposure limits applicable in India with those of the BCBS which come into effect from 1 January 2019. Accordingly, RBI released a "Discussion Paper on Large Exposures Framework and Enhancing Credit Supply through Market Mechanism" on 27 March 2015 and invited comments till 30 April 2015. The Discussion Paper focused on the need to encourage alternative sources of funding to bank credit for the corporate sector to finance growth. This would also de-risk the balance sheets of banks. Specifically, the paper proposed ways to encourage large corporates with borrowings from the banking system above a cut-off level to tap the market for their working capital and term loan needs. Based on suggestions received from stakeholders, in May 2016, RBI has placed on its website a Discussion Paper on Framework for enhancing Credit Supply for Large Borrowers through Market Mechanism. Applicable from 2017-18, in terms of the regulation, borrowings of the 'Specified Borrowers' having a certain aggregate sanctioned fund-based credit limit (ASCL) from the banking system beyond the Normally Permitted Lending Limit (NPLL), will invite additional risk weight and higher standard asset provision. **<u>NBFCs</u>** Credit Concentration Norms prescribed for NBFCs: **Single Borrower-** Credit - 15% of Owned Fund; Investment - 15% of Owned Fund **Group Borrower-** Credit - 25% of Owned Fund; Investment - 25% of Owned Fund **Composite (credit + investment)** Single Borrower- 25% of Owned Fund; Group Borrower- 40% of Owned Fund **Infrastructure Related Activities:** Single – Additional 5% of Owned Fund; Group – Additional 10% of Owned Fund. **Insurance Companies** The definition of 'related party' is being strengthened/ tightened through the 'Corporate Governance framework' and Regulations on Preparation of Financial Statements of Insurance Companies. In terms of IRDA (Investment Regulations), an insurer shall not have investments of more than 5% in aggregate of its investments in all companies belonging to the promoters' groups. Further, investment made in all companies belonging to

		the promoters' group shall not be made by way of private placement or in unlisted instruments. **Pension Funds** The PFRDA investment guidelines have specified the exposure norms for sponsor and non-sponsor group in case of both equity and debt securities.
5.	Enhance specialized expertise available to the supervision function by developing programs to accredit and retain skilled supervisors.	**<u>Reserve Bank of India</u>** • Specialized In-house Programmes are being conducted with the help of renowned institutions such as Euro Finance, National Institute of Bank Management etc. to enhance the expertise available for supervisory function. • Officers are deputed to programmes conducted by IMF, BIS and other Central Banks abroad to enhance their knowledge and expertise. • Further, an approved concept note for a knowledge partnership programme with World Bank through case-study based workshops, e-modules leading to accreditation of bank examiners, along with budgetary approvals, is in place. This will be activated upon final approval by Department of Economic Affairs, Ministry of Finance. Pending that, intensive in-house workshops / class room sessions for different cadres have been organized. • Apart from the above, it is being envisaged for officers to be posted or being posted to the supervisory function to acquire specific external professional certifications in various risk management areas including credit risk, market risk, audit, fraud examination, anti-money laundering etc. **<u>Securities and Exchange Board of India</u>** • An independent consultant M/s Oliver Wyman was engaged to revisit, inter alia, man power needs in SEBI. Based on its findings they have estimated that supervision function is under resourced. They have noted that in SEBI resource allocation to supervision is 20% as compared to 40- 50% of peers. The consultant has recommended to increase resources allocated to supervision activities significantly (current: ~120 (20%)) to ~350 (35%); including supervision of collective investment schemes. • M/s Oliver Wyman have also recommended that SEBI should develop monetary incentive system to explore possibility of performance linked bonuses/increments and to develop mechanism to link level of incentive and performance of individuals across grades. The recommendations of M/s Oliver Wyman are being implemented by SEBI. • Further, training programmes on capital market supervision, macroeconomics, corporate governance, risk modelling and management, forensic accounting and fraud detection, cyber

		forensics, etc. are conducted for SEBI officers on a regular basis to enhance the expertise of the supervision function **<u>Insurance Regulatory and Development Authority</u>** Induction training programmes are conducted for the new recruits with the help of renewed insurance institutes such as Institute of Insurance Risk Management, Hyderabad, National Insurance Academy, Pune, etc., to impart knowledge and skills on insurance related aspects. On promotion to the next cadre, orientation course regarding the new role and the expectations is also conducted. Senior Level officers of IRDAI are members on various IAIS Committees, Working Groups and Task Force which gives them exposure to the global best practices. Officers and employees are also deputed to the seminars/ workshops conducted by various international agencies such as Asian Development Bank (ADB), Access to Insurance (A2ii), OECD etc. The Authority has also formulated a policy on training and knowledge sharing. As per the said policy, a list training programmes offered by Institute of Secretariat Training & Management (ISTM), National Insurance Academy (NIA) and Insurance Institute of India (III) have been approved for sponsoring the eligible officers as per the training policy. The Authority is also encouraging the employees and officers to acquire additional qualifications not only to improve their capabilities in discharging their duties but also better positioning the Authority in its regulatory functions. Accordingly, the Authority has also been incentivising officers and employees on acquiring such various professional qualifications. **<u>Pension Fund Regulatory and Development Authority</u>** PFRDA is involved in capacity building of its staff.
6.	Provide a lead supervisor with legal backing for conducting consolidated supervision including through authority to inspect subsidiaries and affiliates.	**<u>Reserve Bank of India</u>** • The Banking Regulation Act 1949, was amended in 2012 by inserting Section 29A into the Act to confer the powers on the Reserve Bank to direct a banking company to annex to its financial statements or furnish to it separately, the statements and information relating to the business or affairs of any associate enterprise of the banking company. With this amendment, the Reserve Bank is empowered to cause an inspection of any associate enterprise of a banking company and its books of account jointly by one or more of its officers or employees or other persons along with the Board or authority regulating such associate enterprise. For the purpose of the Act "associate enterprise" in relation to a banking company includes an enterprise which (i) is a holding company or a subsidiary company of the banking company, or (ii) is a joint venture of the banking company, or (iii) is a subsidiary company or a joint venture of the holding company of the banking company, or (iv) controls the composition of the Board of directors or other body governing the banking company, or (v) exercises, in the opinion of the Reserve Bank, significant influence on the banking company in taking

		financial or policy decisions, or (vi) is able to obtain economic benefits from the activities of the banking company. **<u>Reserve Bank of India, Securities and Exchange Board of India etc.</u>** • To strengthen the mechanism for monitoring Financial Conglomerates, the Inter-Regulatory Forum (IRF) has been constituted under the aegis of the FSDC Sub Committee and structured as a college of domestic supervisors by adopting the lead/principal regulator model. In this respect, the joint MoU for forging cooperation in the field of supervision of Financial Conglomerates was signed between RBI, SEBI, IRDA and PFRDA on 5 March 2013, to collaborate, co-operate, share information, coordinate on-site examinations, consult on matters of mutual supervisory/regulatory interests and to undertake assessment of systemic risk arising from the activities of FCs as a part of the FC monitoring framework under the IRF ambit. 2. The clause of MoU on Coordinated On-site Inspections • The Authorities agree that co-operation is particularly necessary in carrying out coordinated on-site inspections of entities belonging to the FCs in cases where concerns are serious in nature. The decisions with regard to the frequency/ duration of coordinated inspections, scope of inspection, number of entities (in a group) to be inspected and whether the concerns are sufficiently serious in nature may rest with the concerned Authorities. For the purpose of this MoU, coordinated inspection shall not mean joint inspection. The Authorities will keep each other informed on the results of the inspections, to the extent reasonable and permitted by law and in a timely manner. • The need for, and the nature and scope of joint inspections as also the possible inclusion of this aspect in the MoU among domestic regulators was discussed in a recent meeting of the IRF held on April 25, 2016. Issues relating to the objectives, expected outcomes and the modalities of such joint inspections are being deliberated upon.
7.	Expedite passage of Insurance Law (Amendment) Bill.	The Insurance Laws (Amendment) Act, 2015 has been notified on 20th March, 2015 by replacing the Insurance Laws (Amendment) Ordinance, 2014, which came into force on 26th December 2014. It paved the way for major reform related amendments in the Insurance Act, 1938, the General Insurance Business (Nationalization) Act, 1972 and the Insurance Regulatory and Development Authority (IRDA) Act, 1999.
8.	Implement corrective action ladder for insurers based on solvency ratios.	Section 64 VA of the Insurance Act, 1938 prescribes the minimum excess of assets over the liabilities to be maintained at all times. This is termed as Required Solvency Margin (RSM). The available excess of assets over the liabilities (also termed as Available Solvency Margin, ASM) shall be at least 100% of the RSM. The IRDA (Assets, Liabilities, and Solvency Margin of Insurers) Regulations, 2000 further prescribes the methods to determine solvency for

		both life and non-life insurers. Though the statute has laid down the stipulation of solvency of 100%, to ensure prudence the regulator as part of registration requirements has stipulated the ASM as at least 150% of the RSM, which must be complied with at all times. Further, the Insurance Laws (Amendment) Act, 2015 specifies a level of solvency margin known as control level of solvency, on breach of which, the Authority shall direct the insurer to submit a financial plan indicating action plan to correct the deficiency within a specified period not exceeding six months. Apart from the solvency capital requirements, Section 6 of the Insurance Act, 1938 stipulates minimum paid-up capital requirement of INR 100 Cr for carrying life insurance or general insurance business or health insurance business and INR 200 Cr of minimum paid-up capital to carry reinsurance business. The existing solvency framework is quite conservative and strong, this is principally due to the valuation of liabilities rather than to the capital requirements. All insurance companies are well capitalised as specified in the extant solvency regulations notified by the Authority. Further, economic capital and risk-based capital currently being reported upon as part of the Financial Condition Report submitted to IRDAI appointed actuary. Currently, however it is primarily used for reporting purposes but may replace the existing solvency requirements once Risk Based solvency regime is implemented. These 2 tools are considered a more holistic and prudent measure of capital adequacy.
9.	Enact legislation formalizing the New Pension Scheme and the Pension Fund Regulatory and Development Authority.	Passage of the PFRDA Act 2013 on September 19, 2013.
	Systemic liquidity, crisis management, and safety nets	
10.	Announce a timetable for the gradual reduction in the SLR and review the use of the held to maturity (HTM) category, taking account of emerging global prudential liquidity requirements.	**Commercial Banks** Banks are permitted to hold investments under the HTM category in excess of the limit of 25% of their total investments, provided the excess comprises only SLR securities and the total SLR securities held under the HTM category are not more than 22% of NDTL. The SLR has been reduced to 21.50% of NDTL with effect from February 7, 2015. To align them, it has been decided to bring down the ceiling on SLR securities under HTM from 22% to 21.50% with effect from the fortnight beginning January 9, 2016. Thereafter, both the SLR and the HTM ceiling will be brought down by 0.25% every quarter till March 31, 2017. **Cooperative Banks**

		The SLR requirement for cooperative banks has been gradually reduced from 25% to 21.5 % at present. The SLR prescription is to be brought down by 0.25 % every quarter starting from April 2016 in the following order: (i) 21.25% from April 2, 2016. (ii) 21.00% from July 9, 2016. (iii) 20.75% from October 1, 2016. (iv) 20.50% from January 1, 2017. The holding of SLR securities in HTM category is presently at 25%. A review in this regard was carried out in September 2014 for Urban Cooperative Banks (UCBs) and it was decided to maintain it at the same level. State Cooperative Banks (StCBs) and District Central Cooperative Banks (DCCBs) are categorising their investments as permanent and current. The classification of investments into HTM, available for sale (AFS) or held for trading (HFT) is yet to be introduced in StCBs/DCCBs' regulation.
11.	Strengthen resolution tools by granting stronger powers to supervisors to resolve nonviable entities in an orderly fashion.	India, as member of G-20 has committed to implement the FSB Key Attributes to Effective Resolution Regime by the end of 2015. The FSLRC has also recommended for setting up of a Resolution Corporation (RC). A task force was set up on RC by the Government which has also submitted its report in June 2015.It is proposed to enact a legislation to set up a Resolution Corporation (RC) in consultation with all the financial regulators, Department of Financial Services and other stakeholders. **Existing Resolution Powers and Resolution Authority in India** The existing statutory provisions of the RBI Act, 1934 or any other Act do not provide powers either to RBI or to the Government of India to maintain financial stability or to ensure continuity of systemically important financial services, and payment and clearing services. With a view to establishing a body to institutionalize and strengthen the mechanism for maintaining financial stability, financial sector development and inter-regulatory coordination, the Government of India has, in consultation with the financial sector regulators, set up the FSDC with the Finance Minister, Government of India as its chairman in December 2010. India's financial sector is diversified and expanding rapidly. It comprises commercial banks, insurance companies, non-banking financial companies, cooperatives, pension funds, mutual funds and other smaller financial entities, with banks dominating the financial sector. Insolvency & Bankruptcy Code, 2016 has already been passed by the Parliament and vigorous efforts are underway for enactment of a Comprehensive Code on Resolution of Financial Firms. There are also existing provisions in terms of various Acts [such as BR Act, 1949 and Companies Act, 1956 for private sector banks, branches of foreign banks; BR Act (AACS), 1966 and the Multi-State Co-operative Societies Act, 2002 for co-operative banks; RRB Act, 1976 for RRBs; RBI Act, 1934 and Companies Act, 1956 for NBFCs] that provide for limited resolution

		framework or regimes in respect of financial institutions falling under the regulatory jurisdiction of RBI viz., commercial banks, urban co-operative banks, RRBs, NBFCs etc.. The limited resolution regimes in respect of State Bank of India, Associate Banks of SBI, and nationalized banks are contained in SBI Act, 1955; SBI (Subsidiary Banks) Act, 1959 and The Banking Companies (Acquisition and Transfer of Undertaking) Act, 1970/80 respectively. There is no dedicated resolution authority responsible for overseeing and implementing resolution of financial institutions as a whole group. However, there are separate resolution authorities responsible for overseeing and implementing limited resolutions of respective financial institutions, e.g. Government of India and Reserve Bank of India for banking companies; Government of India for public sector banks and RRBs; authority for resolution for NBFCs is the RBI as regulator in relation to the NBFI activities under the RBI Act and the Registrar of Companies in relation to the NBFC being a company registered under the Companies Act. Moreover, the existing legal provisions contained in the BR Act also apply to branches of foreign banks, as India does not have a binding obligation to respect resolution regime of home resolution authority. The legal provisions contained in the BR Act, 1949 provide that the overall statutory objective of resolution steps for the deposit-taking institutions is to protect the depositors' interest, or the interest of the banking policy, or to prevent the affairs of any banking company being conducted in a manner detrimental to the interests of the depositors or in a manner prejudicial to the interests of the banking company, or to secure the proper management of any banking company. As regards operational capacity, both the RBI and the Government of India have certain resolution powers in terms of BR Act. Additionally, in the case of public sector banks (owned by our central government), the resolution regimes are governed by provisions of the SBI Act, 1955, SBI (Subsidiary Banks) Act, 1959, and Banking Companies (Acquisition and Transfer of Undertakings) Act, 1970/1980. The Central Government also has the powers to place public sector banks under liquidation. The existing resolution powers also apply equally to foreign banks having branches in India. As regards supporting the resolution carried out by a foreign home authority, Indian insolvency laws do not have any extra-territorial jurisdiction, nor do they recognise the jurisdiction of foreign courts in respect of the branches of foreign banks operating in India. However, Section 44A of the Code of Civil Procedure, 1908 provides for execution of a decree passed by a superior court of a reciprocating territory by filing the same in a District Court. Even though there is no designated resolution authority, the Reserve Bank has been performing that role. Moreover, the power to inspect the accounts rests with the Reserve Bank. Section 35 of our BR Act empowers RBI to have unimpeded access for conducting inspection or scrutiny of the affairs of any banking company, including branches of foreign banks and all branches of banking company incorporated in India and conducting business in India or outside India, and its books and accounts. It is, however,

		recognised that there is a need to improve the resolution regime in India through legislation and institutional arrangements. **Cooperative Banks** With respect to Cooperative Banks, RBI has limited power for resolution under Banking Regulation Act, 1949 (AACS). Powers under Section 44 A, 45 of Banking Regulation Act, 1949 available for resolution of Banking Companies are not applicable to Cooperative Banks. However, with a view to facilitating consolidation and emergence of strong entities and providing an avenue for non-disruptive exit of weak/unviable entities in the co-operative banking sector, guidelines for merger/amalgamation of UCBs were framed. Although the Banking Regulation Act, 1949 (AACS) does not empower RBI to formulate a scheme with regard to merger and amalgamation of co-operative banks, the State Governments have incorporated in their respective Co-operative Societies Acts a provision for obtaining prior sanction in writing, of RBI for an order, inter alia, for sanctioning a scheme of amalgamation or reconstruction. To strengthen the resolution framework, Supervisory Action Framework for Urban Cooperative Banks (UCBs) was revised to include four trigger points i.e., Gross NPAs, Credit Deposit (CD) ratio, Profitability, Capital Funds. The trigger point for placing a UCB under All-inclusive directions was advanced from more than 10% to more than 5% of deposit erosion. The trigger point for cancelling the licence of a UCB was also advanced from more than 25% to more than 10% of deposit erosion **Pension Funds** Adequate powers are provided in PFRDA Act and regulations for resolution of pension funds. Section 31 of the PFRDA Act provides for attachment of assets and supersession of the Boards of the Pension Funds. It may however be mentioned that pension funds under NPS are only pass through intermediaries and their (in)solvency does not impact the Assets of subscribers. In fact, historically the PFRDA has directed transfer of assets from one pension fund to another in case of any pension fund not re-selected under new round of selection without impacting the assets of subscribers. **Insurance Sector** The IRDAI under the Insurance Act has a resolution framework in place which include the following: <u>Power of to issue directions:</u> The IRDAI is empowered to issue directions to insurers generally or to any insurer in particular, if it is satisfied that it is necessary in the public interest, or to prevent the affairs of any insurer being conducted in a manner detrimental to the interests of the policy-holders or in a manner prejudicial to the interests of the insurer, or generally to secure the proper management of any insurer. <u>Power to appoint and remove directors:</u> IRDAI has the power to remove any director or the chief executive officer of the insurer, from office and appoint any suitable person in place of the director or chief executive officer who has been removed from his office. It is also empowered to appoint one or

		more persons to hold office as additional directors of the insurer, provided the number of additional directors shall not exceed five or one-third of the maximum strength fixed for the Board whichever is less. Power of IRDAI to appoint Administrator: The IRDAI is empowered to appoint an Administrator of an insurer to control the affairs and conduct the management of the business of the insurer Power of investigation and inspection by IRDAI: On receipt of report of investigation conducted under Section 33 of the Insurance Act, IRDAI may, inter-alia, cancel the registration of insurer or intermediary or insurance intermediary or direct any person to apply to court for the winding of the insurer or intermediary or insurance intermediary. Power to make scheme of amalgamation: The IRDAI may prepare a scheme for the amalgamation of an insurer with any other insurer, provided it is satisfied that it is necessary to do so in the public interest, or in the interests of the policyholders, or in order to secure the proper management of an insurer, or in the interest of insurance business of the country as a whole. Winding-up: The National Company Law Tribunal may order the winding up of an insurance company in accordance with the Companies Act provisions subject, to the provisions of the Insurance Act. The IRDAI can also apply to the Tribunal for the winding up of an insurance company in specified circumstances as indicated in section 53(2)(b). Segregation of client assets: The Insurance Act provides that no assets shall be applied to the discharge of any liabilities other than those in respect of life insurance business except in so far as those assets exceed the liabilities in respect of life-insurance business. The regulatory provisions for insurance companies also provides for the assets of the policyholders to be segregated. Thus, the assets, liabilities and the income derived from the assets of the 'policyholders' is identifiable. Various provisions of Insurance Act, 1938 show that the IRDAI do have the capacity to use certain resolution powers and tools like private sector purchase tool (compulsory amalgamation), temporary public ownership tool in respect of insurance companies. However, the existing legislation does not provide for other resolution tools like bail-in within resolution, etc. for the resolution authority to exercise upon.
12.	Develop and periodically test arrangements to deal with a major disruption to the financial system.	**Reserve Bank of India** The databases/information resources, information technology (IT) infrastructure and systems used for bank supervision are covered by the business continuity and disaster recovery framework of Reserve Bank. Further, the Payment System Infrastructure, settlement systems and other communication systems for the financial system are also covered by the Reserve Bank's business continuity and disaster recovery framework. Banks and financial institutions are expected to have their own business continuity and disaster recovery arrangements, as required by RBI guidelines. The IT risks including business continuity in banks are also examined by Reserve Bank and improvements recommended. Such

		arrangements are also periodically tested to examine their efficacy to address any major disruption to the financial system. The RBI has advised banks on June 2, 2016 to put in place an appropriate cyber-security policy to combat cyber threats. **Securities and Exchange Board of India** • Please refer to the information provided at paragraph 15 below. • Annual Systems Audit of Stock Exchanges and Depositories: Circular Dated July 23, 2008 and Circular Dated November 23, 2011 Exchanges and Depositories shall conduct audit of their systems by a reputed independent auditor on an annual basis. The systems audit should be comprehensive encompassing audit of systems and processes related to examination of Trading Systems, Clearing and Settlement Systems (Clearing Corporation/Clearing House), Risk Management, Databases, Disaster Recovery Sites, Business Continuity Planning, Security, Capacity Management and Information Security Audit. • Annual System Audit of Stock Brokers / Trading Members: Circular dated November 03, 2013 The stock exchanges should ensure that system audit of stock brokers / trading members are conducted in accordance with the prescribed guidelines • Testing of software used in or related to Trading and Risk Management: Circular dated August 19, 2013 and February 07, 2014: It was decided that market participants shall follow the testing procedure which inter-alia include testing of software, mock testing and user acceptance test (UAT) etc., before deployment of the software. • Safeguards to avoid trading disruption in case of failure of software vendor: Circular dated February 11, 2014: Adequate mechanism / procedure should be in place to ensure smooth transition by stock broker(s) to another software vendor in case of inability of the existing software vendor to provide software and related services in timely and continuous manner. • Cyber Security and Cyber Resilience framework of Stock Exchanges, Clearing Corporation and Depositories: Circular dated July 06, 2015: It was decided to lay down the framework that Market Infrastructure Institutions would be required to comply with regard to cyber security and cyber resilience.
	Broadening markets and services	
13.	Ease investment directives and limits to encourage investments in corporate and	**Reserve Bank of India** • To facilitate greater level of participation in corporate bonds by SPDs, it has been decided to increase exposure ceiling limits in respect of single borrower / counterparty from 25% to 50% of latest audited Net Owned Funds and in respect of group borrower from 40% to 65% of latest audited Net Owned Funds only for investments in AAA rated corporate

	infrastructure bonds by institutional investors .	bonds. In respect of other investments in the corporate bonds, the existing limits will continue to apply, hitherto. • RBI has, vide circular dated September 29, 2015, put in place a framework for issuance of Rupee denominated bonds overseas within the overarching ECB policy. As per the instant policy, RBI has allowed Indian body corporates, REITs and Infrastructure Investment Trusts to float such bonds. • RBI has issued detailed guidelines on setting up of IDFs (Infrastructure Debt Funds) by banks & NBFCs, which are expected to enhance the flow of long-term debt in infrastructure development. • RBI has provided banks an additional limit of 10% of their investments in non-SLR securities as on the end of previous fiscal, to invest in unrated bonds of companies engaged in infrastructure activities within the overall ceiling of 20%. • RBI has allowed repo on corporate bonds for maturity less than 1 year. • RBI, vide its notification dated September 24, 2015 had issued guidelines on "Partial Credit enhancement on Corporate Bonds. As per the guidelines, Banks have been allowed to offer partial credit enhancements only in the form of a non-funded irrevocable contingent line of credit, subject to terms and conditions as specified therein. • RBI has allowed banks to issue Long-Term Bonds for lending to long-term projects in infrastructure sub-sectors, and affordable housing. Subsequently, RBI also allowed banks to invest in long-term infrastructure bonds issued by other banks **Securities and Exchange Board of India** • SEBI has provided guidelines for setting up of dedicated Debt Segment on Stock Exchanges. The debt segment shall offer separate trading, clearing, settlement, reporting facilities and membership to deal in corporate bonds, Government Securities, Treasury Bills, State Government loans, securitized debt instruments etc. This is a focused approach towards building a vibrant secondary market for debt securities. It has also been proposed that market making may be provided by merchant bankers, issuers through brokers. • SEBI has permitted foreign institutional investors (FIIs) to use corporate bonds (AAA rating) as collateral to meet margin requirements. • Debt allocation mechanism for FIIs has been standardized on April 01, 2013 and auction mechanism has been done away with till overall investment reaches 90%. • SEBI has allowed institutional investors including mutual funds, banks, insurance companies, pension funds etc. to trade on the debt segment directly on proprietary basis.

		• SEBI has allowed Mutual Funds to participate in repo transactions in corporate debt with AA rated securities as compared to the earlier directive to invest only in AAA rated securities. • SEBI has allowed Mutual Funds to participate in CDS transactions as users. • SEBI directed all SEBI, RBI and IRDA regulated entities to clear and settle their trades through the National Securities Clearing Corporation Limited (NSCCL) or the Indian Clearing Corporation Limited (ICCL) with settlement on T+1 days or T+2 days. This was aimed at encouraging such entities – which includes institutional investors to settle their trades through an institutional mechanism in a time bound manner. • During September 2013, SEBI prescribed risk management framework for dedicated debt segment of stock exchanges. It also prescribed conditions for DVP-3 settlement of corporate bonds by the clearing corporations, thereby guaranteeing the settlement. The guaranteed settlement would attract more investors to invest in such corporate bonds and lead to increase in liquidity. • SEBI amended SEBI (Issue and Listing of Debt Securities) Regulations, 2008 to include enabling provision relating to Consolidation and re-issuance of Debt Securities and Right to early redemption by ways of callable and puttable bonds. • SEBI (Issue and Listing of Debt Securities by Municipalities) Regulations, 2015 have been notified on July 15, 2015, thereby providing a comprehensive regulatory framework for issuance and listing of debt securities by municipalities. These regulations will provide a regulatory framework, governing the issuance and listing of bonds by the Municipalities. • During January 2015, SEBI approved amendment to the (Issue and Listing of Debt Securities) Regulations, 2008 to include a clause on Consolidation and re-issuance of Debt Securities and Right to early redemption by ways of callable and puttable bonds. The enablement of consolidation and re-issuance is likely to avoid fragmentation of debt market with multiple issues and re-issuances can help in creation of large floating stocks which could make corporate bond market more attractive for institutional investors. • In the Fourth Bi-monthly Monetary Policy Statement, 2015-16 dated September 29, 2015, RBI has decided to permit Indian corporates to issue rupee denominated bonds with a minimum maturity of five years at overseas locations within the ceiling of foreign investment permitted in corporate debt (US$ 51 billion at present). There shall be no restriction on the end use of funds except a small negative list. Presently, SEBI and RBI are in discussions to operationalize the same. **Employees' Provident Fund Organisation (EPFO)**

		• EPFO has allowed investment in debt of 15 private sector companies which was earlier 7. • EPFO has extended the tenure of investments in AAA rated paper of public sector units to up to 25 years and for AA rated PSUs up to 15 years. • EPFO, vide notification dated April 23, 2015 has issued new investment guidelines. For the first time, a minimum investment limit has been prescribed for debt instruments. The investment limit for debt instruments has been prescribed between 35% and 45%. **<u>Insurance Regulatory and Development Authority</u>** • IRDA has allowed Insurance Companies to take the Proprietary Trading Membership of stock exchanges for trading in debt segment. **<u>Pension Fund Regulatory and Development Authority</u>** Adequate inbuilt flexibility in investment guidelines. Only limitation is industry exposure of 15% in one industry.
14.	Consider further easing of restrictions on bond market investments by foreign institutional investors (FIIs).	**<u>Reserve Bank of India</u>** Foreign Portfolio Investors (FPIs) have been given access to both sovereign and corporate debt and the aggregate limits in these segments have been progressively increased over time in keeping with the volume of capital flows and macroeconomic conditions. Till end-September, FII limits were prescribed in US dollar terms. However with effect from October 2015, a Medium Term Framework for FPI limits in Government securities has been put in place on September 29, 2015 to provide a more predictable regime which has the following features: i. The limits for FPI investment in debt securities will henceforth be announced/ fixed in Rupee terms. ii. The limits for FPI investment in Central Government securities will be increased in phases to reach 5% of the outstanding stock by March 2018. In aggregate terms, this is expected to open up room for additional investment of INR 1,200 billion in the limit for Central Government securities by March 2018 over and above the existing limit of INR 1,535 billion for all Government securities. iii. Additionally, there will be a separate limit for investment by all FPIs in the State Development Loans (SDLs), to be increased in phases to reach 2% of the outstanding stock by March 2018. This would amount to an additional limit of about INR 500 billion by March 2018. iv. The effective increase in limits will be announced every half year in March and September for the next two quarters. v. The existing requirement of investments being made in G-sec (including SDLs) with a minimum residual maturity of three years will continue to apply to all categories of FPIs.

vi. With regard to FPI investments in Central Government securities, it has also been decided to prospectively put in place a security-wise limit of 20% of the amount outstanding under each Central Government security. Existing investments in Central Government securities where aggregate FPI investment is over 20% may continue. However, fresh purchases by FPIs in these securities shall not be permitted till the corresponding security-wise investments fall below 20%. The Central Government securities in which the aggregate FPI investment is more than 20% of the outstanding would be placed in a negative investment category in which fresh investments would not be permitted.

With these policy changes, the limit for investment by FPIs in Government Securities will be enhanced in two tranches from October 12, 2015 and January 1, 2016 respectively as set out below:

(INR billion)

	Central Government securities			State Development Loans	Aggregate
	For all FPIs	Additional for Long Term FPIs[97]	Total	For all FPIs (including Long Term FPIs)	
Existing Limits	1,244	291	1,535	Nil	1,535
Revised limits with effect from October 12, 2015	1,299	366	1,665	35	1,700
Revised limits with effect from January 1, 2016	1,354	441	1,795	70	1,865

Securities and Exchange Board of India

The quantum of debt limits for FPIs is laid down by the Government of India. SEBI's role is limited to the allocation of limits to the FIIs and monitoring the utilization of the debt limits.

- SEBI vide its circular dated February 05, 2015 has permitted FPIs to invest in Government securities, the coupons received on their existing investments in Government securities. Such investments are kept outside the overall applicable limit.
- Further, in order to provide operational flexibility to FPIs, SEBI vide its e-mail dated April 8, 2015 has permitted FPIs to buy Government securities on the same day upon sale / redemption / maturity of Government securities.

[97] FPIs registered with SEBI include Sovereign Wealth Funds (SWFs), Multilateral Agencies, Endowment Funds, Insurance Funds, Pension Funds and Foreign Central Banks.

	Financial markets infrastructure	
15.	Require central counterparties (CCPs) to strengthen their liquidity risk management procedures to enable them to cover losses in the event of the failure of a major participant.	**<u>Reserve Bank of India</u>** The Reserve Bank of India had advised the Clearing Corporation of India (CCIL) to develop a liquidity plan taking into account various aspects such as managing and monitoring at least on a daily basis, its liquidity needs across a range of market scenarios; the daily assessment and valuation of the liquid assets available vis-à-vis the liquidity needs; assessing timescales over which the CCIL's liquid financial resources should be available and the processes to be followed in the event of liquidity shortfalls, etc.; define the process to be followed in the event of liquidity shortfalls; and, augment its liquidity resources on a priority basis. CCIL has developed Integrated Risk Management System to track liquidity exposures on members on an online basis. This is in operation since April 2014. The system also facilitates simulation of liquidity exposures based on acceptance of trades / likely to be accepted. This system is web-based and access to the same has been given to the clearing participants so that they can monitor the liquidity exposures they create on the system with complete drill down to trade level and with simulation capabilities. This will vastly improve the capability of the clearing participants to ensure that they do not exceed limits that is set. CCIL has developed detailed shortfall handling processes for each possible type of shortfall. Liquidity Stress Test is being carried out on daily basis. CCIL has augmented its liquidity resources and increased line of credit arrangement with the banks. CCIL had submitted the proposal for liquidity framework on a back-to-back basis against the collaterals held in the Settlement Guarantee Fund (SGF). The same was approved by the RBI. The proposal on operational aspects has since been submitted by CCIL which is under examination. Also a framework for extending central bank liquidity to support CCIL in line with the "No Technical Obstacle" (NTO) principle agreed by the Economic Consultative Committee of the Governors (of BIS) has been finalized. The same has been communicated to CCIL. The liquidity support under the NTO principle would be at the discretion of RBI under exceptional circumstances with the objective of maintaining financial stability. CCIL was also advised that they would not rely upon the liquidity support from RBI as part of its liquidity plan to address liquidity risk. CCIL was further advised to keep the provision of emergency liquidity support under the NTO regime confidential. However, CCIL may share the information with other authorities in confidence with prior approval of the RBI. **<u>Securities and Exchange Board of India</u>** In order to align the practices of clearing corporations with CPMI-IOSCO *Principles for Financial Market Infrastructures* (PFMIs), SEBI vide no CIR/MRD/DRMNP/26/2013 dated September 04, 2013 advised the clearing corporations to comply with the PFMIs. Principle 7 of the PFMIs includes

		provisions for effectively measuring, monitoring, and managing liquidity risk. Additionally, pursuant to deliberations held in the Risk Management Review Committee of SEBI with clearing corporations, stock exchanges and market participants, SEBI issued circular no. CIR/MRD/DRMNP/25/2014 dated August 27, 2014 prescribing norms for Core Settlement Guarantee Fund (Core SGF), Default Waterfall and Stress Testing. These guidelines were aimed at enhancing the robustness of the present risk management system of the clearing corporations (CCs) to enable them to deal with defaults of the clearing members much more effectively. The circular inter-alia prescribed that the CC shall ensure that it maintains sufficient liquid resources to manage liquidity risks from members, settlement banks and those generated by its investment policy. Additionally the said circular advised that the clearing corporation shall daily test the adequacy of its liquidity arrangements in order to ensure that its liquid resources are adequate to meet simultaneous default of at least two clearing members and their associates, that would generate the largest aggregate liquidity obligation for the CC in extreme but plausible market conditions and compare such obligation with the resources. SEBI vide circular no CIR/MRD/DRMNP/25/2014 dated August 27, 2014 prescribed the guidelines on "Core Settlement Guarantee Fund, Default Waterfall and Stress Test. The guidelines aim to strengthen the financial infrastructure of the CCPs so that it can withstand defaults by members, as well as improve the risk management practices, in line with CPMI-IOSCO PFMIs. SEBI vide circular dated May 04, 2016 advised Clearing Corporations to comply with the followings: A. Investment Policy of Clearing Corporation - i) The investment policy of the Clearing Corporation shall be built on the premise of highest degree of safety and least market risk. ii) The investments shall be broadly in Fixed Deposits/ Central Government Securities and Liquid schemes of Debt Mutual Funds. B. Liquid assets for the purpose of calculation of Net worth of Clearing Corporation:- The eligible instruments for investment such as fixed deposits, Central Government Securities and liquid schemes of Debt Mutual Funds to the extent permissible, other instruments as may be specified by SEBI from time to time, and cash and bank balance, shall be considered as 'Liquid Assets', for the purpose of calculation of Net worth of a Clearing Corporation. (The complete detail in this circular may be accessed at http://www.sebi.gov.in/cms/sebi_data/attachdocs/1462358916079.pdf)
16.	Consider replacing the commercial bank settlement model	Corporate securities are settled in commercial bank money, which, in principle, exposes the corporate securities market to settlement bank risk. As directed by the FSDC Sub-Committee an RBI-SEBI Working Group was set up to examine the FSAP recommendation regarding "Replacement of

	for corporate securities and derivatives with a central bank settlement model.	Commercial Bank Settlement model with Central Bank Settlement model for securities market". The Working Group had made recommendations regarding the settlement of securities market in Central Bank money. SEBI has since advised the clearing corporations to take steps and approach the concerned departments in RBI for real-time gross settlement. The major recommendations of the Working Group are as under: i. The funds leg involving the Clearing Banks and the CCs (Clearing Corporations) could be settled in central bank money. ii. The CC could minimise their exposures to Clearing Banks in terms of credit risk (including intraday exposures) and the liquidity risks by migrating to settlement in central bank money. iii. RBI in consultation with SEBI and the clearing corporation will finalise the operational aspects. Presently, the CCs are in the process of setting up the infrastructure to operationalize the same. The implementation status is "In Progress".
17.	Enact comprehensive modern corporate insolvency law and upgrade SARFAESI and existing laws governing insolvencies for unincorporated Businesses.	Government of India (Ministry of Finance, Department of Economic Affairs) appointed a Committee on Bankruptcy law under the chairmanship of Law Secretary to study the corporate bankruptcy legal frame work in India and submit a report to reform the system. The Committee submitted its interim report in the month of February 2015 to the Central Government. The final report is yet to be submitted. In the Companies Act, 2013, the provisions for winding up of corporate bodies and un-incorporated bodies, were redrafted with an intention to speed up the process. Further, Insolvency & Bankruptcy Code, 2016 has already been passed by the Parliament and vigorous efforts are underway for enactment of a Comprehensive Code on Resolution of Financial Firms.