

Committee on Comprehensive Financial Services for Small Businesses and Low Income Households

Report

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Members' List and Terms of Reference

Terms of Reference

1. To frame a clear and detailed vision for financial inclusion and financial deepening in India.
2. To lay down a set of design principles that will guide the development of institutional frameworks and regulation for achieving financial inclusion and financial deepening.
3. To review existing strategies and develop new ones that address specific barriers to progress and that encourage participants to work swiftly towards achieving full inclusion and financial deepening, consistent with the design principles.
4. To develop a comprehensive monitoring framework to track the progress of the financial inclusion and deepening efforts on a nationwide basis.
5. Any other related issue/s the Committee may want to opine on.

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Dr. Nachiket Mor, Central Board Member, Reserve Bank of India

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2. Dr. Prakash Bakshi, Chairman, NABARD
3. Mr. Bharat Doshi, Chairman, Mahindra & Mahindra Financial Services
4. Mr. A.P. Hota, Managing Director & CEO, National Payments Corporation of India
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12. Mr. A. Udgata, Principal Chief General Manager, Reserve Bank of India - Member Secretary

Mr. S. Karuppasamy and Dr. Deepali Pant Joshi, both Executive Directors, Reserve Bank of India will be the Expert Observers. Secretarial support will be provided by the Rural Planning and Credit Department (RPCD), Reserve Bank of India.

The Committee will submit its final report by December 31, 2013.

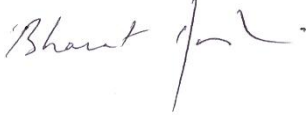
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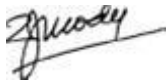
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List of Acronyms and Abbreviations

AD	Authorised Dealer
AEPS	Aadhaar-Enabled Payments Switch
AFS	Available-for-Sale
AIC	Agricultural Insurance Company
AIDIS	All India Debt and Investment Survey
All	Accredited Individual Investors
AMC	Asset Management Company
AML	Anti-Money Laundering
ANBC	Adjusted Net Bank Credit
APO	Army Post Office
APSL	Adjusted PSL
ARG	Automatic Rain Gauge
ASCB	Association of Cantonal Banks
ASIC	Australian Securities and Investments Commission
ATM	Automated Teller Machine
AUD	Australian Dollar
AUM	Assets Under Management
AWS	Automatic Weather Station
BBNL	Bharat Broadband Network Limited
BC	Business Correspondent
BF	Business Facilitator
BIRD	Bankers Institute of Rural Development
BIS	Bank of International Settlements
BOO	Build-Own-Operate
BR Act	Banking Regulations Act, 1949
BRI	Bank Rakyat Indonesia
BRIC	Brazil, Russia, China, India
BSBDA	Basic Savings Bank Deposit Account
BSR	Basic Statistical Returns
CAB	College of Agricultural Banking
CAFRAL	Centre for Advancement in Financial Research and Learning
CBI	Central Bureau of Investigation
CBS	Core Banking System
CCI	Competition Commission of India
CEO	Chief Executive Officer
CERC	Central Electricity Regulatory Commission
CERSAI	Central Registry of Securitisation Asset Reconstruction and Security Interest of India
CFPB	Consumer Financial Protection Bureau
CFT	Combatting the Financing of Terrorism
CGAP	Consultative Group to Assist the Poor

CGMS	Central Grievance Management System
CGTMSE	Credit Guarantee Fund Trust for Micro and Small Enterprises
CIBIL	Credit Information Bureau Limited
CIC	Core Investment Company
CICA	Credit Information Companies Act
CICO	Cash In Cash Out
CIS	Collective Investment Scheme
CMIE	Centre for Monitoring Indian Economy
COBS	Conduct of Business
CRR	Cash Reserve Ratio
CSC	Community Service Centre
CSP	Customer Service Point
CWC	Central Warehousing Corporation
DBT	Direct Benefit Transfer
DCCB	District Central Cooperative Bank
DFI	Development Finance Institution
D-NBFC	Deposit Taking NBFC
DSGV	Deutscher Sparkassen und Giroverband
ECB	European Central Bank
EIC	Economic Intelligence Council
EOD	Economic Offenses Division
EOW	Economic Offenses Wing
EPFO	Employees' Provident Fund Organisation
ETF	Exchange Traded Fund
EU	European Union
FATF	Financial Action Task Force
FCI	Food Corporation of India
FDIC	Federal Deposit Insurance Corporation
Fed.	Federal Reserve
FIU-IND	Financial Intelligence Unit-India
FLC	Financial Literacy Centre
FLCC	Financial Literacy and Credit Counselling
FMC	Forward Markets Commission
FoP	Friends of Police
FOS	Financial Ombudsman Service
FPO	Fleet Post Office
FRA	Financial Redress Agency
FSA	Financial Services Authority
FSB	Financial Stability Board
FSLRC	Financial Sector Legislative Reforms Commission
FSP	Financial Services Provider
FSR	Financial Services Reform Act, 2001

G2P	Government to Person
GBP	Great Britain Pound
GCC	General Credit Card
GDDP	Gross District Domestic Product
GDP	Gross Domestic Product
GIC	General Insurance Corporation of India
GNPA	Gross NPA
GOI	Government of India
GPFI	Global Partnership for Financial Inclusion
GPRS	General Packet Radio Service
GRC	Grievance Redressal Cell
GSDP	Gross State Domestic Product
GSE	Government Sponsored Enterprises
HDBS	Horizontally Differentiated Banking System
HFC	Housing Finance Company
HTM	Held-to-Maturity
IBA	Indian Banks' Association
IFC	International Finance Corporation
IGIDR	Indira Gandhi Institute of Development Research
IMD	Indian Meteorological Department
IMF	International Monetary Fund
IMPS	Immediate Mobile Payment System
IRDA	Insurance Regulatory and Development Authority
JLG	Joint Liability Group
JNNURM	Jawaharlal Nehru National Urban Renewal Mission
KCC	Kisan Credit Card
KGFS	Kshetriya Gramin Financial Services
KYC	Know Your Customer
LAB	Local Area Bank
LACP	Los Angeles Community Policing
LDM	Lead District Manager
LIC	Life Insurance Corporation of India
LOLR	Lender of Last Resort
LTA	Land Titling Authorities
MCA	Ministry of Corporate Affairs
MFI	Microfinance Institution
MITC	Most Important Terms and Conditions
MMMF	Money Market Mutual Fund
MSB	Money Service Business
MSME	Micro, Small, and Medium Enterprises
NABARD	National Bank for Agriculture and Rural Development
NAFSCOB	National Federation of State Cooperative Banks

NBFC	Non-Banking Financial Company
NCAER	National Council of Applied Economic Research
NCMSL	National Collateral Management Services Limited
ND-NBFC	Non Deposit Taking NBFC
NDTL	Net Demand and Time Liability
NECS	National Electronic Clearing Service
NEFT	National Electronic Funds Transfer
NFA	No-Frills Account
NHB	National Housing Bank
NOFN	National Optical Fibre Network
NPA	Non-Performing Asset
NPS	National Pensions Scheme
NREGA	National Rural Employment Guarantee Act, 2005
NSSO	National Sample Survey Organisation
OFO	Office of the Financial Ombudsman
OTP	One-Time-Password
PACS	Primary Agricultural Cooperative Society
PFRDA	Pension Fund Regulatory and Development Authority
PLATINUM	Working Group on Partnerships for Land Title Implementation in Urban Management
PNO	Payment Network Operator
POA	Proof of Address
POI	Proof of Identity
PoP	Point of Purchase
POS	Point of Sale
PPI	Pre-Paid Instrument Issuer
PPP	Public Private Partnership
PSD	Payment Services Directive
PSL	Priority Sector Lending
PTC	Pass-Through Certificate
QIB	Qualified Institutional Buyer
RAROC	Risk Adjusted Return on Capital
RBI	Reserve Bank of India
RBS	Risk Based Supervision
RGS	Rural Godown Scheme
RIDF	Rural Infrastructure Development Fund
RP	Resource Person
RRB	Regional Rural Bank
Rs.	Indian Rupees
RTGS	Real Time Gross Settlement Service
RUA	Reference Unit Area
RWS	Reference Weather Station

SARFAESI	Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest Act
SAT	Securities Appellate Tribunal
SBI	State Bank of India
SCB	Scheduled Commercial Bank
SCORES	SEBI Complaints Redress System
SEBI	Securities and Exchange Board of India
SFIO	Serious Fraud Investigation Office
SFRC	State Finance Regulatory Commission
SHG	Self-Help Group
SIDBI	Small Industrial Development Bank of India
SIFI	Systemically Important Financial Institution
SIV	Special Investment Vehicles
SLR	Statutory Liquidity Ratio
SMS	Short Message Service
SPARC	Supervisory Program for Assessment of Risk and Capital
SPV	Special Purpose Vehicle
sq. km.	Square Kilometre(s)
StCB	State Cooperative Bank
SWC	State Warehousing Corporation
TCF	Treating Customers Fairly
TILA	Truth in Lending Act
TRAI	Telecom Regulatory Authority of India
UCB	Urban Cooperative Bank
UEBA	Universal Electronic Bank Account
UIDAI	Unique Identification Authority of India
ULIP	Unit-Linked Insurance Policies
UPIN	Unique Property Identification Numbers
USB	Ultra-Small Branch
USD	United States Dollar
USSD	Unstructured Supplementary Service Data
VDB	Verband Deutscher Bürgschaftsbanken
VDBS	Vertically Differentiated Banking System
WBCIS	Weather Based Crop Insurance Scheme
WL-ATM	White Label ATM
WL-BC	White Label Business Correspondent

Section 1 Overview

Chapter 1.1 Preface

Providing access to financial services to low-income households and small businesses is not a new goal for India. Policy makers are also well aware of its importance and have been very willing to learn from the successful experiences of other countries and to experiment with new ideas. However, the record of progress on this front has left a great deal to be desired. On both Financial Inclusion (defined as the spread of financial institutions and financial services across the country) and Financial Depth (defined as the percentage of credit to GDP at various levels of the economy) the overall situation remains very poor and, on a regional and sectoral basis, very uneven. An estimate suggests that close to 90 per cent¹ of small businesses have no links with formal financial institutions and 60 per cent² of the rural and urban population do not even have a functional bank account. And, while the bank credit to GDP ratio in the country as a whole is a modest 70 per cent, in a large state such as Bihar, it is even lower at a mere 16 per cent³. This has left a large part of the economy dependent on the informal sector for meeting its credit needs. On the savings front, difficulties of access combined with an absence of a positive real return on financial savings, has accelerated the move away from financial assets to physical assets and unregulated providers. RBI's June 2013 Financial Stability Report notes that savings as a proportion to GDP has fallen from 36.8 per cent in 2007-08 to 30.8 per cent in 2011-12 and the financial savings of households have declined from 11.6 per cent of GDP to 8 per cent during the same period. It is clear that the demand for high-quality formal financial services is not a constraint - there is robust and visible demand for a wide range of financial services by small businesses and low-income households combined with a willingness to pay for them. The challenge is clearly the ability of the formal financial system to mount a strong supply response, which needs to be strengthened considerably.

As one examines the financial inclusion landscape in India, the sheer energy that has been put behind the effort and the seriousness with which providers and regulators have pursued this goal is impressive. However, it is possible that it is this very energy that has been its key weakness as well, because it has propelled highly engaged regulators and policy makers to move from one big idea to another, each time convinced that they have finally found the key to financial inclusion, whether it be cooperative banks, nationalisation of banks, self-help groups, regional rural banks, or business correspondents. While there is no question that there is a continuing need to explore new ideas; learn from the experiences of other nations; and benefit from new technologies; perhaps it is not the best regulatory strategy to centrally pick one approach no matter how convincing it may seem and to push the entire system in that particular direction to the exclusion of all others. A better approach may instead be to articulate a clear vision; establish a set of design principles; and then to permit all strategies, new and old, to flourish or to die out based on their inherent strengths and weaknesses. India is a very large and a very diverse country and no one strategy, however well designed, can ever hope to serve the entire country.

And, while there is no doubt that the goals of comprehensive financial access are very important, given their sheer magnitude, they need to be pursued in manner that does not end up threatening the stability of the financial system by building up high levels of non-performing assets or impairing the profitability of the financial institutions engaged in these tasks. For example, there is a concern that the current approach which is exclusively reliant on full-service, national level, scheduled commercial banks using their own branches and a network of mostly informal agents, while potentially a very good idea for some banks and for some regions of the country, for several banks and several regions is building up an extremely high risk portfolio of assets, and a high cost infrastructure but is not doing much by way of building comprehensive access to finance for low-income

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households and small businesses. Priority Sector Lending (PSL) guidelines require banks to allocate 40 per cent of their lending book to it, and how they are implemented by the bank has a significant impact on its performance as a whole. However, whenever financial inclusion goals are generally specified and strategies articulated, there is little acknowledgement of risk and cost-to-serve considerations. This has had a severe impact and, despite the loan waivers that took place a few years ago, more than half the total NPAs on their books are attributable to this sector with an NPA ratio that is close to double that of the rest of the asset book. Unless these issues are integrated in discussions on financial inclusion, banks will always be reluctant participants. Given this important background, this Report overall makes a conscious effort to redress this imbalance and issues of risks and costs have been kept at the very centre of the discussions of each of the strategies for providing better access to financial services to small businesses and low-income households.

With this perspective in view and in accordance with the Terms of Reference given to it, in its deliberations, the Committee focussed its attention on:

1. Framing a clear and detailed vision for financial inclusion and financial deepening in India.
2. Articulating a set of design principles that will guide the development of institutional frameworks and regulation for achieving financial inclusion and financial deepening, including approaches to prudential regulation, consumer protection, and systemic risk management for institutions involved in financial inclusion and deepening, so that the eventual design: (a) provides a complete suite of suitable financial services to each and every small business and low-income household in a flexible, convenient, reliable, and continuous manner; (b) is highly cost effective; (c) ensures a high degree of customer protection, and enhancement of financial wellbeing; and (d) enhances systemic stability.
3. In the light of the detailed vision and the design principles, carefully reviewing each existing channel and suggesting how its performance may be improved based on both domestic and global experiences.
4. Where necessary, recommending new ideas for consideration by the RBI and other policy makers, in order to address specific barriers to progress and to encourage participants to work swiftly towards the full achievement of the vision in a manner that is consistent with the design principles.
5. Developing a comprehensive monitoring framework to track the progress of the financial inclusion and deepening efforts on a nationwide basis.

At the end of its deliberations the Committee finds that each of the channels, be they large National Banks, regional cooperative banks, or Non-Banking Financial Companies (NBFCs) have a great deal of continuing value to add. However, the entire approach would need to markedly change from one in which all the players become clones of each other because they are all required to adhere to one centrally designed blue-print, to one that would permit each one to focus on its own differentiated capabilities and accomplish the national goals of financial inclusion by partnering with others that bring complementary capabilities to bear on the problem. In such a structure systemic stability would be preserved by ensuring that each participant is required to transparently reveal the risks that it is exposed to and to have an adequate level of capability and financial capital to assume those risks. The best possible outcomes on outreach, pricing, and services would

be achieved by ensuring that each participant is treated in a neutral manner so that it is not operating in an environment that is either biased in its favour or against it and that it survives or fails based entirely on its inherent strengths and the efficacy of its strategies. The regulator, while paying close attention to the achievement of financial inclusion goals of the system as a whole would allow each participant to exercise significant autonomy to chart its own path. It would also exercise constant vigilance in order to ensure that key design principles such as systemic Stability, complete Transparency of balance sheets, Neutrality of regulatory stance towards different types of participants, and the need to protect customers, are not violated.

Such an environment however, also needs the development of mechanisms for an active transfer of assets, liabilities, and risks between financial markets participants and a movement away from a structure where each player is required to raise its own liquidity; originate all of its own risks and assets; and then necessarily hold them to maturity. The presence of such mechanisms, not merely good governance, has for example ensured the continued success of the Sparkassens (the German version of Regional Banks) and their absence was directly responsible for the demise of the Development Finance Institutions (DFIs) in India (the Indian version of Wholesale Banks). Fortunately India already has most of the enablers necessary for a vibrant risk-transfer mechanism to come about but a number of concrete steps would need to be taken to ensure the development of such mechanisms in India. It would for example require central institutions such as National Bank for Agriculture and Rural Development (NABARD), Small Industries Development Bank of India (SIDBI), and National Housing Bank (NHB) to considerably strengthen their own risk assessment capabilities and instead of using their balance sheets to absorb these risks, become actively involved in helping to create markets for risk and liquidity transfers between market participants. It would also need the development and strengthening of several pieces of complementary infrastructure such as credit bureaus, weather stations, commodity markets, and warehouses.

The last few years have seen dramatic improvements on several fronts linked to supply-side infrastructure. The Unique Identification (UID) project has already covered 50 crore Indians and expects to complete the task of issuing a UID to the rest of the country by 2016. By linking UID numbers to Know Your Customer (KYC) norms, RBI has already paved the way for universalising bank accounts, thus removing one of the most important barriers to financial access. Through the Bharat Broadband Network, the Government is laying out the National Optical Fibre Network to all the Gram Panchayats in the country and expects to complete this task by 2014. Against only 3 crore fixed line subscribers, telecommunications companies now have over 87 crore⁴ mobile phone subscribers of whom over 35 crore are based in rural areas and, while the urban number has stabilised, the rural number continues to grow at an annualised rate of 10 per cent. If these opportunities are used well, paradoxically, it is even possible that poor historic progress on financial inclusion may actually present India with an opportunity to leap-frog over the rest of the world and may prove to be an advantage just as the absence of copper-wire allowed India to move directly to mobile telephony. The Committee explores a number of ways that this can be done, benefitting from the early experiences of developing countries such as Kenya, Brazil, and South Africa as well as that of the European Union which has transformed its payment landscape in recent years.

India already has all the elements for success in place - a wide range of institutional types, well-developed financial markets, a good regulatory framework, and large scale and high quality authentication and transaction platforms. The Committee is therefore optimistic that with a concerted effort it should be possible to ensure the achievement of several key goals such as universal access to a bank account; a ubiquitous payments infrastructure; and a base level access to all the other financial products such as credit and insurance within a relatively short period of time.

Chapter 1.2 Executive Summary and List of Recommendations

Section 1 introduces the Report.

Section 2 provides the vision statements, current data on access, design principles and a theoretical framework to examine various banking system designs.

The six vision statements are:

1. Universal Electronic Bank Account (UEBA): By January 1, 2016 each Indian resident, above the age of eighteen years, would have an individual, full-service, safe, and secure electronic bank account.
2. Ubiquitous Access to Payment Services and Deposit Products at Reasonable Charges: By January 1, 2016, the number and distribution of electronic payment access points would be such that every single resident would be within a fifteen minute walking distance from such a point anywhere in the country. Each such point would allow residents to deposit and withdraw cash to and from their bank accounts and transfer balances from one bank account to another, in a secure environment, for both very small and very large amounts, and pay “reasonable” charges for all of these services. At least one of the deposit products accessible to every resident through the payment access points would offer a positive real rate of return over the consumer price index.
3. Sufficient Access to Affordable Formal Credit: By January 1, 2016, each low-income household and small-business would have “convenient” access to formally regulated lenders that have the ability to assess and meet their credit needs, and offer them a full-range of “suitable” credit products, at an “affordable” price. By that date, each District and every “significant” sector (and sub-sector) of the economy would have a Credit to GDP ratio of at least 10 per cent. This ratio would increase every year by 10 per cent with the goal that it reaches 50 per cent by January 1, 2020.
4. Universal Access to a Range of Deposit and Investment Products at Reasonable Charges: By January 1, 2016, each low-income household and small-business would have “convenient” access to providers that have the ability to offer them “suitable” investment and deposit products, and pay “reasonable” charges for their services. By that date, each District would have a Total Deposits and Investments to GDP ratio of at least 15 per cent. This ratio would increase every year by 12.5 per cent with the goal that it reaches 65 per cent by January 1, 2020.
5. Universal Access to a Range of Insurance and Risk Management Products at Reasonable Charges: By January 1, 2016, each low-income household and small business would have “convenient” access to providers that have the ability to offer them “suitable” insurance and risk management products which, at a minimum allow them to manage risks related to: (a) commodity price movements; (b) longevity, disability, and death of human beings; (c) death of livestock; (d) rainfall; and (e) damage to property, and pay “reasonable” charges for their services. By that date, each District would have a Total Term Life Insurance Sum Assured to GDP ratio of at least 30 per cent. This ratio would increase every year by 12.5 per cent with the goal that it reaches 80 per cent by January 1, 2020.
6. Right to Suitability: Each low-income household and small-business would have a legally protected right to be offered only “suitable” financial services. While the customer will be required to give “informed consent” she will have the right to seek

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legal redress if she feels that due process to establish Suitability was not followed or that there was gross negligence.

The four design principles that would inform financial inclusion and deepening strategies discussed in the Report are: Systemic Stability, Balance-sheet Transparency, Institutional Neutrality, and Responsibility towards the Customer.

The framework to understand various types of banking system designs uses the functional building blocks of payments, deposits and credit and constructs two broad designs. These are the Horizontally Differentiated Banking System (HDBS) and the Vertically Differentiated Banking System (VDBS). Across these, ten existing and potential banking designs were identified. These are: National Bank with Branches, National Bank with Agents, Regional Bank, National Consumer Bank, National Wholesale Bank, National Infrastructure Bank, Payments Network Operator, Payments Bank, Wholesale Consumer Bank, and Wholesale Investment Bank. Subsequent chapters build on this framework for detailed discussions.

Section 3 examines issues relevant to the goal of a ubiquitous payments network and universal access to savings. The following recommendations are made in this section:

- 3.1 Every resident should be issued a Universal Electronic Bank Account (UEBA) automatically at the time of receiving their Aadhaar number by a high quality, national, full-service bank. An instruction to open the bank account should be initiated by UIDAI upon the issuance of an Aadhaar number to an individual over the age of 18. The bank would need to be designated by the customer from amongst the list of banks that have indicated to UIDAI that they would be willing to open such an account with the understanding that it would attract no account opening fee but that the bank would be free to charge for all transactions, including balance enquiry with the understanding that such transactions' charges would provide the host banks with adequate compensation. The Bank would be required to send the customer a letter communicating details of the account thus opened. The Committee recommends that the RBI issue a circular indicating that no bank can refuse to open an account for a customer who has adequate KYC which specifically includes Aadhaar. [Identical to Recommendation 5.1]
- 3.2 RBI should require a strong Proof of Identity (POI) for each and every customer and a documentary proof of one national address but waive the requirement of documentary proof for the current address, for the purpose of opening a full-service bank account. It should instead enjoin upon banks to carry out careful tracking of usage and transactions patterns to ascertain the risk levels of the customer and take necessary action based upon risk-based surveillance processes developed internally by each bank. [Identical to Recommendation 5.2]
- 3.3 Under the existing rural branching mandate, a qualifying branch may be understood to have specified features regarding minimum services available, minimum hours of operation, nature of employment of staff, minimum infrastructure configuration, nature of ownership of infrastructure and premises, and minimum customer protection. In addition, this mandate is to be reviewed regularly and be phased out once the goals specified in the vision statement for payments services and deposit products have been achieved.
- 3.4 Aadhaar is the key piece of infrastructure to enable a customer to be identified and authenticated so that repudiation and fraud risks are minimised and therefore should become the universal basis for authentication. However, with slow enrolment in some areas and low penetration of biometric devices and internet

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network connectivity in many areas, intermediate authentication methods such as PIN numbers and OTP could be used. State Governments need to coordinate more closely with UIDAI, NPR, and BBNL to ensure rapid coverage of their states for both Aadhaar and broadband.

- 3.5 Restore the permission of ND-NBFCs to act as BCs of a bank. Concerns around commingling can be effectively handled through technology-based solutions such that all settlements happen on an intra-day basis. In addition, eliminate the distance criteria between the BC and the nearest branch of the sponsor bank. Allow Banks to decide operational criteria.
- 3.6 The Taskforce on Aadhaar Enabled Unified Payment Infrastructure recommended that State Governments pay a fee of 3.14 per cent (subject to a cap of Rs. 15.71 per transaction) for Direct Benefit Transfer (DBT) payments originating from governments. RBI should enjoin upon State Governments to implement the same.
- 3.7 In order to address contagion risk concerns, instead of requiring White Label ATMs to access the settlement systems in a “nested” manner through a sponsor bank, provide them direct access to the settlement system subject to certain prudential conditions, to mitigate operation risk.
- 3.8 In order to ensure that the BC infrastructure that is established is utilised in an optimal manner and shared by multiple banks, which may each have account holders in a specific geography, allow high-quality White Label BCs to emerge with direct access to settlement systems subject to certain prudential conditions. This would be similar to Recommendation 3.7 vis-à-vis mitigating operations risk in the White Label ATM network.
- 3.9 Given the difficulties being faced by PPIs and the underlying prudential concerns associated with this model, the existing and new PPI applicants should instead be required to apply for a Payments Bank licence or become Business Correspondents. No additional PPI licences should be granted.
- 3.10 Under the Banking Regulation Act, a set of banks may be licensed which may be referred to as Payments Banks with the following characteristics:
 - a. Given that their primary role is to provide payment services and deposit products to small businesses and low-income households, they will be restricted to holding a maximum balance of Rs. 50,000 per customer.
 - b. They will be required to meet the CRR requirements applicable to all the Scheduled Commercial Banks.
 - c. They will be required to deposit the balance proceeds in approved SLR securities with a duration of no more than three months and will not be permitted to assume any kind of credit risks.
 - d. In view of the fact that they will therefore have a near-zero risk of default, the minimum entry capital requirement for them will be Rs. 50 crore compared to the Rs. 500 crore required for full-service SCBs.
 - e. They will be required to comply with all other RBI guidelines relevant for SCBs and will be granted all the other rights and privileges that come with that licence.
 - f. Existing SCBs should be permitted to create a Payments Bank as a subsidiary.

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- 3.11 RBI to work with TRAI to ensure that all mobile phone companies, including those with Payments Bank subsidiaries, be mandated to provide USSD connectivity as per recent TRAI regulations with the price cap of Rs. 1.5 per 5 interactive sessions and to categorise all SMSs related to banking and financial transactions as Priority SMS services with reasonable rates and to be made available to the banking system.

Section 4 examines issues relevant to the goal of sufficient access to affordable, formal credit. The following recommendations are made in this section:

- 4.1 In order to encourage banks to actively manage their exposures to various sectors, including priority sectors, a number of steps would have to be taken:
- a. Banks must be required to disclose their concentration levels to each segment in their financial statements.
 - b. Credit facilities documented as bonds or Pass-Through Certificates (PTC), whether originated directly or purchased in the secondary markets should be permitted to be held in the “banking book” of a bank based on declared intent and not merely based on source or legal documentation. [Identical to Recommendations 4.10 and 4.30]
 - c. RBI must represent to the MoF to restore the tax-free status of securitisation SPVs as pass-through vehicles for tax treatment pointing out the role it would play in ensuring efficient risk transmission. [Identical to Recommendations 4.11 and 4.38]
 - d. Banks must be permitted to purchase portfolio level protection against all forms of rainfall and commodity price risks, including through the use of financial futures and options bought either within India or globally.
- 4.2 Universal reporting to credit bureaus should be mandated for all loans, both individual and SME, but in particular SHG loans, Kisan Credit Card, and General Credit Card. [Identical to Recommendation 4.43]
- 4.3 In view of the fact that banks may choose to focus their priority sector strategies on different customer segments and asset classes, it is recommended that the regulator provide specific guidance on differential provisioning norms at the level of each asset class. A bank’s overall NPA Coverage Ratio would therefore be a function of its overall portfolio asset mix. On standard assets, provisioning levels as well as asset classification guidelines specified by RBI would need to reflect the underlying level of riskiness of each asset class (combination of customer segment, product design, and collateral) and not be uniform across all the asset classes. Additionally, different customer-asset combinations behave very differently from each other and it is recommended that the regulator mandate NPA recognition rules at the level of each asset-class and require that all banks conform to these mandates. [Identical to Recommendation 4.21 for NBFCs]
- 4.4 All banks should be required to publicly disclose the results of their stress tests both at an overall balance sheet level as well as at a segmental level at least annually. [Identical to Recommendation 4.22 for NBFCs]
- 4.5 From the perspective of Stability that entails sustainable pricing, banks must be required to freely price farm loans based on their risk models and any subventions and waivers deemed necessary by the government should be transferred directly to the farmers and not through interest subsidies or loan waivers. The permission to

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- price farm loans below the base rate should be withdrawn. [Also see Recommendation 4.34]
- 4.6 Banks are already permitted to set up specialised subsidiaries upon getting specific approvals from the RBI. However, no approvals have been granted; potentially due to concerns around circumvention of branch licensing guidelines. In light of the recent relaxation of branch licensing guidelines and the capability carry to out consolidated supervision, the requirement of prior approvals may be removed for the purpose of creating dedicated subsidiaries for financial inclusion.
 - 4.7 The decision on the manner in which risk sharing and credit approval arrangements need to be structured between banks and their agents can be left to the judgment of banks. Outsourcing guidelines should be amended to permit this.
 - 4.8 There is a need to develop a robust legal and regulatory framework around customer data generated in various transactions (credit and payments, digital and off-line), with the objective of customer ownership of their own transactions data and its use, among others, for signalling credit-worthiness. RBI should constitute a Working Group comprising TRAI, CERC, and Credit Information Companies to develop a framework for sharing of data between telecom companies, electrical utilities, and credit bureaus. This framework should be in keeping with the FSLRC's draft Indian Financial Code which recommends the creation of regulations on the collection, storage, modification and protection of personal information by financial services providers; and establishment of mechanisms to ensure that consumers have access to, and are given an effective opportunity to seek modifications to, their personal information. [Identical to Recommendation 4.42]
 - 4.9 The stipulation that the all-inclusive interest charged to the ultimate borrower by the originating entity should not exceed the Base Rate of the purchasing bank plus 8 per cent per annum should be removed. [Identical to Recommendation 4.37]
 - 4.10 Credit facilities documented as bonds or Pass-Through Certificates (PTC), whether originated directly or purchased in the secondary markets should be permitted to be held in the "banking book" of a bank based on declared intent and not merely based on source or legal documentation. [Identical to Recommendations 4.1(b) and 4.30]
 - 4.11 RBI should also represent to the Government of India to restore the tax-free status of securitisation SPVs as pass-through vehicles for tax treatment so as to create pathways for Wholesale Banks to provide liquidity to other Banks and Financial Institutions directly originating assets in priority sectors. [Identical to Recommendations 4.1(c) and 4.38]
 - 4.12 Reorient the focus of NABARD, CGTMSE, SIDBI, and NHB to be market makers and providers of risk-based credit enhancements rather than providers of direct finance, automatic refinance, or automatic credit guarantees for National Banks.
 - 4.13 Regional Banks continue to have a strong appeal for inclusion but low demonstrated stability in the Indian context. Robust solutions are required vis-à-vis regulation, supervision, risk management, and governance of the existing Regional Banks before any new ones are created.
 - 4.14 In a manner similar to National Banks, for Regional Banks as well, refinance by NABARD or credit guarantee support by CGTMSE should be designed as risk-based guarantees and not available automatically. [Similar to Recommendation 4.12]

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- 4.15 While the Risk Based Supervision process has been designed for the larger and more complex institutions, a similar effort could be conceived of for the Regional Banks allowing supervisors to direct scarce on-site supervision resources to higher-risk institutions. The help of commercial ratings agencies could also be taken to formally rate these Regional Banks and provide the ratings to the depositors on a regular basis - thus including them more directly into the risk-containment process.
- 4.16 Since DICGC offers deposit insurance to these banks, the Agreement between DICGC and the bank provides an additional opportunity to both ensure that the bank is run well on an on-going basis and resolved quickly in the event that it turns insolvent. Such an Agreement would provide for risk-based pricing of deposit insurance; the right to carry out both on-site and off-site inspections; and to take possession of the bank in the event that it goes into liquidation.
- 4.17 A State Finance Regulatory Commission (SFRC) could be created into which all the existing State Government-level regulators could be merged and functions like the regulation of NGO-MFIs and local Money Services Business could be added on. In some states, the SFRC could be created by upgrading existing Institutional Finance Cells. There is also value in bringing the regulatory function close to the enforcement function under the Economic Offences Wing (EOW), so as to ensure that they are working closely together. The RBI must be closely involved over a longer time frame in training the commissioners and licensing and accrediting the Commission itself. The local regional directors of the RBI could, for example, be ex-officio Chairs of the Commission's Board of Governors while the Commissioner could be a senior State level appointee drawn from the local Banking community. The District Magistrates would also play an important role in their respective districts.

Non-Banking Finance Companies

- 4.18 The Committee recognises that a partial convergence of NBFC and Bank regulations may be desirable. It recommends the following:

Regulations	Banks	NBFC	Recommendation
Minimum Capital Adequacy	9%	15%	No case for convergence.
Cash Reserve Ratio	4%	N.A	CRR applicable on bank deposits, shift to exclude time deposits recommended.
Statutory Liquidity Ratio	23%	15% for D-NBFCs on their deposits	Complete elimination recommended.
Duration to qualify for NPA	Non-repayment for 90 days	Non-repayment for 180 days	Case for convergence. Risk-based approaches to be followed for both types of institutions.
Definition for sub-standard asset	NPA for a period not exceeding 12 months	NPA for a period not exceeding 18 months	Case for convergence. Risk-based approaches to be followed for both types of institutions.

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Definition for doubtful assets	Remaining sub-standard asset for a period of 12 months	Remaining sub-standard asset for a period exceeding 18 months	Case for convergence. Risk-based approaches to be followed for both types of institutions.
Quantum of provisioning for Standard Assets	Direct advances to agricultural and Small and Micro Enterprises (SMEs) sectors at 0.25%	0.25%	Case for convergence. Risk-based approaches to be followed for both types of institutions. For agricultural advances, this would imply at least 0.40%.
Priority Sector	40% of ANBC	NIL	No case for convergence.
Deposit Insurance	YES	NO for D-NBFCs	No case for convergence.
SARFAESI eligibility	YES	NO	Case for convergence subject to strong customer protection guidelines.
Lender of Last Resort	YES	NO	No case for convergence.
Risk Weights	Differential	100% for all assets	No case for convergence.
Entry Capital Requirement	Rs. 500 crore	Rs. 2-5 crore	No case for convergence.

- 4.19 Multiple NBFC definitions should be consolidated into two categories: a distinct category for Core Investment Companies (CIC) and another category for all other NBFCs. Benefits that were previously available to specific NBFC types, such as tax benefits, bank limits, and priority sector benefits should continue to be available even after consolidation, on a pro-rata asset basis.
- 4.20 The Committee recommends addressing wholesale funding constraints faced by NBFCs in a systematic manner. The following are the specific recommendations in this regard:
- A clear framework to be developed by RBI and SEBI for Qualified Institutional Buyers and Accredited Individual Investors who may participate in debt market issuances of NBFCs.
 - Benefit of 'shelf prospectus' should be available for one year to all issuers including NBFCs.
 - Permit ECB in Rupees for all institutions.
 - For ECB not in Rupees, eligibility should be linked to size and capacity to absorb foreign exchange risk rather than specific NBFC categories.

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- e. The nature of activity, rather than institution type, must be made the criterion for availing refinance from NABARD, NHB, SIDBI and credit guarantee facilities.
 - f. Current capitalisation slabs on foreign equity funding should be relaxed and money laundering concerns should be mitigated by instituting additional reporting requirements on Banks/Authorised Dealers (AD).
- 4.21 In a manner similar to banks, different customer-asset combinations behave very differently from each other and it is recommended that the regulator specify NPA recognition and provisioning rules, including for standard assets, at the level of each asset-class and require that all NBFCs conform to these mandates. [Identical to Recommendation 4.3 for National Banks]
- 4.22 Require all NBFCs to have better on-going risk measures. These include disclosure of their stress test results both at an overall balance sheet level as well as at a segmental level at least annually. All NBFCs must adopt core banking systems so that this can enable better off-site supervision. [Identical to Recommendation 4.4 for National Banks]
- 4.23 Enable better benchmarking by requiring all NBFC-MFIs to disclose their operating costs (direct and indirect) of a mature branch to the RBI or MFIN once it becomes an SRO.
- 4.24 The regulatory focus must be on total indebtedness of the small borrower in relation to their debt-servicing capacity and not just indebtedness per se or merely from NBFC-MFIs. Keeping this in mind, the total borrowing limit for the small borrower segment may be increased immediately to Rs. 100,000 across all lenders, including bank-lending to this segment. In order to implement this, all lenders to this segment will need to be mandated to report to the credit bureau as has been the case with NBFC-MFIs. If total indebtedness is being tracked adequately, the stipulation of a maximum number of lenders appears redundant and can be gradually removed as this would also help in creating intensified price competition.
- 4.25 All policy biases against consumption finance need to be removed. An example of this is restricting the proportion of consumption finance that is permitted for NBFC-MFIs.
- 4.26 In order to enable the gradual transition of eligible and interested NBFCs to Wholesale Consumer Banks or Wholesale Investment Banks or National Banks, the Committee recommends a re-examination of PSL definitions [also see Recommendation 4.41], creating an active market for PSL assets, assessment of the relevance of SLR in light of capital adequacy norms, and application of CRR on time liabilities.
- 4.27 Under the Banking Regulation Act, a set of banks may be licensed which may be referred to as Wholesale Banks with the following characteristics:
- a. Given that their primary role is lending and not the provision of retail deposit services, they will only be permitted to accept deposits larger than Rs. 5 crore.
 - b. Since they could expect to borrow large amounts from other banks, net liabilities from the banking system will be permitted to be deducted from their NDTL computation for the purposes of ascertaining their SLR obligations on par with the treatment currently given for CRR.

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- c. Since other banks are expected to lend large amounts to Wholesale Banks, those other banks will be permitted to deduct their net assets to the banking system from the computation of their ANBC (the amounts on which PSL requirements are to be applied).
- d. In view of the fact that they will not take retail deposits, the minimum entry capital requirement for them will be Rs. 50 crore compared to the Rs. 500 crore required for full-service SCBs.
- e. If the institution has fewer than twenty branches through which it operates, it will not be required to meet the 25 per cent branching requirement. Institutions with twenty or fewer branches could be referred to as Wholesale Investment Banks while those with a larger branch network could be referred to as Wholesale Consumer Banks.
- f. Wholesale Consumer Banks should be permitted to act as BCs for other full service Banks.

They will be required to comply with all other RBI guidelines relevant for SCBs and will be granted all the other rights and privileges that come with that licence.

Priority Sector Lending

- 4.28 All loans given to landless labourers and small and marginal farmers should be counted as a part of Direct Agriculture and not merely the wages component of a loan given to a farmer for financing her agricultural production.
- 4.29 Investment by banks in bonds of institutions must qualify for PSL where wholesale lending to the same institutions already qualifies under PSL.
- 4.30 Credit facilities documented as bonds or Pass-Through Certificates (PTC), whether originated directly or purchased in the secondary markets should be permitted to be held in the “banking book” of a bank based on declared intent and not merely based on source or legal documentation. [Identical to Recommendations 4.1(b) and 4.10]
- 4.31 Investment by banks in the form of non-fund based limits (such as guarantees) should qualify for PSL to the extent of the credit equivalent amount of the off-balance sheet facility where loans to these categories qualify for PSL. ANBC should also be adjusted to include such PSL-linked, non-fund based limits.
- 4.32 Equity investments by banks in complementary infrastructure within the purview of PSL guidelines, such as rural warehouses, market yards, godowns, silos, and NBFCs in low financial depth districts. These equity investments should be eligible for contribution to the overall priority sector lending targets. They should be permitted where debt already qualifies for PSL but with a multiplier of four, to reflect the higher risk and the illiquid character of these investments. The benefit must accrue as long as the equity investment is held by the Bank. This list of eligible equity investments may be varied from time-to-time. [Identical to Recommendation 4.44]
- 4.33 PSL targets should be applicable on the last reporting Friday during the last month of each quarter in exactly the same manner as it is currently applicable in the month of March, so as to ensure more timely and continuous credit flow into

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priority sectors. In order to ensure administrative ease, requirements such as investment into RIDF can continue to be levied on an annual basis and computed on the basis of the average of the quarterly requirements.

- 4.34 If the government does desire to provide relief in any form to the small farmer, it would be best carried out as a direct benefit transfer (DBT) to the bank account of the farmer and not through the mechanism of either interest subvention or debt waiver. This would ensure that the banking system is able to price loans in a sustainable manner and also protect credit discipline amongst its borrowers. Adding a universal requirement to report all defaults to credit bureaus would ensure that the borrower also builds a strong interest in protecting his credit history, even if he is a recipient of DBTs. [Similar to Recommendations 4.2 and 4.43]
- 4.35 In order to guard against large scale defaults resulting from catastrophic events, banks should be permitted to work closely with insurance companies to purchase bank-wide portfolio level insurance against events such as large scale rainfall failure on a regional or national basis, instead of having an expectation that relief would be provided from national or state budgets.
- 4.36 For the provision of food-credit, Food Corporation of India (FCI) and State Governments should be required to originate warehouse receipts and raise low-cost funds in the market against these receipts instead of being reliant only on bank credit. [Identical to Recommendation 4.46]
- 4.37 The stipulation that the all-inclusive interest charged to the ultimate borrower by the originating entity should not exceed the Base Rate of the purchasing bank plus 8 per cent per annum should be removed. [Identical to Recommendation 4.9]
- 4.38 The RBI should represent to the Government of India to restore the tax-free status of securitisation SPVs as pass-through vehicles for tax treatment so as to create pathways for Wholesale Banks to provide liquidity to other Banks and Financial Institutions directly originating assets in priority sectors. [Identical to Recommendation 4.11]
- 4.39 While a market that trades PSL assets will be of critical importance, regulation should additionally enable the use of risk-free PSL Certificates as a means to achieving PSL compliance amongst banks that wish to do so.
- 4.40 In order to enable greater regional and sectoral specialisation among Banks, the Committee recommends that the RBI revise the PSL targets and require banks to meet an Adjusted PSL target of 50 per cent against the current requirement of 40 per cent. Districts and sectors are weighted based on the difficulty in lending to them, and a Bank lending to a difficult sector in a difficult to reach district can benefit from a multiplier value based on the specific sector and district. Every sector-district combination has a weight associated with it and the Bank will have to reach an adjusted PSL value of 50% taking these weightages into account.
- 4.41 The Committee recommends that RBI seriously examine moving to a new framework in which two parameters: District level credit depth, and sector and sub-sector level credit depth be used to determine the sector, sub-sector, and regional weights which are published every three years. Using these weights banks would be required to reach an Adjusted PSL target of 150 per cent of ANBC.

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- 4.42 There is a need to develop a robust legal and regulatory framework around customer data generated in various transactions (payments and credit, digital and off-line), with the objective of customer ownership of their own transactions data and its use, among others, for signalling credit-worthiness. RBI should constitute a Working Group comprising TRAI, CERC, and Credit Information Companies to develop a framework for sharing of data between telecom companies, electrical utilities, and credit bureaus. This framework should be in keeping with the FSLRC's draft Indian Financial Code which recommends the creation of regulations on the collection, storage, modification and protection of personal information by financial services providers; and establishment of mechanisms to ensure that consumers have access to, and are given an effective opportunity to seek modifications to, their personal information. [Identical to Recommendation 4.8]
- 4.43 Universal reporting to credit bureaus should be mandated for all loans, both individual and SME, but in particular SHG loans, Kisan Credit Card, and General Credit Card. [Identical to Recommendation 4.2]
- 4.44 Equity investments by banks in complementary infrastructure within the purview of PSL guidelines, such as rural warehouses, market yards, godowns, silos, and NBFCs in low financial depth districts. These equity investments should be eligible for contribution to the overall priority sector lending targets. They should be permitted where debt already qualifies for PSL but with a multiplier of four, to reflect the higher risk and the illiquid character of these investments. The benefit must accrue as long as the equity investment is held by the Bank. This list of eligible equity investments may be varied from time-to-time. [Identical to Recommendation 4.32]
- 4.45 For the provision of food-credit, Food Corporation of India (FCI) and State Governments should be required to originate warehouse receipts and raise low-cost funds in the market against these receipts instead of being reliant only on bank credit. [Identical to Recommendation 4.36]
- 4.46 RBI needs to write to each of the State Governments expressing its support for the recommendations of both the PLATINUM Group and the Rajan Committee (2009) and urge them to implement those ideas by pointing out the potential benefits to the expansion of banking and financial activity in their respective states.
- 4.47 Banks and Financial Institutions should be required to verify the land records of their clients at the time of making loans and in those states where this is possible, to insist that transfers take place before a loan can be renewed for a second time.
- 4.48 Equity investments by banks in private companies engaged in the task of installing and operating weather stations, or in creating markets for second-hand assets should be eligible for PSL treatment. These investments should also get a multiplier of four, to reflect the higher risk and the illiquid character of these investments. [Also see Recommendation 4.44]

Section 5 examines issues relevant to the goal of universal access to investment and risk management products. The following recommendations are made in this section:

- 5.1 Every resident should be issued a Universal Electronic Bank Account (UEBA) automatically at the time of receiving their Aadhaar number by a high quality, national, full-service bank. An instruction to open the bank account should be initiated by UIDAI upon the issuance of an Aadhaar number to an individual over the age of 18. The bank would need to be designated by the customer from

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amongst the list of banks that have indicated to UIDAI that they would be willing to open such an account with the understanding that it would attract no account opening fee but that the bank would be free to charge for all transactions, including balance enquiry with the understanding that such transactions' charges would provide the host banks with adequate compensation. The Bank would be required to send the customer a letter communicating details of the account thus opened. The Committee recommends that the RBI issue a circular indicating that no bank can refuse to open an account for a customer who has adequate KYC which specifically includes Aadhaar. [Identical to Recommendation 3.1]

- 5.2 RBI should require a strong Proof of Identity (POI) for each and every customer and a documentary proof of one national address but waive the requirement of documentary proof for the current address, for the purpose of opening a full-service bank account. It should instead enjoin upon banks to carry out careful tracking of usage and transactions patterns to ascertain the risk levels of the customer and take necessary action based upon risk-based surveillance processes developed internally by each bank. RBI must take the lead in developing this as a convergent approach to KYC across all regulators for their respective products. [Identical to Recommendation 3.2]
- 5.3 In keeping with the goal of creating integrated providers for financial services delivery, RBI should publish a guideline towards the appointment of entities regulated by it, including National Banks, Regional Banks, or NBFCs, as agents. This guideline should set out the following eligibility criteria for agents:
- a. The Agent must not have been subjected to any disciplinary proceedings under the rules, regulations and bye-laws of a stock exchange, SEBI, RBI, IRDA, FMC, or any other regulator with respect to the business involving either organisation, partners, directors, or employees;
 - b. All Agents must be required to commit some capital against operating risks and customer protection risks for the business that they are engaged in. While the minimum amount may be structured as a Rs. 5 lakh security deposit from the agent, the amount may vary depending on the number of customers and volume of transactions;
 - c. There must be suitable limits on cash holding as also limits on individual customer payments and receipts;
 - d. Transactions should be accounted for and reflected in the Principal's books by end of day or next working day. Where the transfer of money from agent to Principal happens on the next working day, there should also be a stipulation that the agent should transfer the day's collections to a non-operative pooled collections account on the same day itself. To ensure this, the Agent has to maintain the account with a bank which has online fund transfer facility with standing instructions to transfer the funds to the designated pool account at the end of each day. This ensures that the clients' funds are secure even if the agent goes bankrupt;
 - e. To counter the risk of repudiation of transactions, RBI should insist that every transaction be initiated by the customer. Biometric authentication can help achieve this. The log of each transaction must be maintained at the agent level. Each transaction must carry a transaction number and customer must receive the transaction receipt at the time of the transaction;

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- f. The Agent must have trained staff that can communicate with the clients about the details of the products and take full responsibility for communicating with the clients. The Agent must have a comprehensive human resource policy, including an incentive plan for staff that not only encourages them to achieve the business objectives but more importantly prevents mis-selling;
- g. The Agent should adopt the Suitability principles of the RBI as well as those of the Principal's regulator. The Agent should also have a mechanism to address queries and grievance of the customer about the services rendered by it and publicise it widely through electronic and print media. All customer grievances should be addressed within a defined time frame.

RBI could then request each regulator to follow this integrated approach to Agent appointment for its respective products.

Section 6 examines issues in customer protection. The following recommendations are made in this section:

6.1 The RBI should issue regulations on Suitability, applicable specifically for individuals and small businesses, to all regulated entities within its purview, i.e., banks, NBFCs and payment institutions (under Sections 35 A of the BR Act, Section 45 JA of the RBI Act and Section 38 (2) of the Payments and Settlement System Act, 2007); so that the violation of such regulations would result in penal action for the institution as contemplated under the aforesaid statutes through a variety of measures, including fines, cease-and-desist orders, and modification and cancellation of licences. These regulations should be applicable specifically for individuals and small businesses defined under the term "retail customer" by FSLRC. FSLRC defines a retail customer as "an individual or an eligible enterprise, if the value of the financial product or service does not exceed the limit specified by the regulator in relation to that product or service." Further, an eligible enterprise is defined as "an enterprise that has less than a specified level of net asset value or has less than a specified level of turnover." All financial firms regulated by the RBI would be required to have an internal process to assess Suitability of products prior to advising clients with regard to them. The RBI would provide the following guidance with regard to the internal compliance requirements for firms regarding Suitability:

- a. The Board should approve and oversee the procedures put in place for Suitability on an annual basis and attempt to detect and correct any deviations from procedure.
- b. The firm would have to carry out a limited due diligence of the customer and put in place a process to assess the appropriateness of any product offered to a customer based on the results of the diligence. With respect to credit, for instance, the firm could be obliged to check the borrower's information from credit bureaus to determine the current level of indebtedness, make reasonable attempts to determine the current and projected income of the borrower, financial capacity, objectives and risk tolerance of the borrower, to determine the repayment capacity of the borrower. The lender should seek appropriate documentation to evaluate income and the ability of the borrower to repay given the increasing interest rates of the loan.
- c. The requirement to conduct a due diligence should include the requirement to obtain relevant information about the customer's personal circumstances and

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give advice or recommendations based on due consideration of the relevant personal circumstances. If the financial firm finds that the information is inaccurate or incomplete, the customer must be warned.

- d. Any product may be offered to customers upon establishing its Suitability, except “globally unsuitable” products discussed in (m).
- e. In the event a customer chooses to purchase a product considered unsuitable to the customer, the financial services provider should consider providing written advice to the customer and seeking acknowledgement from the customer. This should however, not be misused by the financial services provider.
- f. The firm’s internal rules relating to compensation packages of staff should not create incentives or otherwise promote inappropriate behaviour. In addition, requirements relating to Suitability and appropriateness should be embedded into compensation packages. Accordingly, the compensation packages and incentive structures should not be based solely on numerical targets but should include qualitative aspects such as offering appropriate products and services to customers and complying with requirements of the internal policy relating to Suitability etc.
- g. The firms should have internal processes to track compliance with Suitability and an internal process to detect and correct any deviations from the policy, including potential disciplinary action and sanctions for the staff for any deviations. This could include a customer audit committee which reports to the board that is responsible for determining compliance with the Suitability process and other customer protection initiatives of the financial services provider.
- h. The firm must have internal grievance redressal mechanisms for non-compliance with process and this should be required to be communicated to customers as well. The customers, should however be made aware that it is the process that is guaranteed and not the outcome. An internal grievance redressal process would not, however, preclude a customer from proceeding against the firm in any other forum.
- i. The internal policy and procedure of the board should be communicated across the organisation and appropriate training programs should be put in place for the staff- both the client facing and the control staff. Such communication should articulate inter alia (a) the business benefits of having Suitability requirements, (b) the firm’s commitment to a zero-tolerance approach to follow the process, and (c) the consequences for the breach.
- j. The firms should have a paper trail and record keeping procedures to demonstrate compliance with its internal procedures which should be available for inspection by the RBI.
- k. Additionally, if gross negligence, fraud or wilful misconduct can be established on the part of the financial services provider, the adherence to the process will not be sufficient and the firm would be liable to be penalised regardless of the process.
- l. The regulations should additionally protect the firm from penal action in a situation where the customer may have deliberately misled or misrepresented to

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the firm, or if despite reasonable attempts the firm was unable to assess Suitability.

- m. In addition, specific products may be deemed as “globally unsuitable” and would not be eligible to be offered to households or businesses below a certain income threshold or net worth or individuals above a certain age. Such products should be prescribed by the RBI and could be amended from time to time based on feedback from customers and financial services providers.
 - n. There is a specific set of de minimis products, the offer of which is to be subjected to a limited application of the Suitability requirements - basic bank accounts, the universal electronic bank account recommended in the Report and credit below Rs. 5000 subject to ascertaining the income and repayment capacity of the borrower. However, the Suitability process should definitely apply if an insurance, investment or derivative product is being offered to a customer, whether on a standalone basis or bundled along with credit.
- 6.2 The Committee recommends that a unified Financial Redress Agency (FRA) be created by the Ministry of Finance as a unified agency for customer grievance redress across all financial products and services which will in turn coordinate with the respective regulator. The FRA should have a presence in every district in the country and customers should be able to register complaints over the phone, using text messages, internet, and with the financial services provider directly, who should then be required to forward the complaint to the redressal agency. The customers should have their complaints resolved within 30 days of registration of the complaint with the FRA.
- 6.3 The RBI should create a system using which any customer can effortlessly check whether a financial firm is registered with or regulated by RBI. Customers should be able to access this service by phone, through text-messages or on the internet. Once the FRA comes into being, this system should be subsumed under the FRA and be available for firms registered under all regulators.

Section 7 examines issues relevant to measurement and monitoring of comprehensive access to financial services. The following recommendations are made in this section:

- 7.1 RBI should mandate all formal providers of financial services to households and small businesses to report data on a quarterly basis at the level of each one of their access points such as branches, outlets, BCs, ATMs, and POS terminals, as applicable. This includes data on geo-spatial location, access, services offered, quantum of transactions, depth of penetration, and application of Suitability process. This data should be verified periodically by the RBI using standardised quality control and follow up visits conducted by trained enumeration field teams within randomly selected sub samples.
- 7.2 In order to measure access, usage, and affordability of financial services, RBI should mandate two surveys of consumers to gain a more accurate picture of progress towards achieving the desired outcomes outlined by the vision statements. The Financial Access & Usage Survey should be a nationally representative survey of consumers undertaken annually to collect data on access and usage of financial services and can be incorporated as additional modules in nationally representative surveys that are being undertaken for other purposes by institutions such as the National Sample Survey Organisation (NSSO) and the Centre for Monitoring Indian Economy (CMIE). The Cost & Return Survey should be a nationally representative

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survey of consumers undertaken triennially to collect data on costs of credit, insurance and investment products, as well as returns on deposits and investment products. For this survey, RBI should commission institutions which have appropriate capacity and expertise in conducting such nationally representative surveys with the required academic rigour.

Section 2
Vision Statements and Design Principles

Chapter 2.1 Vision Statements

Providing access to high-quality financial services to all sectors of the economy, including low-income households and small businesses is a key goal of financial sector policy. This is motivated by the fact that; (a) there are well documented links between the extent of financial development and economic growth; (b) the depth and breadth of financial services access in the country could impinge materially on the conduct of monetary policy and the ability of the regulators to balance between inflation, growth, and unemployment concerns; and (c) development of market infrastructure such as payment systems has the ability to improve the efficiency of all firms and of the interaction of government with citizens. Given these inter-relationships, it is entirely legitimate for financial regulators to lay down financial depth and inclusion objectives that they need to facilitate and track, keeping in mind the broader perspective that any actions that they take must not impair the efficiency, effectiveness and stability of the financial system. In the event that there are explicit costs that have a pure redistributive character they must be borne explicitly by the government and not by the financial system. The report of the Rajan Committee (2009) placed “inclusion, growth, and stability as the three objectives of any reform process”⁵ and in the specific context of inclusion had expressed the hope that 90 per cent of Indian households should have a deposit account by the end of 2011⁶.

Given the focus of this Committee’s tasks, the very first term of reference for this Committee is to, “Frame a clear and detailed vision for financial inclusion and financial deepening in India”. The intent of these vision statements is to provide specific benchmarks to regulators to assess the quality of financial inclusion and deepening obtained in India. The Committee has gone about this task keeping in view the following four guidelines:

1. The vision should be sufficiently sharp to serve as a guide to action but also have the flexibility to adapt to the changing needs of the Indian economy.
2. The vision must be focussed on outcomes and be agnostic towards the specific institutional designs that deliver the eventual results. Advances in technology and financial markets are rapidly changing the nature of institutions.
3. The vision must be ambitious given the magnitude of the un-served population in India but it must also take cognizance of the ground-realities while thinking about near-term milestones.
4. The vision must not restrict itself to national aggregates. The provision of an increased quantum of comprehensive financial services in every region, sector and segment of the economy needs to be articulated wherever relevant, while framing the vision.

Vision Statements for Financial Inclusion and Financial Deepening in India

1. **Universal Electronic Bank Account (UEBA):** By January 1, 2016 each Indian resident, above the age of 18 years, would have an individual, full-service⁷, safe⁸, and secure⁹ electronic bank account.

This vision implies that at least 50 crore new, unique accounts are created by January 1, 2016. This is the date by which the Unique ID Authority of India (UIDAI) and the National Population Register (NPR) expect to substantially complete the task of issuing an Aadhaar number to every resident. The Aadhaar number and other forms of identification would have, between them, by then ensured that every citizen has adequate documentation. The Committee believes that in the presence of such documentation, the customer has the right to receive a bank account. The Reserve Bank of India (RBI) should put in place processes designed to ensure that such an account is indeed made available to every Indian resident above the age of 18 years by January 1, 2016.

The Committee recognises that “legal incapacity” imposed upon an individual by virtue of age or mental disability represents an enormous challenge that needs to be addressed. This is however a complex matter which would need to be examined by a group of experts before any specific approach towards addressing this issue can be recommended.

2. **Ubiquitous Access to Payment Services and Deposit Products at Reasonable Charges:** By January 1, 2016, the number and distribution of electronic payment access points would be such that every single resident would be within a fifteen minute walking distance from such a point anywhere in the country. Each such point would allow residents to deposit and withdraw cash to and from their bank accounts and transfer balances from one bank account to another, in a secure environment, for both very small and very large amounts, and pay “reasonable” charges for all of these services. At least one of the deposit products accessible to every resident through the payment access points would offer a positive real rate of return over the consumer price index.

Ensuring that these transaction points are within a fifteen minute walking distance for every resident would require that each square kilometre patch with at least 400 people would have 1 such point. The Committee believes that by January 1, 2016 it should be possible to ensure that 100 per cent of all such clusters, containing 400 people, have 1 transaction point.

3. **Sufficient Access to Affordable Formal Credit:** By January 1, 2016, each low-income household and small-business would have “convenient” access to formally regulated lenders that have the ability to assess and meet their credit needs, and offer them a full-range of “suitable” credit products, at an “affordable” price. By that date, each District and every “significant” sector (and sub-sector) of the economy would have a Credit to GDP ratio of at least 10 per cent. This ratio would increase every year by 10 per cent with the goal that it reaches 50 per cent by January 1, 2020

“Convenient” access to lenders would imply that at the level of every urban and rural centre, with a population of 10,000, there should be at least one formal lender physically present with the ability and willingness to provide a complete range of loan products, including short-term loans, long-term loans, and working-capital loans, both

on a secured and an unsecured basis for small businesses. In the context of a household this would include crop loans, loans to assist with consumption smoothing, housing loans, and education loans.

The Committee recognises the need for affordable credit even while acknowledging that pricing would vary depending on the underlying risk of the specific segment and cost-to-serve considerations. Given the high level of entry barriers and small size of the banking system, the price to the customer often varies significantly from what such considerations would imply. Therefore, strategies would have to be developed to address this concern and ensure that the price differentials between identically rated credit risks are minimal.

A growing body of empirical research produces a remarkably consistent narrative that the services provided by the financial system, especially credit, exert a first-order impact on long-run economic growth and poverty. For instance, an impact study of bank branches in rural India shows that output increased and poverty declined with greater access to finance¹⁰. Studies¹¹ have found that a 10 percentage point increase in the private credit-to-GDP ratio reduces the percentage of population in poverty by 2.5-3 percentage points. Cross-country analysis show that Gini coefficients (income inequality) fall more rapidly in countries with more developed financial intermediaries like banks and insurance companies. It has been estimated that with higher levels of financial development, the income of the poorest 20 per cent of the population grows faster than the national average and that the population under poverty falls rapidly¹². Further, financial development facilitates economic growth based on the rationale that financial development reduces the costs of external finance to firms. Studies have found that in a large sample of countries over the 1980s, industrial sectors that are relatively more in need of external finance develop disproportionately faster in countries with more-developed financial markets¹³.

Data from the World Development Indicators¹⁴ shows that by 2012 high income countries had attained an average Credit to GDP ratio of close to 200 per cent; middle-income countries 100 per cent (with China having crossed 150 per cent); low-income countries 40 per cent; and India as a whole 75 per cent. Based on this data and the arguments regarding the importance of credit deepening presented earlier, the Committee felt that while India as a whole may over time plan to take her credit to GDP ratio to a number above 100 per cent, in order to ensure that the absence of credit does not choke off the growth potential of an entire region of the country or a significant sector of the economy, a minimal credit to GDP ratio of 50 per cent by the year 2020, just above that already reached by even low-income countries, would be a reasonable one to aspire for.

- 4. Universal Access to a Range of Deposit and Investment Products at Reasonable Charges:** By January 1, 2016, each low-income household and small-business would have “convenient” access to providers that have the ability to offer them “suitable” investment and deposit products, and pay “reasonable” charges for their services. By that date, each District would have a Total Deposits and Investments to GDP ratio of at least 15 per cent. This ratio would increase every year by 12.5 per cent with the goal that it reaches 65 per cent by January 1, 2020.

It is envisaged that convenient access to deposit and investment products would be provided by a combination of payment access points and credit access points.

Starting with an aspiration of a 10 per cent credit to GDP ratio for each district and assuming a starting credit to deposit ratio of 67 per cent (which is close to the current number), a 15 per cent deposit to GDP ratio appears reasonable as a minimal

aspiration. The credit to deposit ratio is already showing an upward trend, therefore if the credit to GDP ratio does indeed cross 50 per cent in every district of India by January 1, 2020, it would be reasonable to apply a credit to deposit ratio of 77 per cent to arrive at an equivalent deposit to GDP aspiration of 65 per cent by that date.

- 5. Universal Access to a Range of Insurance and Risk Management Products at Reasonable Charges: By January 1, 2016, each low-income household and small business would have “convenient” access to providers that have the ability to offer them “suitable” insurance and risk management products which, at a minimum allow them to manage risks related to: (a) commodity price movements; (b) longevity, disability, and death of human beings; (c) death of livestock; (d) rainfall; and (e) damage to property, and pay “reasonable” charges for their services. By that date, each District would have a Total Term Life Insurance Sum Assured to GDP ratio of at least 30 per cent. This ratio would increase every year by 12.5 per cent with the goal that it reaches 80 per cent by January 1, 2020.**

It is envisaged that convenient access to insurance and risk management products would be provided by a combination of payment access points and credit access points.

A comparison with global averages of level of protection, measured as the ratio of the sum assured to GDP reveals that while this ratio is 58 per cent for India, it is much higher in other countries like the USA (191 per cent), Germany (105 per cent), France (97 per cent), South Korea (152 per cent) and Japan (321 per cent)¹⁵. From a field perspective, the average GDP for a Gram Panchayat in India is estimated to be about Rs.12 crore¹⁶ and the total Human Capital requiring coverage for an average rural household is about Rs. 3.5 lakh¹⁷. Assuming that the average population of a Gram Panchayat is 3,000¹⁸ (or 600 households), the Total Sum Assured required to cover the human capital of all earning members of the Gram Panchayat population is Rs. 21 crore. This implies that in order to cover the entire human capital of a Gram Panchayat, the Sum Assured to GDP ratio will be in the region of 175 per cent. As against this requirement, and in view of global benchmarks, the Committee believes that it is a reasonable goal to reach a Term Life sum assured to GDP ratio of 30 per cent by January 1, 2016, going up to 80 per cent over five years for each District.

- 6. Right to Suitability: Each low-income household and small-business would have a legally protected right to be offered only “suitable” financial services. While the customer will be required to give “informed consent” she will have the right to seek legal redress if she feels that due process to establish Suitability was not followed or that there was gross negligence.**

The “caveat emptor” principle that has underpinned India’s customer protection architecture has not created desired outcomes. The Committee believes that India needs to move to a customer protection regime where the provider ascertains through due process that the products sold or the advice given is suitable for the buyer considering her needs and current financial situation.

In addition, customers would also have ease of recourse to ex-post grievance redressal mechanisms. This would mean that they have access to a unified platform for grievance redressal across financial products and services. The grievance redressal agency would have a presence in every District in the country and customers would be able to register complaints over the phone, using text messages, internet, and with the financial services provider directly, who would then be required to forward the complaint to the redressal agency. The customers would have a right to speedy redressal of grievances and the right to appeal decisions of the redressal agency.

Vision Statements

In summary, the six vision statements for financial inclusion and deepening refer to:

1. A Universal Electronic Bank Account.
2. Ubiquitous Access to Payments and Deposit Products at Reasonable Charges.
3. Sufficient Access to Affordable, Formal Credit.
4. Universal Access to Investment Products at Reasonable Charges.
5. Universal Access to Insurance and Risk Management Products at Reasonable Charges.
6. Right to Suitability.

The goals laid out by these six vision statements and the desired outcomes for each of them are summarised below.

#	Vision	Goal	Desired Outcome
1	A Universal Electronic Bank Account	Each Indian resident, above the age of 18	100% by January 1, 2016
2	Ubiquitous Access to Payment Services and Deposit Products at Reasonable Charges	Full services access point within a fifteen minute walking distance from every household in India	Density of 1 per sq.km (with more than 400 people), across the country, by January 1, 2016.
		Reasonable Charges	Reasonable Charges
		At least one product with positive real returns	By January 1, 2016
3	Sufficient Access to Affordable Formal Credit	Credit to GDP Ratio in every District of India	10% by January 1, 2016
		Credit to GDP Ratio in every District of India	50% by January 1, 2020
		Credit to GDP Ratio for every "significant" sector of the economy	10% by January 1, 2016
		Credit to GDP Ratio for every "significant" sector of the economy	50% by January 1, 2020
		Convenient Access	Density of 1 per 10,000 people, across the country, by January 1, 2016
		Affordable Rates	Ordinal by risk level in the long-run after adjusting for "reasonable" transactions charges
4	Universal Access to a Range of Deposit and Investment Products at Reasonable Charges	Deposit & Investments to GDP Ratio in every District of India	15% by January 1, 2016
		Deposit & Investments to GDP Ratio in every District of India	65% by January 1, 2020
		Reasonable Charges	Reasonable Charges
5	Universal Access to a Range of Insurance and Risk Management Products at Reasonable Charges	Total Term Life Sum Assured to GDP Ratio in every District of India	30% by January 1, 2016
		Total Term Life Sum Assured to GDP Ratio in every District of India	80% by January 1, 2020
		Reasonable Charges	Reasonable Charges
6	Right to Suitability	All financial institutions to have a Board approved Suitability Policy	100% by January 1, 2016
		Presence of district level redressal offices for all customers availing any financial service	100% of districts by January 1, 2016

Vision Statements

The rest of the report articulates a set of principles that will guide the choice of one of more financial systems designs and recommends several specific strategies to achieve this vision and monitor the progress on achieving it.

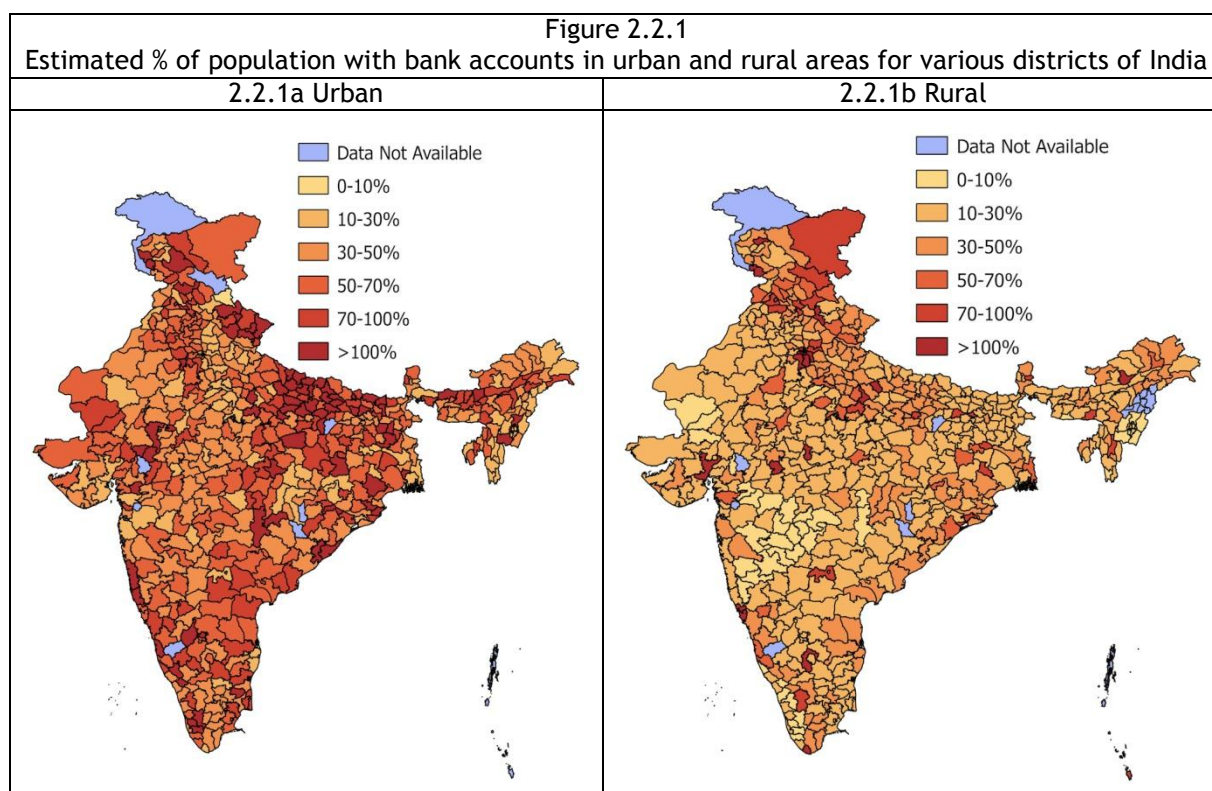
Chapter 2.2 Review of Current Status of Financial Inclusion and Financial Deepening

This chapter reviews the achievements of the Indian financial system so far, against each of the vision statements.

Vision 1: Universal Bank Account (UEBA): By January 1, 2016 each Indian resident, above the age of 18 years, would have an individual, full-service, safe, and secure electronic bank account.

Goal: 100 per cent achievement of the vision by January 1, 2016.

Current Status: The institutions that currently provide bank accounts include Scheduled Commercial Banks, Urban Cooperative Banks, Regional Rural Banks, and State and District Cooperative Banks. While available data provides an overall sense of savings bank account spread, it is not clear how many of these accounts are unique accounts as this data is not captured currently. Figures¹⁹ 2.2.1a and 2.2.1b provide an estimated number²⁰ and proportion of bank accounts available at a District level to urban and rural Indian residents respectively at the end of March 31, 2012.



This estimation yields a result of 36 per cent at an All-India level (which is commensurate with data from the World Bank Findex Survey which indicates that 35 per cent of the target population in India have at least one bank account²¹). It can be seen from the above data that the situation in both urban and rural India is very grim overall with only 45 per cent of the urban residents and 32 per cent of the rural residents having bank accounts. There is also significant variation from district to district even within that. In an urban context the current penetration of individual bank accounts, as proportion of the population of people above the age of 18 years, ranges from 10 per cent in Imphal East district of Manipur to 688 per cent in Wayanad district of Kerala, while in the rural context it ranges from close to 0 per cent in the districts of Nagaland to 89 per cent in Solan in

Review of Current Status

Himachal Pradesh. And, even where there is good progress on this front, a large proportion of the bank accounts do not have full-service electronic capabilities.

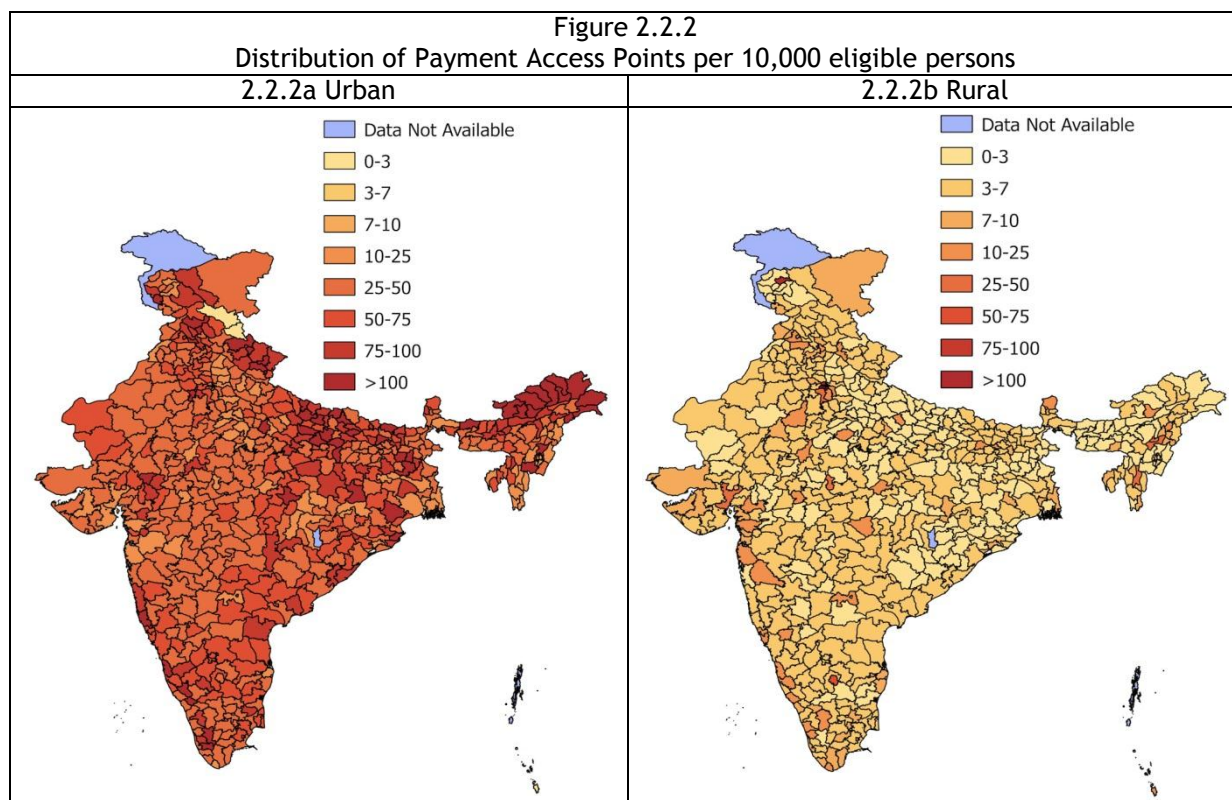
Vision 2: Ubiquitous Access to Payment Services and Deposit Products at Reasonable Charges: By January 1, 2016, the number and distribution of electronic payment access points would be such that every single resident would be within a fifteen minute walking distance from such a point anywhere in the country. Each such point would allow residents to deposit and withdraw cash to and from their bank accounts and transfer balances from one bank account to another, in a secure environment, for both very small and very large amounts, and pay “reasonable” charges for all of these services. At least one of the deposit products accessible to every resident through the payment access points would offer a positive real rate of return over the consumer price index.

Goal: A density of 1 access point per sq.km, with more than 400 people, across the country by January 1, 2016; “reasonable” charges; at least one deposit product with positive real-returns by January 1, 2016.

Current Status: Payment access points currently include bank branches, active business correspondent locations, and Automated Teller Machines (ATMs)²². There are also 8.45 lakh merchant Point-Of-Sale (POS) terminals in the country as on the end of March 2013²³. Almost all of these are operational in the urban areas and while they are not yet full-service since they do not have remittance and cash-in capabilities and limited cash-out capabilities (regulation permits only up to Rs. 1,000), they have a density of 25 per 10,000 in urban areas and could be permitted to offer a wider range of payments services to their consumers. Keeping this in mind, Figures 2.2.2a and 2.2.2b provide an estimated²⁴ distribution of all these access points including POS terminals at the District level for urban and rural areas respectively per 10,000 eligible persons (population aged 18 and above).

While exact data is not available at the level of detail that is required, it is clear from the Figures 2.2.2a and 2.2.2b that against an aspiration of 100 per cent of the population-groupings of 400 people each having 1 or more payment access points, the data available enables calculation only up to a district level. Using this data, it can be observed that while 89 per cent of districts have 25 or more payment access points per 10,000 population in urban areas, only 3 per cent of districts have the same in rural areas.

However, with small-format retailers²⁵, and mobile-recharge operators, each operating with a density of more than 10 per 10,000, if there is a way to also include even a portion of them within the payments access networks, it should be possible to expand this number considerably and reach the goal of having 25 such points in each and every part of the country (and thus one point per sq.km with more than 400 population).



As far as charges for the use of these services are concerned a very wide range prevails, as given in Table 2.2.1, with post offices for example, charging 5 per cent for their remittance services²⁶ and banks offering them for free for certain classes of their customers. Pre-paid Instrument Providers such as Airtel Money charge between 0.5 per cent and 3 per cent for their services²⁷.

Money Order, India Post	0.5%
Business Correspondent of SBI	2.0%
Airtel Money	0.5%

It can be seen from Table 2.2.2²⁸ on interest rates offered by banks in India, there is currently no product that offers a positive real rate of return on deposits.

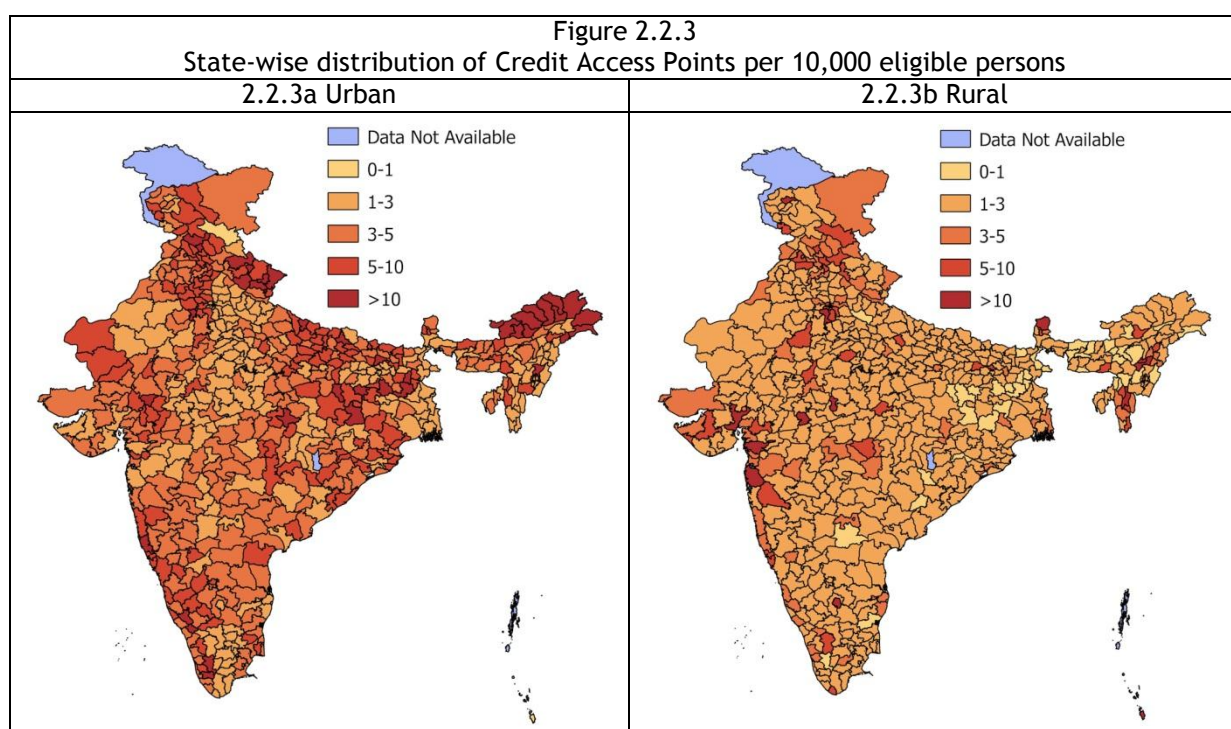
Maturity	Nominal Rate	Inflationary Expectation	Real Rate
Savings deposit rate	4.00%	11.24%	-7.24%
Term deposit rate >1 year	9.05%	11.24%	-2.19%
Fixed deposit for 360 days	7.50%	11.24%	-3.74%
Fixed deposit for 720 days	9.00%	11.24%	-2.24%

Vision 3: Sufficient Access to Affordable Formal Credit: By January 1, 2016, each low-income household and small-business would have “convenient” access to formally regulated lenders that have the ability to assess and meet their credit needs, and offer

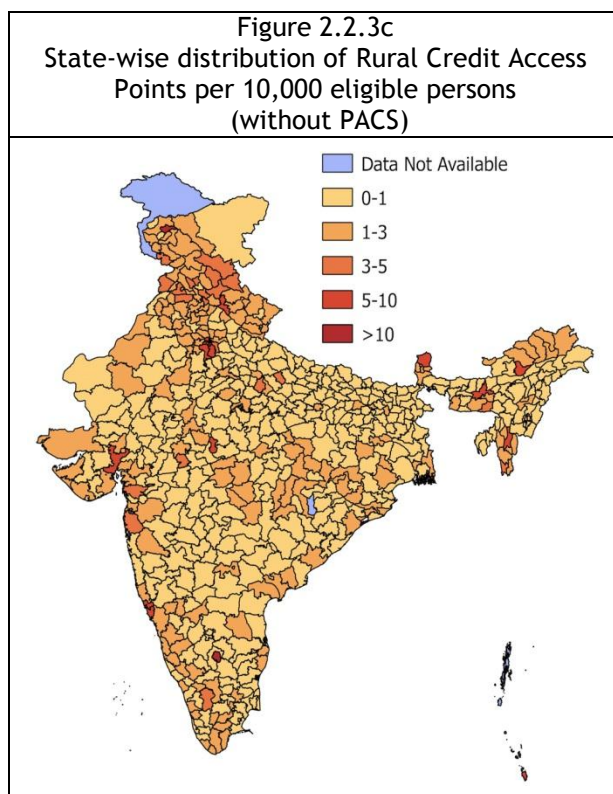
them a full-range of “suitable” credit products, at an “affordable” price. By that date, each District and every “significant” sector (and sub-sector) of the economy would have a Credit to GDP ratio of at least 10 per cent on January 1, 2016. This ratio would increase every year by 10 per cent with the goal that it reaches 50 per cent by January 1, 2020.

Goal: A Credit to GDP ratio of 10 per cent by January 1, 2016, increasing by 10 per cent every year until it reaches 50 per cent by January 1, 2020, in every District of the country and every “significant” sector of the economy. Full-service credit access points to have a density of 1 per 10,000 people, across the entire country, by January 1, 2016. And, in the long run, higher rated credits to have a lower rate of interest than lower rated ones after adjusting for “reasonable” transactions charges.

Current Status: Figures 2.2.3a and 2.2.3b provide an estimate²⁹ at a District level for distribution of credit access points in urban and rural areas respectively for 10,000 eligible persons.

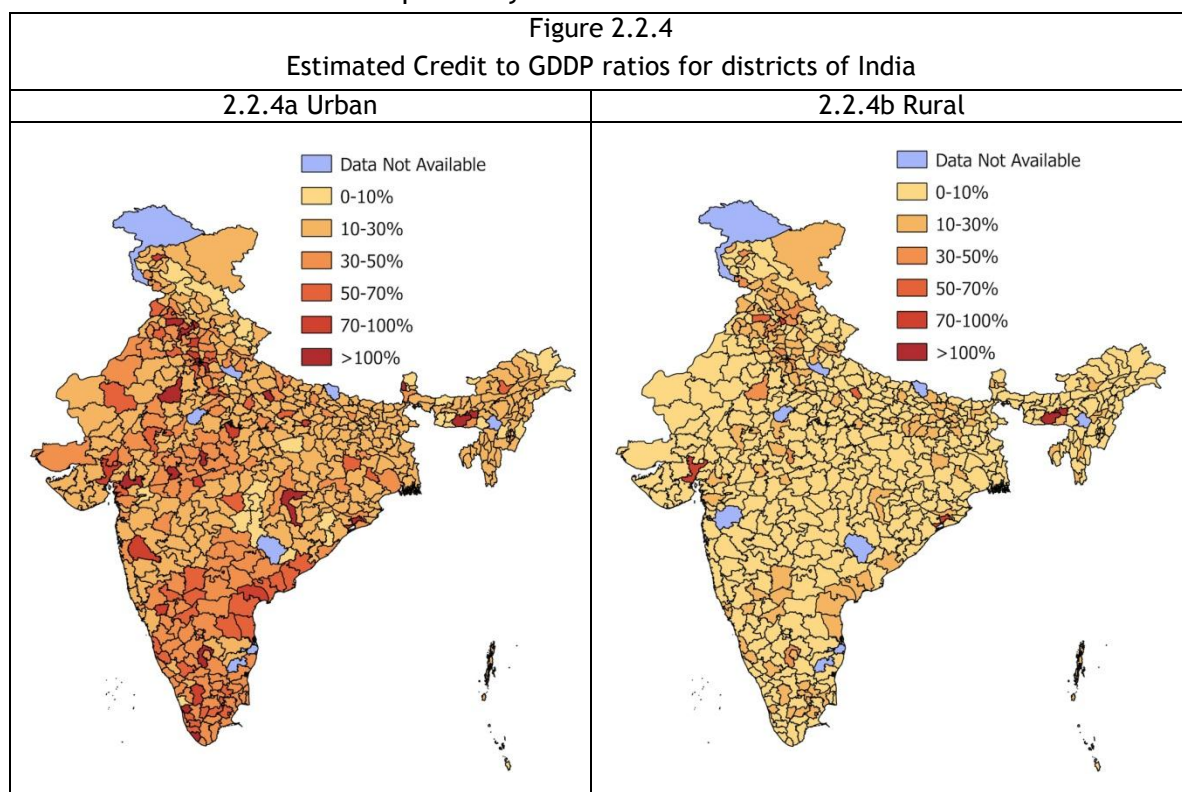


While exact data is not available at the level of detail that is required, it is clear from the above Figures that against an aspiration of 100 per cent of the population-groupings of 10,000 people each having at least 1 credit access point, at a District level, 99 per cent of such groupings within urban areas have at least 1 credit access point, and in rural areas this figure is 92 per cent. While this looks very positive on an overall basis, this will need to be verified using more exact data and, particularly the level of activity of Primary Agricultural Cooperative Societies (PACS) and the range of products they are able to offer. If the PACS access points are removed from the analysis, the picture changes substantially, as in Figure 2.2.3c.



From an earlier estimate of 92 per cent of population-groupings of 10,000 people each in rural areas having at least 1 credit access point, this figure now becomes 59 per cent when PACS are excluded.

Figures 2.2.4a and 2.2.4b give an estimated³⁰ district-wise break-up of credit to GDP ratios for urban and rural areas respectively.



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While exact data at the level of the District is not available and neither is the rural-urban break-up of that District level data, it is clear from the above figures that there is an extremely wide variation in the achievement levels. While about 94 per cent of the districts' urban areas have in excess of 10 per cent credit to GDP ratio, only 18 per cent of them are currently above the eventual target mark of 50 per cent. The situation in rural areas is much worse with only 30 per cent of the districts' rural areas currently having in excess of 10 per cent credit to GDP ratio with a mere 2 per cent of the districts above the eventual target mark of 50 per cent. This analysis reveals that despite a reasonable number of access points, financial depth indicators are lagging.

In terms of sectoral allocation of credit, Table 2.2.3³¹ indicates the differences in outstanding bank credit allocation with respect to the sectors' contributions to GDP.

Sectoral GDP (Rs. Crore)		Sectoral Credit (Rs. Crore)		Credit to GDP
GDP at Current prices, 2012-13	93,21,638	Gross Bank Credit of Scheduled Commercial Banks	48,61,345	52.0%
<i>Of which,</i>				
GDP of Agriculture and allied activities	16,44,834	Credit to Agriculture	5,89,914	35.9%
GDP of Industry	24,36,502	Credit to Industry	22,30,182	91.5%
GDP of Services	52,40,302	Credit to Services	20,41,249	39.0%
GDP contribution of Industry MSMEs	5,10,473	Credit to Industry MSMEs	2,84,348	55.7%
GDP contribution of Service MSMEs	10,97,899	Credit to Service MSMEs	2,77,947	25.3%

It is clear from Table 2.2.3³² that agriculture still has a distance to go before it reaches the 50 per cent depth mark even though it is above the 10 per cent mark. Industry MSMEs appear to have just above 50 per cent financial depth, while Service MSMEs have a much lower depth, at 25 per cent, and have a long way to go to reach the 50 per cent benchmark. This is corroborated by a micro-study of Bangalore Urban District conducted by Jana Foundation for the Committee which revealed that even though 70 per cent of micro-enterprises have a bank account, only 5 per cent have access to term loans and a mere 1 per cent has access to working capital loans from banks.

The goal of affordability has been interpreted to mean that clients with similar risk profiles should be able to access credit at similar rates after adjusting for "reasonable" levels of transactions charges. Gold loans are the lowest risk category of consumer loans. Table 2.2.4a³³ provides a comparison of the spread on these loans depending on the channel that is used. Table 2.2.4b³⁴ carries out a similar exercise for a broader category of loans.

Customer Class	Loan-to-Value	Interest Rate	LTV Adjusted Interest Rate ³⁵	Spread to Risk Free Rate ³⁶
Able to Access Bank	80%	12%	12%	3.23%
Able to Access NBFC	60%	24%	32%	23.23%
Unable to Access Bank or NBFC	80%	65%	65%	56.23%

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Customer Class	Expected Loss Rate ³⁷	Interest Rate	Adjusted Interest Rate net of expected loss	Spread to Risk Free Rate ³⁸
Personal Loan Borrower	5.80%	18.00%	12.20%	3.35%
SHG Borrower	7.08%	24.00%	16.92%	8.07%
JLG Borrower	0.40%	26.00%	25.60%	16.75%
Money Lender Borrower	0.40%	65.00%	64.60%	55.75%
Home Loan Borrower	0.43%	10.30%	9.87%	1.02%

From the two Tables it is clear that for a variety of reasons, which could include very high transactions costs, mispricing of credit risks, and differences in the cost of funds faced by different channels, even in the formal system there is a large distance to travel before the goal of ordinality can be satisfied.

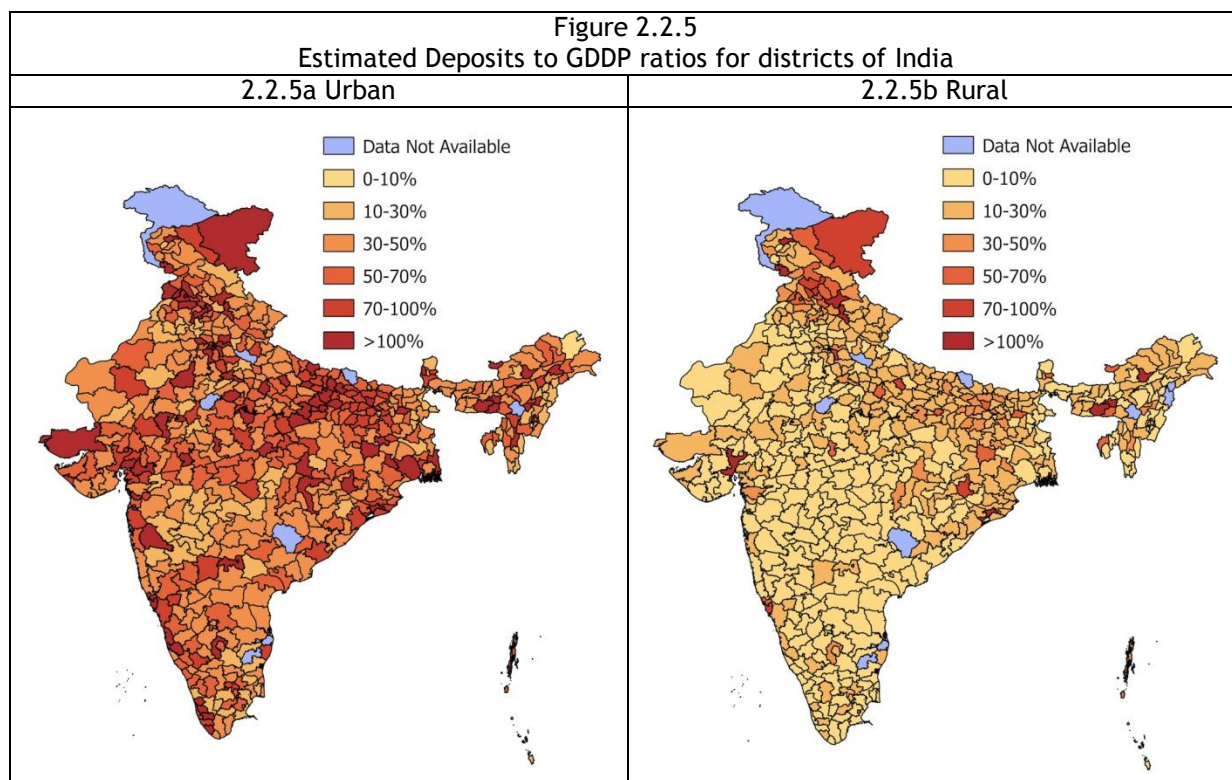
Vision 4: Universal Access to a Range of Deposit and Investment Products at Reasonable Charges: By January 1, 2016, each low-income household and small-business would have “convenient” access to providers that have the ability to offer them “suitable” investment and deposit products, and pay “reasonable” charges for their services. By that date, each District would have a Total Deposits and Investments to GDP ratio of at least 15 per cent. This ratio would increase every year by 12.5 per cent with the goal that it reaches 65 per cent by January 1, 2020.

Goal: A Deposit & Investments to GDP ratio of 15 per cent by January 1, 2016, increasing by 12.5 per cent every year until it reaches 65 per cent by January 1, 2020, in every district of the country.

For these services it is envisaged that a combination of Payment Access points and Credit Access points would be able to provide “convenient” access points.

Current Status: Figures 2.2.5a and 2.2.5b give an estimated district-wise break-up of Deposit to GDP ratios for urban and rural areas respectively³⁹. These deposits are the sum of savings, current and term deposits in banking institutions.

While exact data at the level of the District is not available and neither is the rural-urban break-up of that District level data, it is clear from the figure below that there is an extremely wide variation in the achievement levels. While 99 per cent of the districts’ urban areas have in excess of 15 per cent Deposit to GDP ratio, only 35 per cent of them are above the eventual target mark of 65 per cent. The situation in rural areas is much worse with only 36 per cent of the districts’ rural areas having in excess of 15 per cent Deposit to GDP ratio with only 4 per cent being above the eventual target mark of 65 per cent.



For Mutual Funds and investments into Provident Funds, Pension Funds, and various plans of Insurance Companies, while the detailed break-ups are not available, Table 2.2.5⁴⁰ gives the relevant ratios for each at the national level. Most of these amounts are likely to be concentrated in the urban areas (with the exception of postal savings) and may not change any of the above mentioned percentages significantly.

Table 2.2.5 Retail investments in other significant channels		
Channel	Investment Corpus / AUM	As a % of GDP for the year
Schemes offered at India Post	Rs.6,05,697 Crore	7.315%
Employees Provident Fund	Rs.3,73,645 Crore	4.513%
NPS	Rs.29,852 Crore	0.316%
Mutual Funds (Retail)	Rs. 1,52,483 Crore	1.612%

Table 2.2.6⁴¹ gives the approximate charges that are payable by a customer when she invests in a number of investment options.

Table 2.2.6 Transactions Costs for other Saving and Investment options		
Scheme	Amounts	Charges
Savings Account	For BSBDA, there is no minimum balance requirement. For Savings Accounts, banks can decide minimum balance	1% on an account balance of Rs.10,000
Fixed Deposit	Minimum Rs.1,000	Nil
Money Market Mutual Fund	UTI Money Market Fund requires a minimum investment of Rs. 10,000	Up to 4% for an investment of Rs.10,000

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Index Mutual Fund	The Quantum Index Fund (Liquid Fund) requires a minimum investment of Rs. 5,000	Up to 4% for an investment of Rs.10,000
Pension Fund	NPS-Lite	Up to 0.86% for contribution of Rs.10,000
Public Provident Fund	Rs.500 to Rs.100,000 per financial year, to be locked in initially for 15 years	Nil
Endowment Policy	An indicative number is Minimum of Rs.20,000 per annum for LIC's Endowment Plus Unit Linked Plan	Up to 11.9% in the 1 st year for an investment of Rs.20,000

From the Table 2.2.6 it can be seen that even for very standardised products, the costs of transactions vary a great deal and can be extremely high in certain cases.

Vision 5: Universal Access to a Range of Insurance and Risk Management Products at Reasonable Charges: By January 1, 2016, each low-income household and small business would have “convenient” access to providers that have the ability to offer them “suitable” insurance and risk management products which, at a minimum allow them to manage risks related to: (a) commodity price movements; (b) longevity, disability, and death of human beings; (c) death of livestock; (d) rainfall; and (e) damage to property, and pay “reasonable” charges for their services. By that date, each District would have a Total Term Life Insurance Sum Assured to GDP ratio of at least 30 per cent. This ratio would increase every year by 12.5 per cent with the goal that it reaches 80 per cent by January 1, 2020.

Goal: A Total Term Life Sum Assured to GDP Ratio of 30 per cent by January 1, 2016, increasing by 12.5 per cent every year until it reaches 80 per cent by January 1, 2020, in every District of the country.

Current status: It is not possible with currently available data to paint a picture of the depth of insurance penetration in terms of the sum assured measured as a per cent of GDP for rural and urban areas for each district.

Also, while India fares comparatively well when compared to other countries in terms of aggregate premiums to GDP, as given in Table 2.2.7⁴², it is not clear, with respect to life insurance premiums, the extent of term life insurance penetration.

	Life	Non-Life	Total
Australia	3.0%	3.0%	6.0%
UK	8.7%	3.1%	11.8%
USA	3.6%	4.5%	8.1%
India	3.4%	0.7%	4.1%
Brazil	1.7%	1.5%	3.2%
Russia	0.1%	2.3%	2.4%
Bangladesh	0.7%	0.2%	0.9%

Charges for products sold by insurance companies through their distributor channels vary based on the kind of product. Indicative charges are given in Table 2.2.8⁴³.

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Annual term life insurance policy	2.5% - 7.5%
Single premium Life Insurance policy	2% of the single premium
General Insurance such as Personal Accident Insurance, Property Insurance	Up to 15% of premium

Vision 6: Right to Suitability: Each low-income household and small-business would have a legally protected right to be offered only “suitable” financial services. While the customer will be required to give “informed consent” she will have the right to seek legal redress if she feels that due process to establish Suitability was not followed or that there was gross negligence.

Current Status: The current system of regulations that govern the sale of financial products and services is based on caveat emptor as a doctrine. Firms do not have the requirement around Suitability today and therefore none of the envisaged processes are in place yet.

#	Vision	Goal	Desired Outcome	Current Status
1	A Universal Electronic Bank Account	Each Indian resident, above the age of 18	100% by January 1, 2016	All India 36% with Urban India 45%; and Rural India 32%
2	Ubiquitous Access to Payment Services and Deposit Products at Reasonable Charges	Full services access point within a fifteen minute walking distance from every household in India	Density of 1 per sq.km with population of 400 people, across the country by January 1, 2016	Density ranges from 89% in Urban areas and 3% in Rural areas, calculated at a district level
		Reasonable Charges	Reasonable charges	Charges range from 0% to 5% for different classes of customers
		At least one product with positive real returns	By January 1, 2016	None; the best available rate is -1.95%
3	Sufficient Access to Affordable Formal Credit	Credit to GDP Ratio in every District of India to cross 10%	100% of districts by January 1, 2016	94% of the Urban areas and 30% of the Rural areas, calculated at a district level
		Credit to GDP Ratio in every District of India to cross 50%	100% of districts by January 1, 2020	18% of the Urban areas and 2% of the Rural areas, calculated at a district level
		Credit to GDP Ratio for every “significant” sector of the economy to cross 10%	100% of “significant” sectors by January 1, 2016	All sectors (agriculture, industry and services) appear to have crossed this limit however there are important sub-sectors that have not, such as Marginal, Small,

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				Medium and Large Farmers and Services MSMEs.
		Credit to GDP Ratio for every “significant” sector of the economy to cross 50%	100% of “significant” sectors by January 1, 2020	Only Industry as a broad sector has crossed this limit.
		Convenient Access	Density of 1 per 10,000 people, across the country, by January 1, 2016	99% in Urban areas and 92% in Rural areas, calculated at a district level. Excluding PACS, rural access drops to 59%.
		Affordable Rates	Ordinal by risk level in the long-run after adjusting for “reasonable” transactions charges	Very high levels of violations of ordinality within the formal system and in the economy as whole
4	Universal Access to a Range of Deposit and Investment Products at Reasonable Charges	Deposit & Investments to GDP Ratio in every District of India to cross 15%	100% of districts by January 1, 2016	99% of the Urban areas and 36% of the Rural areas, calculated at a district level
		Deposit & Investments to GDP Ratio in every District of India to cross 65%	100% of districts by January 1, 2020	35% of the Urban areas and 4% of the Rural areas, calculated at a district level
		Reasonable Charges	Reasonable charges	Charges range from 0% to 11.9% for different amounts and for different products
5	Universal Access to a Range of Insurance and Risk Management Products at Reasonable Charges	Total Term Life Sum Assured to GDP Ratio in every District of India to cross 30%	100% of districts by January 1, 2016	No Data
		Total Term Life Sum Assured to GDP Ratio in every District of India to cross 80%	100% of districts by January 1, 2020	No Data
		Reasonable Charges	Reasonable charges	Charges range from 2% to 15% on different products
6	Right to Suitability	All financial institutions to have a Board approved Suitability Policy.	100% of financial institutions by January 1, 2015	This is not required or present in any institution today.
		Presence of district level redressal offices for all customers availing any financial service	100% of districts by January 1, 2016	There are 15 offices of the Banking Ombudsman covering the entire country today and none that cover all financial services ⁴⁴ .

Chapter 2.3 Design Principles for Financial Inclusion and Financial Deepening

There are significant changes taking place within the Indian as well as the global financial system. These include fundamental changes in the needs of consumers, technological advances particularly in the fields of telecommunications and customer identification, and in the broad area of financial engineering. Ten years ago, for example, it would have been impossible to conceive of the possibilities that are emerging from advances in electronic payments and mobile banking. The danger of developing too specific or prescriptive of an approach towards comprehensive financial services is that it will become very quickly outdated and the design will begin to act as an impediment to change instead of being an enabler. To prevent this and to ensure that the progress towards the achievement of the vision proceeds in an orderly manner but continually benefits from all that is happening in the field of finance and other domains that intersect with it, the best way to proceed would be to “articulate broad principles that do not vary with financial or technological innovation” but instead have a “timeless” character⁴⁵. This chapter lays out the design principles which are expected to have such a character and around which specific strategies for comprehensive financial inclusion would be designed by various institutions.

Four broad design principles are proposed: Stability, Transparency, Neutrality, and Responsibility. Each is discussed in detail below:

Principle 1: Systemic Stability: Any design must seek to enhance stability of the financial system. Following the IMF-FSB-BIS definition, the Financial Sector Legislative Reforms Commission (FSLRC) defines systemic risk as “[a] risk of disruption to financial services that is caused by an impairment of all or parts of the financial system and has the potential to have serious negative consequences for the real economy.” For an emerging market like India, financial inclusion and depth are no doubt important public policy goals for reasons discussed in Chapters 2.1 and 2.2. However, extreme care needs to be taken to ensure that the attempts to accelerate progress on this front do not result in a low-quality financial system with increased instability. Such instability would hurt everyone, in particular low-income households. Every proposal that seeks to increase financial inclusion or depth must also be asked whether it will have a consequence of increasing, leaving unchanged, or reducing systemic risk and instability. This principle, however, must not be interpreted as a “do nothing” equilibrium because the broader risks of exclusion are also high. Investments must be made in enhancing regulatory capacity to support advances in financial inclusion and depth.

This principle also implies that the longer term “repeated game” implications of any policy or regulatory action must be carefully examined for issues such as creation of moral hazard. Individual institutions and participants must not have expectations of regulatory forbearance for certain actions, irrespective of the costs to the financial system.

In the United States, ownership housing for low-income households came to be viewed as an important policy goal by politicians, regulators and voters alike. This goal was sought to be realised through the financial system by the creation of Government Sponsored Enterprises (GSE) such as the Freddie Mac and Fannie Mae⁴⁶ and other measures, all of which resulted in the creation of an extremely poor quality portfolio of sub-prime loans on balance sheets of large banks and mortgage finance companies and transmitted via the securities markets to balance sheets of insurance companies and other market participants. This is an illustration of a well-intentioned policy goal that had a highly detrimental impact on the financial system. On the other hand, in an example from India, in order to pursue the goal of providing increased access to formal bank accounts and savings to households, the RBI in 2006 issued guidelines that permitted the creation of

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Business Correspondents that were expected to make it easier for households to access the banking system but importantly, the risks of the account would be borne by a regulated Bank. The systemic risk implications would have been very different if the regulator chose to achieve the same goal through the creation of lightly regulated deposit-taking entities.

One crucial tool to ensure Stability is capital, in adequate quantum for a given type of risk. The offering of financial services entails the assumption of three broad types of risks: (a) market (including liquidity) risk; (b) credit risk; and (c) operational (including settlement, legal and reputational) risk. Each entity that aspires to participate in this process, no matter how large or small its role, needs to clearly identify the specific risks to which it is exposed and to have an adequate amount of capital to absorb that risk. While it is generally accepted⁴⁷ that institutions that are permitted to warehouse insurance risks or hold deposits on their balance sheets, need to have a level of capital that reflects their underlying risk profile, it is often assumed that agents of financial institutions do not need to hold any capital at all. However, unless a financial institution is willing to accept complete financial responsibility for all aspects of the agents' behaviour and unconditionally surrender its right to repudiation and allow the agent to function under the Doctrine of Indoor Management⁴⁸, given the incomplete nature of the contract between the agent and the financial institution, each agent must have an adequate amount of financial capacity to absorb all the risks that are attendant with his role⁴⁹.

The Committee is also of the view that for Stability to obtain, providers must be financially sustainable. In the absence of this, their ability to generate capital is severely constrained and it is not clear if all the risks borne by them are being priced correctly. Under-pricing of risks can lead to build-up of asset bubbles.

Principle 2: Balance-sheet Transparency: Any design must require each participant in the system to build a completely transparent balance sheet in such a way that it reflects an accurate picture of its current status as well as the impact on this status of stress situations that the participant may encounter. For any financial institution the most important risks are embedded in its balance sheet and while in a "true but unobserved" manner, they evolve continuously; it can take an extended period of time, sometimes several years, before the risks become directly apparent. For a financial system to function well the true quality of the balance sheet must be made visible in a high-frequency manner and efforts must be constantly made to ensure that an accurate estimate is made of the true value of the each component of the balance sheet. This ensures that risks do not build-up in the system undetected and subsequently resolve with a catastrophic impact on the system; participants make every effort to manage these risks; and eventually the stronger participants grow and thrive while the weaker ones gradually fade away.

Once again here, this is not fundamentally at odds with a policy of financial inclusion and deepening. For example, if there is a policy goal of ensuring adequate financing to farmers, this does not by any means imply that the quality of such finance and its impact on the balance sheet of the lender must be opaque. Transparency in the quality of these assets provides important feedback loops for policy formulation and refinement as well as product design. In this example, in an extreme scenario, a case might emerge that the quality of assets is so poor and the resultant systemic risks significant enough that the policy goal is better achieved through direct cash transfers to the target farmers rather than intermediated through bank balance sheets.

Principle 3: Institutional Neutrality: Any design must ensure that the treatment of each participant in the financial system is strictly neutral and entirely determined by the role it is expected to perform and not its specific institutional character. In other words, function

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over form⁵⁰. Additionally, the financial system design must not be predicated on the existence of a subsidy from some parts of the financial firm's balance sheet to support other parts. While it may well be that individual firms strategically decide to cross-subsidise products or business lines, the design of the financial system should in no way force such a subsidy.

India has a wide range of entities that participate in the financial system. Amongst formal institutions there are several that are directly owned by the government, several that are entirely owned by the private sector, and others that have a cooperative character. For a variety of historical reasons regulatory structures have been designed separately for each type of institution to the point where there is a concern that the focus has moved from serving the end customer to preserving a certain institutional design. Variations in regulatory treatment have the potential effect of protecting weaker institutions and do not therefore allow the evolution of a robust market structure which encourages the stronger institutions and products to grow and the weaker ones to gradually fade away.

The report of the Rajan Committee (2009) stated that:

In an efficient financial system, the playing field is level so that different institutions compete to provide a function, no institution dominates others because of the privileges it enjoys, competition results in resources being allocated efficiently, and society gets the maximum out of its productive resources. This is also equitable for only thus will the interests of consuming masses be emphasized, instead of the more usual trend of privileged producers being protected.

Another form of Neutrality is internal to the Financial Institution. The financial systems design should not be predicated on parts of the balance sheet of a financial institution subsidising another portion. It is often argued that the fact that since commercial banks have privileged access to low-cost deposits in return they must pay a compensatory penalty and lend to certain sectors of the economy at negative rates of return⁵¹. This argument has a number of flaws. First, it treats savings as somehow being "inferior" or "less important" than loans - it is not at all obvious that at the level of a household this is indeed the case; and second, offering lower rates of interest to depositors results in a diversion of savings away from financial assets which on economy-wide basis reduces the supply of funds available for loans. And, in a market where the charter value of a bank is gradually eroding and new payment institutions are emerging, it is not clear how much longer the interest benefit from low-cost deposits will survive but any high cost infrastructure that is created in pursuit of such priority sector obligations could end up acting as a high "tax" for the financial institution and the financial system as a whole. This does not imply, however, that as a matter of its strategy, a financial institution cannot cross-subsidise products and activities or that a business group cannot cross-subsidise across its financial and non-financial service product lines. There may be competitive reasons to do so.

Principle 4: Responsibility towards the Customer: Any financial systems design must make it unnecessary for the household or the small business to build a full understanding of risks and Suitability as a pre-requisite for availing services but instead maintain the principle that the provider is responsible for sale of suitable financial services. This must be viewed in the context of persistent information asymmetries that are inherent in financial services. When a household or a small business buys services such as rainfall insurance or derivatives that it needs from a risk management perspective, it does so with very little ability to understand the precise nature of the risk it has taken on. That does not, however, mean that these services are not welfare-enhancing.

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Maximising the well-being of low-income households and small businesses requires the financial system to find a way to deliver to the customer all of the products that it is able to offer which may themselves have very complex designs but together serve to simplify the life of the customer and allow her to minimise the risks that she faces and maximise the benefit to her from the available growth opportunities. It also requires the financial system to ensure that all the participants directly facing the customer make every effort to offer only such welfare-enhancing products to the customer and are prevented from offering those that do not have this property.

In summary, the four design principles for financial inclusion and deepening are:

1. Stability
2. Transparency
3. Neutrality
4. Responsibility

Chapter 2.4 Banking Systems Designs

This chapter aims to provide a framework to understand various types of current and potential banking system designs. While there are many ways to specify this, the functional building blocks of payments, deposits and credit are used to construct two broad designs. These are the Horizontally Differentiated Banking System (HDBS) and the Vertically Differentiated Banking System (VDBS). Within each of these designs, there are multiple institutional categories that are explored.

In a HDBS design, the basic design element remains a full-service bank that combines all three building blocks of payments, deposits, and credit but is differentiated primarily on the dimension of size or geography or sectoral focus. This could also be referred to as an Institutional Design Configuration. In a VDBS design, the full-service bank is replaced by banks that specialise in one or more of the building blocks of payments, deposits, and credit. This could also be referred to as Functional Design Configuration. In reality, most banking systems will have a mix of both designs.

Horizontally Differentiated Banking System: The various configurations within HDBS are shown in the table below. In this design while all configurations are deposit-taking, the variations between them are on account of: (i) the ways in which they originate risks and transmit them throughout the system; and (ii) their size and focus - whether regional or sectoral. Each of the column types are defined below:

Table 2.4.1 Horizontally Differentiated Banking System				
S.No:	DESIGN	REGIONAL / SECTORAL FOCUS	CAPITAL MARKETS	AGENTS
1	NATIONAL BANK WITH BRANCHES	NO	NO	NO
2	NATIONAL BANK WITH AGENTS	NO	NO	YES
3	REGIONAL BANK	YES	NO	NO
4	NATIONAL-CONSUMER BANK	YES	NO	YES
5	NATIONAL-WHOLESALE BANK	NO	YES	NO
6	NATIONAL-INFRASTRUCTURE BANK	YES	YES	NO

1. **Regional Focus:** This refers to their geographical focus which can either be national or regional.
2. **Sectoral Focus:** This could either be consumer or corporate banking or project finance.
3. **Capital Markets:** This refers to whether or not there is an interaction with capital markets from the point when an asset is originated to when it is warehoused.
4. **Agents:** This refers to whether or not the design requires the use of agents who are not direct employees, to reach the customer. These agents are principally characterised by their lowered transactions costs and the fact that they do not bring any risk bearing capacity at all in the form of capital especially with respect to lending.

This approach in theory produces sixteen potential designs but only the six mentioned in the table above are sufficiently distinct to represent fundamental design choices - the other ten are variations / hybrids of these basic six designs. Each of these six designs is discussed in some detail in the following paragraphs by invoking the previously stated design principles of Stability, Transparency, Neutrality, and Responsibility.

1. National Bank with Branches: This is a design in which the bank operates on a nationwide basis exclusively through owned branch networks and if it does use agents, it does so only very sparingly for transactions processing and not for origination. Within India, State Bank of India embodies this model on a national basis but several other supra-regional government owned banks such as Punjab National Bank and Bank of Baroda also represent this model. In aggregate, there are 105,753 branches across all scheduled commercial banks in India⁵².

This structure has several advantages in terms of: diversification across several regions as well as asset classes, lower cost of capital, and consistency of culture and operating environment and within India has done reasonably well in performing its role in an urban context. However, given its exclusive reliance on branches, it has been very challenging to create a network that is adequate to serve the entire Indian population living in over 25 lakh habitations⁵³. There is also evidence that forcing National Banks to extend reach in terms of branch networks is producing both high cost structures as well as non-performing assets⁵⁴. The very consistency of culture and operating environment makes it very difficult for such banks to adapt to local needs as well as effectively use “soft”, locally available information about small businesses and low-income households. It produces a tendency towards uniformity of processes and decision making structures as well as high costs that are not well suited to serve the wide variety of local customers that it encounters with each one representing higher levels of risk but relatively modest levels of revenue.

This design also tends to be opaque as there is no capital markets interaction anywhere in the sequence from origination to warehousing of assets and therefore, very few market signals other than equity price of the entire bank. A financial system that has only a few large National Banks, while easier to supervise centrally, also creates a stability concern stemming from the fact that the probability of failure of an individual Bank translating into a systemic event is high⁵⁵.

2. National Bank with Agents: This is a design in which there are large banks which may or may not have a large branch network despite their large balance sheet size and net worth. Private Banks such as ICICI Bank, Axis Bank, and HDFC Bank are good examples of such banks within the Indian context. In this design there is no use of Capital Markets but there is extensive use of Agents of various types. This design directly extends the reach of these banks through the use of individual or corporate agents who act as “pure agents” without any capital commitment whose operational cost structures are significantly lower than that of a bank branch.

In the context of financial inclusion, one specific type of Agent that has gained importance in recent years is the Business Correspondent (BC) of which there are over 2.2 lakh now. These are Agents that transact on behalf of the Bank, typically for deposits and payments. Brazil has had the most success with this approach through its Business Correspondent model but a review of the progress there finds that while these correspondents have effectively acted as good transactions points (payments, withdrawals, and deposits account for over 95 per cent of the transactions volume), opening of new bank accounts and provisions of loan accounts formed only 0.35 per cent of the transactions volume because the capital free nature of these agents does not provide the comfort with loan origination that Banks need. This picture is also true for Indian Banks that have deployed BCs. While the programme is still in its early stages and has the potential for deeper presence than the traditional bank branch, it needs to overcome several teething problems before it reaches full viability as a payments channel but it is not very clear if in its current form, as a dedicated channel, it will ever do so⁵⁶.

The available evidence suggests that while the National Bank with Agents design could eventually have some success at delivering payment services through its BCs, particularly in high revenue areas, there would be some significant credit risk if they were permitted to accumulate assets originated through BCs that do not bring any capital of their own with regard to the underwriting they carry out.

3. Regional Bank: This is a design in which there are several Regional Banks, each relatively small in size, that are full-service Banks (offering credit, deposits, and payments services). This design is also sometimes referred to as “Small Banks” or “Community Banks”. These are supervised directly by the national regulator and governed on a day-to-day basis by their local boards. While these banks may borrow some amounts in wholesale markets their principal source of funds is their local deposit base. A Regional Bank does not use Capital Markets for its resource raising nor does it use Agents in any form to reach its customers - its only means of serving customers is typically through its branches.

The country where this model of banking has historically thrived is the United States. It has 8,100 commercial banks, 1,200 Savings and Loans Associations, and 12,000 credit unions (cooperative banks). Its top ten banks have only 60 per cent of total assets compared to Canada or UK where 4 or 5 banks dominate the industry and have close to 90 per cent of the assets⁵⁷. Even in the USA though, despite its resilience, the model is in retreat⁵⁸ because National Banks and Non-Bank Financial Institutions have been able to bring both a wider range of products as well as lower cost of funds into the home markets of the Regional Banks. Developing countries that mandated community banks with low minimum capital requirements produced hundreds of institutions that have had solvency problems while not solving the inclusion problem (Nigeria, Tanzania) or have required intensive, subsidised upgrading programs (Philippines, Ghana). The jury is still out on Mexico, but risks are apparent. Supervisory capacity has been overwhelmed by many small institutions, leaving weaknesses uncorrected⁵⁹.

Regional Banks are likely to be able to process “soft” information for lending better than National Banks. However, their local nature also makes them more prone to “capture”. This could lead to persistent governance problems and owing to the higher exposure that they have to local systematic risk (weather, crop prices, and regional economic performance), they are likely to have to pay a higher rate to their depositors which in turn, might create the need to make “riskier” loans resulting in a vicious cycle of rising non-performing assets. The Regional Rural Bank which was conceived of as a subsidiary of larger National Banks was potentially a stronger design because it successfully dealt with the challenge of “capture” by local political interests owing to its relationship with its parent, but eventually did not perform as expected because gradually the culture and the cost structure of the parent National Bank permeated into the Regional Rural Bank as well and overwhelmed the attempts at building a truly regionally focussed institution. A design that seeks to significantly grow this category of institutions will place significantly higher regulatory and supervision demands. It is not clear that India is equipped for this. At the same time, there may be ways to leverage the existing network of these institutions in ways that don't create instability. All of these issues are discussed in greater detail in later chapters.

4. National-Consumer Bank: This is a type of National Bank design that focusses on consumer credit using sophisticated techniques such as credit scoring to deal with adverse selection and relying on collateral enforcement and credit reporting to address concerns relating to moral hazard. Some of the international banks in India have successfully used this strategy while building out their consumer finance and credit card businesses as have the domestic mortgage lenders. Sometimes this approach has been extended to small business lending as well. The credit risk often

remains high but is sought to be dealt with by charging very high interest rates. Developed financial systems infrastructure such as credit bureaus, and specialised collection agencies make the task of such lenders easier. However the experience of the US sub-prime crisis warns of the dangers of exclusively relying on credit-scoring approaches to origination⁶⁰ particularly in the “sub-prime” segment where the opacity of information is much higher. However, as “hard information” becomes more readily available, this route does represent an opportunity to extend credit on a nation-wide basis⁶¹, particularly for niche areas such as student loans. The Deposit taking NBFCs in India, including the Housing Finance Companies that take deposits from the public, may also be thought of as belonging functionally in this category.

5. National-Wholesale Bank: This is another type of the National Bank design which is not focussed on any particular region or sector. The asset creation activity of this bank is almost entirely in the form of wholesale loans to the corporate sector and purchases of high quality, rated, securitised and other assets from the capital market⁶², which include a substantial amounts of retail and small-business loans as well. They have no Agent networks but have a fairly high degree of interaction with capital markets as they constantly seek to optimise returns and portfolio quality. These institutions would be very large and would need to maintain very strong credit ratings and capital adequacy positions. These Banks could also emerge as strong investment banks as they seek to maximise returns on the high levels of capital required to maintain their ratings.
6. National-Infrastructure Bank: This is a variation of the Wholesale Bank wherein the institution focuses on one particular sub-segment of the wholesale market. It is not obvious that such an institution would need to be a full-service bank with deposit taking functions. It will need to diversify its balance sheet profile and actively manage it to ensure that it does not end up with high levels of concentration risks to particular sectors. The erstwhile DFIs were structured in this manner but because they failed to actively manage concentration risk they eventually failed. A current high-performing example is IDFC, which specialises in financing infrastructure projects without accessing public deposits.

Vertically Differentiated Banking Systems: This approach to design revisits the notion of a full-service bank itself and constructs different types of “banks” using the three building blocks of payments, deposits, and credit. Within India as well as around the world it is possible to find different examples of such specialised institutions such as the South Korean Post Office Bank (only payments and deposits), GE Capital (credit and payments), MasterCard and Visa (only Payments), India Post (deposits and payments), Mahindra Finance (credit and term deposits). The rationale for their existence is usually linked to niche capabilities such as credit under-writing for specialised business segments or network management in the case of payments. In this section, this approach to design is explored more fully, all the possibilities examined, and their merits and demerits discussed in some detail.

This approach produces five potential designs that are specified below:

S.No:	DESIGN	CREDIT	RETAIL DEPOSIT	PAYMENTS
1	PAYMENTS NETWORK OPERATOR	NO	NO	YES
2	PAYMENTS BANK	NO	YES	YES
3	FULL-SERVICE BANK	YES	YES	YES
4	WHOLESALE CONSUMER BANK	YES	NO	YES
5	WHOLESALE INVESTMENT BANK	YES	NO	YES

Each of these five designs is discussed in the following paragraphs.

1. Payments Network Operator: This is a dedicated payments company which does not accept deposits or issue electronic money (e-money) but merely routes payments from one point to another in an instantaneous manner, without holding any balances. In India, examples of this design include VISA, MasterCard, National Payments Corporation of India, and Corporate Business Correspondents such as FINO and White Label ATM providers such as Prizm⁶³.

A Payments Network Operator can be nested or independent. A Nested Payments Network Operator would need to partner with a bank (Sponsor Bank) to clear payments and the Sponsor Bank will participate in the payments network - the payments system would not directly deal with the Payments Network Operator. An Independent Payments Network Operator would directly participate in the payments system just like any other bank. This would include bank card network companies like VISA and MasterCard and also retailers that issue their own cards, such as Walmart. Currently India allows only Nested Payment Network Operators to operate but globally this is not always the case and if the size of the Payment Network Operator becomes large relative to its Sponsor Bank it could potentially create undesirable levels of contagion risks.

2. Payments Bank: This is a design that provides payment and deposits, but not credit. A Payments Bank may or may not pay interest on the account/wallet that it provides. Once again, a Payments Bank can be nested or independent. A Nested Payments Bank would need to partner with a bank (Sponsor Bank) to hold both the escrow account and to participate in the payments network. An Independent Payments Bank would be a direct participant in the payments system and instead of escrow balances with the sponsor bank would hold some combination of CRR and SLR directly with the Central Bank. Globally, in the inclusion context, Kenya's M-Pesa is the most successful example of a Nested Payments Bank. Over two thirds of Kenya's population now uses this service and about 25 per cent of the Kenyan GDP flows through it⁶⁴. A number of other products have started to be offered through the M-Pesa payments platform, including Bank deposits, loans and pre-paid electricity vouchers.

In India, Pre-Paid Instrument Issuers (PPIs) like Airtel Money and Oxigen are effectively Nested Payments Banks. They acquire the customer, issue a pre-paid wallet and facilitate transfer of value within their network (closed or semi-closed loops) or to a bank account outside their network (open loop). All balances in the wallets are held in escrow with a Bank and no interest is paid on such balances to the customer currently.

There is, however, a concern that nested designs in any form, including Nested Payments Banks create opacity. The Payments Bank has to take a view on the riskiness of its Sponsor Bank that holds its deposit balances and the Sponsor Bank has to worry about the operating quality and the likelihood of a "run" on its partner Payments

Bank. While today PPIs are not required to maintain capital, it would be important to evolve capital rules for operational risks and credit risk (of the Sponsor Bank) in the case of Nested Payments Banks and for operational and market risks in the case of the independent Payments Bank.

3. **Full Service Bank:** This is the traditional model of full-service banks whose variants are listed in Table 2.4.1.
4. **Wholesale Investment Bank:** This design is very similar to the Full Service Bank in the manner in which it operates on the asset side, but on the liabilities side it does not accept retail deposits (deposits less than Rs. 5 crore). The Wholesale Investment Bank does not make retail loans either, it only lends in niche wholesale markets such as infrastructure or corporates.
5. **Wholesale Consumer Bank:** Like the Wholesale Investment Bank, the Wholesale Consumer Bank also does not accept retail deposits. The Consumer Bank operates in retail lending, but could do this without necessarily building a large branch network, relying instead on sophisticated credit scoring methodologies.

Design Choices:

It would appear that a well-functioning financial system has a good mix of institutions that collectively meet the needs of the country while enhancing the stability of the system as a whole. Fortunately, in India, there are already many of the elements referred to previously and experience with multiple kinds of banking system designs. For example, India has significant experience of both the National Bank as well as the Regional Bank design. There are a robust set of NBFCs; and several PPIs are currently active. What is required is to evaluate these experiences systematically and accelerate the growth of the designs that seem to hold promise for financial inclusion and that are consistent with the design principles. Additionally, there is a need to enable significant partnerships between various institution types that leverage each of their strengths.

It has been argued that there are sound efficiency reasons for lending and deposit-taking to be combined in the same institution⁶⁵. However, these efficiency arguments can be dominated by effectiveness and risk management arguments if the same full-service banks turn out to be unsuited to the task for either building effective outreach or managing the associated credit risks. Additionally concerns regarding self-dealing are far more pronounced in the case of deposit taking institutions which are also authorised to lend, and may also end-up dominating the efficiency argument, particularly amongst financial institutions that have poor regulatory and market oversight. Within regional or sectorally focussed institutions, given the higher levels of risk implied by their lending portfolio and the inability of the local depositor to effectively diversify or even monitor the risk of the institution adequately, the depositor is likely to demand a risk premium which would increase the cost of funds of the financial institution by an amount greater than the efficiency gains implied by the sharing of the “liquid asset stockpile”. In the Indian context all of these concerns are visible and it would be important to have the regulatory flexibility to approach payments, savings, and credit independently (the Vertically Differentiated Banking Design) and to bring them together (the Horizontally Differentiated Banking Design) when the efficiency gains are high and the other costs are low. This is discussed in greater detail in subsequent chapters.

Section 3
Building a Ubiquitous Electronic Payments Network and Universal Access to Savings

Chapter 3.1 Introduction and Strategic Direction

Introduction:

The vision statements for payments and savings for small businesses and low-income household are:

By January 1, 2016 each Indian resident, above the age of 18 years, would have an individual, full-service, safe, and secure electronic bank account.

By January 1, 2016, the number and distribution of electronic payment access points would be such that every single resident would be within a fifteen minute walking distance from such a point anywhere in the country. Each such point would allow residents to deposit and withdraw cash to and from their bank accounts and transfer balances from one bank account to another, in a secure environment, for both very small and very large amounts, and pay “reasonable” charges for all of these services. At least one of the deposit products accessible to every resident through the payment access points would offer a positive real rate of return over the consumer price index.

India has a rich and diverse payments infrastructure in place already. A number of measures have been taken by RBI to “activate” this infrastructure⁶⁶ including the creation of:

1. The National Electronic Clearing Service (NECS) to “facilitate centralised processing for repetitive and bulk payment instructions”⁶⁷.
2. The National Electronic Funds Transfer (NEFT) payment system to facilitate (in a batch-mode with netting), “one-to-one funds transfer” from an account in “any bank branch” to an account in “any other bank branch in the country”⁶⁸.
3. The Real Time Gross Settlement (RTGS) System which is similar to NEFT but operates in real-time on a transaction to transaction basis and is “primarily meant for large value transactions”⁶⁹.
4. The Immediate Mobile Payment Service (IMPS), “an instant interbank channel agnostic electronic fund transfer service which includes mobile phones”⁷⁰ between customers of different banks.
5. White Label ATMs (WL-ATMs) by “non-bank entities” recognising that, “investments in ATMs have been leveraged for delivery of a wide variety to customers” and “expanded the scope of banking to anytime, anywhere banking through interoperable platforms”⁷¹. Although there has been nearly 23-25 per cent year-on-year growth in the number of ATMs (1,26,950 as of 30th August 2013⁷²), their deployment has been predominantly in Tier I & II centres. There is a need to expand the reach of ATMs in Tier III to VI centres (classification of centres as prescribed under the Census of India 2011). In spite of the banks' pioneering efforts in this direction, much needs to be done.
6. A Payments system for the issuance and operations of Pre-paid Instruments that are issued by banks and non-banks on an “Open System” and a “Semi-Closed System” basis respectively.⁷³
7. A Mobile Banking system permitting banks to offer services to their customer over mobile phones⁷⁴.

8. A network of Business Correspondents across the length and breadth of the country by permitted Banks to engage individuals, and for-profit and non-profit organisations as their agents for the performance of some of the core banking functions⁷⁵.

However, despite all this effort and the number of initiatives that have been taken, as can be seen from the data and discussion in Chapter 2.2, there is still a vast gap in the availability of even basic payments and savings services for small businesses and low-income households both in rural and urban India. However, the large presence of Business Correspondents, advances in mobile telephony, rural and urban broad-band connectivity, and the large scale roll-out of Unique-ID (Aadhaar) numbers (more than 50 crore generated by the end of November 2013 with more than 3 crore generated in November alone)⁷⁶ now offer an unprecedented opportunity to realise this vision and for India to leap-frog over several other far more developed countries in this area just as it has done in mobile telephony.

Strategic Direction:

As evidenced by the July 2002 date of its “Report of the Working Group on Electronic Money” India was one of the early movers amongst both developed and developing countries in formally exploring the potential of electronic money⁷⁷. However, driven by concerns relating to the loss of seigniorage income of the Reserve Bank of India (“...lesser private sector demand for central bank money and the consequent threat to the existence of the central bank”⁷⁸), and the lower perceived “credibility of non-bank financial institutions in India”⁷⁹, the Working Group recommended a model which restricted the full use electronic money only to scheduled commercial banks with very limited participation being permitted to non-banks⁸⁰. In the last ten years since the report was published, this appears to have been the guiding regulatory philosophy in India, even if not entirely for just these two reasons.

Given the sheer size of the country (33 lakh sq. km., 120 crore population) and the absolute poverty of a majority of its citizens (more than 60 per cent with an income below USD 2 per day)⁸¹, a large proportion of them do not have the financial capacity to absorb the costs associated with the management of physical currency notes and traditional branches. This implies that while some progress can indeed be made using a cross-subsidisation route or the use of more efficient non-branch but cash-based channels such as ATMs and Business Correspondents, the financial inclusion and efficiency gains associated with the wide-spread, even ubiquitous use of electronic money are likely to be very high. For these reasons making access to formal electronic payments infrastructure universal is a key component of the overall vision of financial inclusion and the RBI vision document on payments⁸² correctly aims towards an economy that is eventually entirely cash-less. In this document, RBI lays out the over-arching vision to “proactively encourage electronic payment systems for ushering in a less-cash society in India”. In addition to the obvious benefits to individuals and businesses, moving away from cash-based transactions to electronic transactions also has important efficiency benefits for the Government⁸³. A 2010 McKinsey study⁸⁴ while assessing the costs and benefits of digitising government payments in India estimates that the Government would save more than Rs.1 lakh crore per annum if it were to digitise all payments to and from the government.

In order for this state of the future to be realised, while clearly bank-led strategies will have a key role to play, it will become necessary to:

1. Address the concerns relating to the loss of seigniorage income by either concluding that it is not a serious problem or by finding alternate solutions for it.
2. Add to the work being done by the bank-led channels and develop new ways of harnessing the capabilities of non-bank institutions as independent participants in this

strategy while ensuring that concerns of Stability, Transparency, Neutrality, and Responsibility are not violated in the process and in particular a level-playing field is ensured for the existing scheduled commercial banks.

It is estimated that in order to achieve the vision, more than 30 lakh payment points will be required. The number of 30 lakh points itself is not daunting given the number of transaction points that already exist in urban India. What is required is a greater proliferation in rural India so that there is a more even distribution of points which have the ability to handle very small value transactions efficiently and in a secure manner. While, through the dedicated Business Correspondent model, banks have indeed been able to provide this functionality quite effectively in more densely populated urban areas, it is in the very low-revenue rural areas that they have faced a particular challenge and is perhaps the place where independent non-bank players such as telecommunications companies which have far bigger customer bases and a significantly deeper presence, may be able to add the most incremental value for the following reasons:

1. Banks are the most effective and efficient when credit and savings products are offered together. However, while ubiquity and the presence of 30 lakh access points is a desirable vision for payments and savings services, credit by its very nature is a significantly more specialised activity with important customer protection, and risk considerations for the financial system requiring the presence of better trained and higher cost personnel whom the customer needs to access relatively less frequently. Far fewer such points would be needed or for that matter would be supportable from a feasibility and viability point of view. And, while they would be more than adequate in number for the provision of credit, they may not be able to meet the requirements of a ubiquitous payments system.
2. While provision of credit is an important “adjacency” that is available when payment and savings services are integrated with it, there are a number of other businesses with adjacencies to payments which have even higher risk-adjusted margins than credit does, such as retailing and mobile telephony that, under the appropriate regulatory architecture, can increase the penetration of very low cost payment points, particularly in rural and low-income urban neighbourhoods where the revenue flows from purely “bank-like” businesses are not sufficient to ensure channel viability.
3. This approach also brings these non-banks firmly into the fold of financial services and facilitates system wide access to the very valuable data that they hold on their customers which otherwise would be accessible only with great difficulty. There would of course in any case be a need to put in place some carefully designed complementary infrastructure in partnership with these institutions that would facilitate such access. This issue is discussed in great detail in the chapter on Complementary Infrastructure later in the report.
4. When banks seek to partner with such businesses even for purely payments purposes, a problem of “pancaking” also occurs where both the bank and the front-end “Business Correspondent” partner such as a telecommunications company need to maintain account information for the client. Client revenues now have to support the cost of two accounts when they are barely sufficient to support one.

The above discussion does not, by any means, intend to conclude that the existing banks, if they so wished, using a variety of partnerships would not be able to offer payment and savings services to small businesses and low-income households, but it does suggest that the inclusion of additional participants could significantly accelerate progress towards universal access as long as it is done in a way that does not disadvantage existing banks.

The experience of both developed and developing countries has been consistent with this view.

In addition to exploring the potential of new channels, given the sheer size of the country and its unbanked population, there are also some critical enablers that will need to be in place to enhance the potential for impact of all the channels and to achieve faster and more orderly progress towards the goal of universal access to payments and savings services. The solutions to each of these problems will necessarily need to be very different from those taken by other smaller developing countries or the developed countries which have followed a more traditional pathway. These are related to the existence of a universal bank account, resolution of Know-Your-Customer (KYC) issues, suitable authentication strategies, and existence of smooth inter-operability across channels. The rest of this chapter will discuss each of these issues.

Universal Electronic Bank Account (UEBA)

There is considerable value in the existence of an electronic bank account that is automatically assigned to every citizen at the point that she gets an acceptable identity number such as Aadhaar. Opening bank accounts in field settings for individuals is both difficult and expensive. However, not having an account becomes a barrier even for the government to operationalise its various DBT schemes to low-income households. Additionally, the bank account has become an essential gateway to all financial services, including those supervised by other regulators. Not having one is equivalent to being shut out of the entire financial system.

One of the vision statements is that by January 1, 2016 each Indian resident, above the age of eighteen years, would have an individual, full-service, safe, and secure electronic bank account. The automatic bank account has to be provided by a high-quality, national, full-service bank. It is recommended that the following approach that leverages the Aadhaar number issuance process be pursued:

1. An instruction to open the bank account should be initiated by UIDAI upon the issuance of an Aadhaar number to an individual over the age of 18. The bank would need to be designated by the customer from amongst the list of banks that have indicated to UIDAI that they would be willing to open such an account with the understanding that it would attract no account opening fee but that the bank would be free to charge for all transactions, including balance enquiry with the understanding that such transactions' charges would provide the host banks with adequate compensation. In its discussions with members of the Committee, State Bank of India, Bank of Baroda and Axis Bank have indicated their willingness to participate. The Committee recommends that RBI issue a circular that permits banks to open such an account upon the receipt of such an electronic instruction. The Committee also requests all the other banks that have an interest in this to formally write to UIDAI.
2. UIDAI has already indicated that there are over 24 crore individuals that have an Aadhaar number and wish to have a bank account. UIDAI has agreed that it would facilitate an automatic opening of these accounts with banks that show an interest. The Committee also recommends that the RBI issue a circular indicating that no bank can refuse to open an account for a customer who has adequate KYC which specifically includes Aadhaar (as this data sent by UIDAI is same as e-KYC already recognised by RBI). The UIDAI would therefore be able to automatically send a request for those individuals who have not designated a specific bank but have indicated an interest in having a bank account opened to a bank which has a branch closest to the customer. Such a bank would be required to open this account under extant RBI regulations and send a letter to the customer indicating the details of this account.

3. The resident is of course free to open an additional account with any financial institution and map their Aadhaar number to it but the UEBA would remain active as a perpetual account as long as the Aadhaar number remains active. In order to ensure that the account does not get misused without the knowledge of the account-holder, the account could remain inactive until, by using it at least once in a properly authenticated manner she indicates her acceptance of the account, and its terms of use.

If a UEBA is not possible to be issued automatically there is a real risk that banks may directly or indirectly refuse to open bank accounts for under-banked customers which are full service or, as has been seen recently in the context of Basic Savings Bank Deposit accounts⁸⁵, if they indeed open them, refuse to make full service functionality operational on account of the costs involved. To address this issue, in Sweden, for example, banks cannot refuse to open a saving or deposit account under Section 2 of the Banking Business Act of 1987 while in France, Article 58 of the Banking Act, 1984 recognises the principle of the right to a bank account⁸⁶. A similar guideline would need to be issued to banks in India and aggrieved individuals would need to have the right to seek redress from RBI in case they have not received this account. Upon receiving such a complaint the RBI would need to ensure that such an account is opened within 30 days of receipt of the complaint.

An important issue behind the reluctance of banks has been the requirement to bundle a number of free transactions along with a basic bank account⁸⁷. This represents a real cost to the bank⁸⁸ and it is not clear that it represents an equivalent source of value to the customer or if indeed what is offered for free is the best route for the customer to access these services. In order to ensure that each customer is offered a UEBA in a manner that does not become a substantial drain on the banking system and that multiple channels evolve to serve the customer, it would be important for policy to move away from the notion of forced bundling (which is equivalent to hidden subsidies) to a strategy in which the customer needs to pay for every transaction but has a choice of competitive channels through which she can access her account at an affordable cost.

RBI and UEBA

Concerns have been raised around the digitisation of cash and its effect on monetary policy and in particular seigniorage revenue of the RBI⁸⁹. Given the fact that at Rs.12 lakhcrore of notes in circulation⁹⁰ this amounts to over 50 per cent of the RBI's balance sheet and at an average T-Bill rate of about 7 per cent represents an interest savings of about Rs.84,000 crore (about 1 per cent of Indian GDP) to the RBI (more than 100 per cent of its Gross Income during the same period), this is an important concern. From a public policy perspective seigniorage represents an effective tax on the financial assets of households and firms that are being held using currency notes. This is a global phenomenon and applicable in every country of the world and is a key component of the revenues of the Central Bank and the national exchequer. However, in India (and other developing countries) since the poor are likely to hold a larger proportion of their financial assets in such a form and, given poor progress on financial inclusion, are the least likely to substitute away from it, this tax, levied in its current form, acquires a highly regressive character.

Reports of the BIS Committee on Payment and Settlement Systems suggest that while, "so far no Central Bank has indicated an adverse impact on the size of its balance sheet due to a decline in the value of the banknotes in circulation as a consequence of widespread adoption of e-money. The ECB is of the view that the national Central Banks can maintain the size of their balance sheet if necessary by imposing minimum reserves on e-money issuers or by issuing e-money themselves"⁹¹. In India the switch to electronic money is already on its way but is likely to happen much more slowly but result in the steady

reduction in the seigniorage income of the RBI and impair its ability to finance its assets such as the foreign exchange reserves of the country.

All of this builds a case for the RBI or an Agent appointed by it to become the sole issuer of e-money and to invest in its rapid adoption as a medium of exchange with the goal of rapid phase-out of currency notes in circulation on a nation-wide basis. If indeed the RBI is able to become the sole issuer of e-money it could issue it directly to the other purveyors of e-money (as it does with notes in circulation now) and thus maintain only wholesale accounts on its books.

KYC Issues

Current KYC guidelines from the RBI are very different from those of other regulators and require that in addition to a proof of identity the individual provide documented proof of her current address. Proof of identity can be obtained by the individual from local authorities at the place at which they were born but proof of local address is much harder to obtain and is perhaps now the most significant barrier to opening a bank account for many individuals in urban and rural environments.

This requirement appears to be unique to the RBI and is neither required by the global Financial Action Task Force (FATF) nor even by other equally conservative financial regulators. FATF Guidance on Financial Inclusion (2013)⁹² states that, "...in a normal Customer Due Diligence (CDD) scenario, the FATF Recommendations do not require information to be gathered on matters such as occupation, income, or address, which some national AML/CFT regimes mandate, although it may be reasonable in many circumstances to seek some of this information so that effective monitoring for unusual transactions can occur." The FATF Guidance also expresses a concern that⁹³: "There are potentially negative consequences if the controls designed for standard risks and higher risks are also applied to situations where the risks are lower. This "over-compliance" approach by regulators and financial institutions could exacerbate financial exclusion risk, thereby increasing overall money laundering/terrorism financing risk. Regulators/supervisors should play a role and provide further guidance when institutions overestimate money laundering/terrorism financing risks or adopt overly-conservative control measures." The US Code of Federal Regulations governing this aspect of banking (31 CFR 103.121) not only does not require banks to verify the current address but defines address extremely broadly to mean: "For an individual: a residential or business street address, or if the individual does not have such an address, an Army Post Office (APO) or Fleet Post Office (FPO) box number, the residential or business street address of next of kin or of another contact individual, or a description of the customer's physical location."

The current approach being followed by the RBI is to allow customer accounts to be opened without any documentary proof of identity or current address if the amounts involved are less than Rs.50,000 and to insist on both once that limit is crossed⁹⁴. The Committee believes that a superior approach would be to insist on a strong proof of identity like Aadhaar in all cases and to require financial institutions to internally develop their own risk based processes which are linked to transactions monitoring and usage patterns to identify and address high risk cases once identity has been clearly established. This approach, in the Committee's view, particularly with the advent of Aadhaar, will make it much easier for multiple channels of financial access to become fully engaged in the task of ensuring universal access to payments and savings services. It will also serve to converge the KYC requirements of multiple financial and non-financial regulators making the process of customer acquisition and customer migration from one service provider to another much easier and more importantly, at lower costs. If this issue is clarified, the recently announced e-KYC guidelines⁹⁵ for example, can significantly accelerate the process of account opening.

Customer Authentication

As the payments network is sought to be scaled up, the manner in which a customer is sought to be identified and authenticated so that repudiation and fraud risks are minimised, becomes very important. Aadhaar is the crucial piece of infrastructure in this regard. If each of the payments points is enabled with an acquiring device with biometric capability, identification and authentication of the customer become very secure. However, there are three concerns on this issue, one that the authentication and transaction platform represents an additional investment of Rs. 15,000 for the transaction point and whether the merchant will be willing to invest in this; two, given that Aadhaar has not been activated as of this date for about 50 per cent of the population and that there are entire states such as Chhattisgarh and Madhya Pradesh which have low penetration, there may be a need for some intermediate solutions; and three, given the slow roll-out of broadband and GPRS, biometric authentication may not be feasible in the most remote parts of the country. In order to build ubiquity each of these issues needs to be addressed carefully:

1. The cost of biometric authentication devices is expected to fall sharply over a period of time due to the multiple-vendor architecture as well as developments in integrating biometrics with phones. Even in the current context if the merchant in-charge of the payment access point has a smart phone already then the add-on biometric device costs only Rs.3,000. This cost is sufficiently low that either merchants would invest in it themselves or the government could launch a scheme through the UIDAI to give these devices away.
2. Currently, India has an optical fibre network at the block level. Bharat Broadband Network Limited (BBNL) has initiated National optical fibre network (NOFN) project to provide connectivity in 2.5 lakh gram Panchayats in India. The Recent TRAI report: "Recommendations on Improving Telecom Services in the North-Eastern states: An Investment Plan", makes valuable suggestions on improving telecommunications and optic fibre outreach in the context of the North-Eastern states.
3. State Governments need to coordinate more closely with UIDAI, NPR, and BBNL to ensure rapid coverage of their states for both Aadhaar as well as broadband. The Committee recommends that authentication for the purpose of transactions happen in either of three ways:
 - a. Fingerprint in combination with the Aadhaar number or the bank account number (Token-less authentication)
 - b. One-time Password (OTP) in combination with the Aadhaar number or the bank account number (Token-less authentication)
 - c. PIN in combination with the Aadhaar number or the bank account number (Token authentication)

In the context of a UEBA, at the time that the account is created or an Aadhaar number is generated, the customer also provides her mobile number which is then mapped to her Aadhaar number and UEBA. Using this information where the customer does not have access to a payment access point, assuming that she has not changed her mobile number, she could request that a One-Time-Password (OTP) be sent to her registered mobile phone number so that she can then use it in combination with her Aadhaar number to authenticate herself. Developing additional alternative authentication strategies, in the Committee's view, would only delay the entire process.

Rural Branching Mandate

As discussed in Chapter 2.2, there still is a large gap between the number of full-service access points required for financial inclusion particularly as it concerns payment services and deposit products. While it is possible that the strong emphasis on achieving priority sector outcomes by building specialisations and the inclusion of newer business models and participants would have the effect of automatically and quickly filling in this gap, the Committee feels that just as in the case of PSL requirements, the time is not yet opportune for the complete removal of the 25 per cent rural branching requirement for unbanked rural (Tier 5 and Tier 6) centres⁹⁶. It welcomed the fact that in order to suit customer requirements RBI has already changed its understanding of what constitutes a branch⁹⁷. However, it felt that there is need for additional clarification on issues such as the nature of services provided, hours of operation, and the number of days/week that it should be open. The Committee proposes that under the rural branching mandate, a qualifying branch be understood to have the following features:

1. Minimum services available: account opening with e-KYC on an off-line mode, cash in, cash out, transfer initiation, balance enquiry.
2. Minimum hours of operation: 1,000 working hours per annum.
3. Minimum days of operation: 100 days.
4. Nature of employment of staff: not applicable/any.
5. Minimum infrastructure configuration: ability to directly transact on bank's CBS, ability to print an account statement.
6. Nature of ownership of infrastructure and premises: not applicable/any.
7. Minimum customer protection: bank takes full responsibility for all banking related grievances of the customer, customers covered by branch audit process of the bank, secured authentication as per bank's internal guidelines and extant RBI regulations.

The Committee also recommends that the policy of mandatory rural branching be reviewed regularly and be phased out once the goals specified in the vision statement for payments services and deposit products have been achieved.

Designs

The next few chapters in this section of the report will examine each relevant bank and non-bank channel carefully for its potential to serve small businesses and low-income households and, where necessary, make recommendations on how the channel could be strengthened and its potential better realised. The institutional designs that are relevant for the provision of payments and savings services in the Indian context are given below. Each of these designs and their variants has been described earlier in Section 4 in some detail:

1. National Banks operating through their branches or through agents;
2. Regional Banks;
3. Payment Network Operators (PNO); and
4. Payments Banks.

Recommendations:

- 3.1 Every resident should be issued a Universal Electronic Bank Account (UEBA) automatically at the time of receiving their Aadhaar number by a high quality, national, full-service bank. An instruction to open the bank account should be initiated by UIDAI upon the issuance of an Aadhaar number to an individual over the age of 18. The bank would need to be designated by the customer from amongst the list of banks that have indicated to UIDAI that they would be willing to open such an account with the understanding that it would attract no account

opening fee but that the bank would be free to charge for all transactions, including balance enquiry with the understanding that such transactions' charges would provide the host banks with adequate compensation. The Bank would be required to send the customer a letter communicating details of the account thus opened. The Committee recommends that the RBI issue a circular indicating that no bank can refuse to open an account for a customer who has adequate KYC which specifically includes Aadhaar. [Identical to Recommendation 5.1]

- 3.2 RBI should require a strong Proof of Identity (POI) for each and every customer and a documentary proof of one national address but waive the requirement of documentary proof for the current address, for the purpose of opening a full-service bank account. It should instead enjoin upon banks to carry out careful tracking of usage and transactions patterns to ascertain the risk levels of the customer and take necessary action based upon risk-based surveillance processes developed internally by each bank. [Identical to Recommendation 5.2]
- 3.3 Under the existing rural branching mandate, a qualifying branch may be understood to have specified features regarding minimum services available, minimum hours of operation, nature of employment of staff, minimum infrastructure configuration, nature of ownership of infrastructure and premises, and minimum customer protection. In addition, this mandate is to be reviewed regularly and be phased out once the goals specified in the vision statement for payments services and deposit products have been achieved.
- 3.4 Aadhaar is the key piece of infrastructure to enable a customer to be identified and authenticated so that repudiation and fraud risks are minimised and therefore should become the universal basis for authentication. However, with slow enrolment in some areas and low penetration of biometric devices and internet network connectivity in many areas, intermediate authentication methods such as PIN numbers and OTP could be used. State Governments need to coordinate more closely with UIDAI, NPR, and BBNL to ensure rapid coverage of their states for both Aadhaar and broadband.

Chapter 3.2 National Bank with Branches

Design Description

This is a design that comprises large scheduled commercial banks that operate on a nation-wide basis or a supra-regional basis using traditional branch banking and have the capacity to provide the full suite of payment and savings services including electronic bank accounts, payments services, and a full-range of savings products.

High Cost to Serve

In the context of bank accounts with small-value deposits or nil balances, the branch becomes a very high cost-to-serve channel for banks. Currently, RBI requires all banks to open a certain number of accounts in un-banked areas. The first generation of these accounts were referred to as “No-Frills Accounts” (NFAs) and had very little functionality beyond local deposits and withdrawals. The absence of integration with the Core Banking platforms (CBS) of the banks had created this situation. More recently, RBI has mandated that all these NFAs need to be converted to “Basic Savings Bank Deposit Accounts” (BSBDAs) accounts with a minimum set of features including inter-operability between different banks. Progress on this has been slow because from the bank’s perspective, the principal barrier is the cost of opening these BSBDAs without clear visibility on account balances and usage levels.

The traditional bank branch is neither an effective nor an efficient channel for directly serving low-income households and small businesses for their basic payments and savings product needs. There is also the added factor that branches have limited working hours and are fundamentally not suited for the “anytime access” that customers need. There is sometimes a view that is expressed that income from credit products that are offered to low-income households and small businesses will be able to compensate for losses from savings products. However, as is discussed in detail later in the section on credit products, for loans less than Rs.5 lakh in value, the bank-branches have shown themselves to be an extremely high cost and high-risk credit channel.

Valuable National Resource

Despite these limitations, from a financial inclusion perspective, the branch infrastructure of the banks continues to represent an invaluable national resource that can be more effectively utilised to provide a number of important services on the payments and savings front:

1. Branch as a Gateway: For larger businesses and upper income households who would necessarily seek to build integrated relationships with their financial services provider, as the proportion of such households grows even in rural and semi-urban areas, branches would become an essential component of the delivery strategy of any financial institution for both payments and credit. For small businesses and low-income households that seek to graduate from their relationships with local providers, the presence of such “gateways” to National Banks would be invaluable. In order to free-up capacity to service such customers and to thus maximise their own profitability, branches of National Banks could be strongly encouraged to use agent based models to address routine requests from all customers and all requests from small businesses and low-income households. They would also need to slow down the growth of such branches to match the requirements of larger businesses and upper income households otherwise they risk adversely impacting their own profitability and thus have a negative impact on the stability of the financial system as a whole.

2. Branch as a Cash and Cheque Management Hub: With strong support from the RBI, even if e-money becomes the dominant medium of exchange it is likely to take a number of years and notes in circulation are likely to have an important role. In this context branches, with their strong rooms, trusted and highly trained personnel, and a close relationship with the RBI could become operators of a much larger number of RBI Currency Chests so that both dematerialisation and re-materialisation of currency notes to and from e-money can happen smoothly at a number of locations spread-out nationwide. For the provision of these services these branches could be paid out a service charge.

In terms of its core business, a framework could be developed that allows each bank branch to operate in a fully inter-operable manner vis-à-vis other banks. For example while cash-in, cash-out, and remittances can be handled at agent locations in an interoperable manner, only bank branches currently have the ability to handle cheques. Cheque clearing, can be carried out by branches in an inter-operable manner as the Cheque Truncation process does not require the physical cheque issued by the drawer to be presented for clearing. This could become yet another source of fee-income for bank branches.

3. Branch as an Enrolment Hub: Similarly there will be a continuing need to ensure that customers are properly identified and their electronic identities established. Once the current “camp-mode” of providing Indian residents with Aadhaar numbers concludes, given their extensive presence, bank branches could become a very good system-wide resource for the issuance of Aadhaar numbers and for the careful verification of proof of identity and proof of address documents submitted by residents.
4. Branch as a Risk Management Hub: Experiences both globally as well as in India clearly point to fact that while from a cost perspective the branch is an expensive resource, from a risk management perspective, in an environment where multiple channels will be deployed by the Bank to serve the low-income household and the small business customer, the branch does have an important role to play, particularly if the branch is organised in a manner that allocates substantial decision making powers to it and tracks its overall performance using metrics such as RAROC - thus creating a full “bank-in-a-bank” model.

Chapter 3.3 National Bank with Agents

Design Description

This design refers to banks that seek to extend the reach of their branches through the use of agents. It is one of the ways employed by them for reducing costs and improving outreach. Under current regulation an agent used by the bank for these purposes is referred to as the Business Correspondent (BC).

Low Financial Viability

This is a very powerful channel and countries such as Brazil have ensured that vast segments of their populations have been covered by the Business Correspondents of existing commercial banks. Every municipality in Brazil is reached by banks with 1 in 4 municipalities being served only by business correspondents. In 2008, bill payments comprised 75 per cent of volume and 70 per cent of value transacted through Brazilian correspondents⁹⁸. Various studies reveal that in absolute terms, the number of BC points in rural India is very large and showing very encouraging signs of growth both in rural and urban areas. As of March 2013, there were 2,21,341 business correspondents engaged by banks, having grown by 548 per cent since 2010.⁹⁹ However, the fraction of them actively transacting is very low, particularly in rural areas and low-income urban neighbourhoods where they are most needed and alternate channels such as ATMs are not available¹⁰⁰. This has resulted in an absence of financial viability and several have now started to shut down. Field research by College of Agricultural Banking, CGAP, and MicroSave suggest that over 75 per cent of accounts opened and over 25 per cent of BCs are dormant¹⁰¹.

This suggests that urgent action needs to be taken if all the investments that have been made in building these networks are to result in the financial inclusion benefits that were anticipated when the channel was originally conceived. The financial viability of the Business Correspondent, particularly in rural areas, is a key challenge but a number of steps can be taken to address it. The core of the strategy for doing this has three components - improve revenues by exploiting existing or building new “adjacent” revenue streams, ensure fair compensation for services provided by the agent, and reduce costs.

Building Adjacencies

“Adjacencies” can arise from three sources: transactions, credit, and the real-sector.

1. Transactions Adjacencies: Instead of treating the BC as an independent third-party operating on a stand-alone basis, some banks have successfully integrated them seamlessly into their day-to-day operations. Routine transactions of all customers such as balance enquiry, balance statement, and small-value cash-withdrawals are all handled by the Business Correspondent thus allowing the branch itself to focus on high value customers and transactions. The savings in costs that have accrued to the branch have more than paid for the fixed costs associated with operating this channel and have allowed the bank to extend the reach and profitability of its entire operations in its command area. Dena bank illustrates such an arrangement with its BC wherein it pays a monthly remuneration of Rs. 2,000 plus commissions for carrying out operations such as account opening, organising financial literacy camps, sourcing loans resulting in sanction and disbursement, maintaining records, and post-sanction monitoring and recovery of loan accounts.
2. Credit Adjacencies: The services of the BC can also be employed to provide access to a broader range of financial services, including credit and insurance so that he now has multiple revenue streams. While, as discussed later in Chapter 6.1, the existing BC

model does not lend itself very well to such an approach being adopted, there are ways in which the BC can be made into a stronger credit originator for the Bank and thus acquire this adjacency effectively but this may well come at the cost of ubiquity since not all BCs would be able to benefit from this adjacency.

The other alternative is for the bank to work with ND-NBFCs as their BCs. These entities currently offer credit on their own account and are regulated like banks in their discharge of that function but, under extant regulations, are not permitted to act as BCs. This stems in part from the concern around the isolation of the cash from deposits collected by the BC on behalf of the bank from the lending activities of the NBFC (comingling risk), and in part from the desire to ensure that banks do not inadvertently end-up strengthening a potential competitor on the assets side (competition risk). The issue of “competition risk” is very much a commercial one and is best left to the bank to resolve as it builds out its partnerships. Even the former issue is related to how the bank is able to ensure that the funds of its customers are not comingled with that of the funds of the ND-NBFC. With technology enabling intra-day clearing of funds, it is not obvious that this is anymore a risk factor that cannot be managed by a bank. Regulation should permit ND-NBFCs to be BCs for National Banks where they can take deposits on behalf of the National Bank and offer credit from their own balance sheet or in risk-sharing partnerships with that bank or any other bank. ND-NBFCs have a vast reach on the ground and those that are classified as NBFC-MFIs in particular are able to access customers well beyond the reach of the bank branches. BC partnerships between banks and such NBFCs could prove to be very valuable.

3. Real Sector Adjacencies: Real sector adjacencies obtain when BCs provide access to payments as well as a broader range of non-financial services such as mobile phone top-ups and retailer revenues. This approach extends what existing merchants with POS terminals do in urban areas into the rural context. Globally large non-financial companies offer payment services to increase the potential to garner new revenues. For instance, Diconsa, an operator of 22,000 grocery stores in rural Mexico, began a program to deliver cash payments from government benefit programs to people in its stores. Since they began doing this, they have seen customer visits and foot traffic increase by 20 per cent¹⁰². This model of ‘adjacent’ non-financial revenue possibilities seems highly scalable without creating additional risks to the financial system. Similar partnerships are being explored in India between banks and Community Service Centres (CSC) as well as mobile phone companies and have demonstrated a great deal of potential for growth. Many CSCs already facilitate the opening of savings accounts, the distribution of government payments, and the distribution and processing of loans and Kisan Credit Cards¹⁰³. Axis Bank, for instance, has partnered with Airtel and Idea to leverage their wide outreach in rural areas.

Adequacy of Fees

These are principally related to when BCs intermediate G2P payments and when they support other transactions.

1. G2P Payments: The Report of the Taskforce on the Aadhaar-enabled Unified Payments Infrastructure recommended that a fee of 3.14 per cent (subject to a cap of Rs. 15.71 per transaction) be paid for Direct Benefit Transfer (DBT) payments originating from governments. However government departments have been reluctant to pay these fees to the banks. This situation needs to be urgently corrected if the governments are to realise the benefits of DBTs actually reaching the end-beneficiary. The Madhya Pradesh State Government has followed an entirely different path and has ensured, through a heroic coordination and database creation effort, that all the government schemes

pay-out electronically and do so through a single bank / BC location in every 5 kilometre radius (implying an area of about 80 sq. km.) which also includes the bank account of the Panchayat. This has allowed them to successfully make the DBT payments in some of the poorest parts of the State¹⁰⁴ while ensuring that the branches and BCs that provide these services remain viable despite very low levels of fees being paid to them by the government on account of the sheer volume of money flowing through them. It is hard to see however, how such an effort, while highly admirable, can be replicated elsewhere or even extended deeper into those very regions to provide comprehensive financial services beyond DBT, in the absence of an adequate amount of fees being paid out by the State Government.

2. Charging for services: A rural BC carries out between 1 and 10 transactions per day while an urban agent does 10 to 60 transactions a day. However, despite this, banks are much more willing to charge urban customers than they are rural customers. For instance, on a deposit of Rs. 5,000 an urban customer is charged 2 per cent (or Rs. 100) while the same transaction for a rural customer yields a total charge of Rs. 6 to be shared between the Bank and the BC¹⁰⁵. As discussed earlier, while there is no regulatory barrier, banks would need to allow the BC channel to charge a remunerative fee to the customer if the BC channel is to thrive.

Reduction of costs

While the BC provides an additional channel for Account Opening that is proximate to low income households, the account is hosted with the Sponsor Bank. As a result, the costs associated with account opening and maintenance discussed in the earlier chapter, are applicable here as well. These costs, particularly those associated with Information Technology and the high level of branch-personnel engagement in the process of account opening would need to be resolved to ensure the viability of this channel as a whole.

Interoperability of BCs

Another key limitation that has severely restricted the number of transactions that are being carried out by each BC is the fact that it is restricted to operating only those accounts directly opened by it within the parent bank. Given multiple banks and multiple schemes, it is entirely possible that the members of the community hold bank accounts with multiple banks. A BC with full inter-operability would be able to easily give them access to their own bank accounts despite being appointed by another bank. There are no regulatory barriers to accomplishing this¹⁰⁶. A number of banks have activated this and an inter-change price has been agreed to as a result of the efforts of the IBA. The only barrier now is for each bank to migrate their legacy No-Frills Accounts to an inter-operable switch and follow the RBI guidelines on BSBDA's. There is slow progress on this front.

Specific Regulatory Barriers

There is also value in eliminating regulatory barriers that are preventing the effective utilisation of this channel. In particular historically there are several approvals available to merchants that operate POS Terminals in urban India which, for some reason, have been taken away from rural BCs who offer an identical functionality. These need to be made available to the entire BC network as well. These include:

1. NBFCs are not permitted to own and operate BC networks while they are permitted the same for ATMs and POS terminals. The concern that has been expressed here is that there may be potential for conflict of interest because the NBFC is a lending channel and may co-mingle deposits raised through its BC activity. The Committee is of the view that this may be left to the judgment of banks. There are adequate technology solutions available to do intra-day reconciliations between the Bank and its BC.

2. There are distance criteria (30 km for rural and 5 km for urban) which are specified in terms of the distance between the BC and a branch of the Sponsor Bank, while there is no such restriction for ATMs. The concern that has been expressed here is that some branch oversight of BCs is required from a cash management and operational perspective. The Committee is of the view that this may be left to the judgment of banks to decide.

BC Networks

There are two types of BC networks emerging in the country - one established directly by the bank through their branches and others created by various government and private sector entities. There are a number of benefits and challenges associated with each of them.

1. Pay Parity: Demands for pay and job parity from individual BCs directly engaged by bank branches. This concern arises from a similar experience that banks had when the “pygmy banking” scheme was deployed by them several years ago. Ensuring that each BC has adequate work and is able to earn more on the basis of increased effort and engagement would be the best way to address this concern.
2. Technical Support: Poor technical support provided by branches to individual BCs particularly in case of breakdown of machinery. Ensuring that the contracts with equipment providers include a provision for on-going maintenance will be key to addressing this issue.
3. Performance of CSPs: Low performance by the Customer Service Points (CSPs) of corporate BC networks. The concern here is that while corporate BC networks are able to successfully address the human resources and technical support issues, the quality of performance by their CSPs has a highly variable nature. Compensating corporate BC networks adequately, building in strong penalties for non-performance, and getting branches engaged in the supervision of the CSPs would all be key aspects of addressing the performance issue of CSPs.

Recommendations:

- 3.5 Restore the permission of ND-NBFCs to act as BCs of a bank. Concerns around commingling can be effectively handled through technology-based solutions such that all settlements happen on an intra-day basis. In addition, eliminate the distance criteria between the BC and the nearest branch of the sponsor bank. Allow Banks to decide operational criteria.
- 3.6 The Taskforce on Aadhaar Enabled Unified Payment Infrastructure recommended that State Governments pay a fee of 3.14 per cent (subject to a cap of Rs. 15.71 per transaction) for Direct Benefit Transfer (DBT) payments originating from governments. RBI should enjoin upon State Governments to implement the same.

Chapter 3.4 Regional Bank

Design Description

This is a design in which there are several regionally focussed full-service banks, each relatively small in size, which offers credit, deposits, and payments services. This design is also sometimes referred to as “Small Banks” or “Community Banks”. These banks are supervised by the RBI through NABARD and are governed on a day-to-day basis by their local boards. The Cooperative banks though licensed by RBI are registered under the respective State Cooperative banks. A Regional Bank does not use capital markets for its resource raising. While cooperative banks with their network of PACS do not use agents in any form to reach their customers, the RRBs in addition to their branches, have begun to deploy BCs and CSPs to reach out to their clients. As on 30th September 2013, RRBs have deployed 30,352 BCs and 24,279 CSPs¹⁰⁷.

Poor Technology Infrastructure

Regional Banks have lower human resources and infrastructure costs and are closer to the customer and are therefore, better equipped to originate deposits and offer payment services vis-à-vis National Banks that operate through branches. They also have an extensive branch network and very large existing customer bases with the potential to add new ones relatively easily¹⁰⁸. They have experienced personnel who have had many years of experience and training in handling cash and have well developed cash management and fraud-control processes. They are also well equipped to handle all the traditional banking instruments such as cash, cheque, demand drafts, and can relatively easily be trained in the use of new devices that work with biometric authentication. The environment of a branch offers the customer safety and privacy that compares very favourably with that offered by a local agent.

While there has been some progress, more effort is urgently needed to complete the task of upgrading the technological infrastructure of these banks. As on 31 October 2013, 23 of the 31 StCBs and 257 of the 370 DCCBs were on the CBS platform and will be offering technology based services such as NEFT and ATM by 31st March, 2014. While PACS are yet to fully embrace technology, a few State Governments such as those of Odisha and Gujarat have initiated the process of computerising them¹⁰⁹. Such measures will make them very well placed to offer a much broader range of savings products to their customers as well as connect smoothly with national platforms such as RTGS.

Significant Challenges on Credit

However, a significant challenge that they face is in regard to deployment of their resources since their local nature also makes them more prone to “capture”. This has led to persistent governance problems and owing to the higher exposure that they have to local systematic risk (weather, crop prices, and regional economic performance), they are likely to have to pay a higher rate to their depositors which in turn, might create the need to make “riskier” loans resulting in a vicious cycle of rising non-performing assets and eventual losses to their depositors. Addressing these issues is likely to be difficult but feasible for those institutions and State Governments that are willing to resolve them effectively. Possible directions that this effort could take are discussed in detail in Chapter 4.6.

Payments and Savings: Regional Bank

Payments Bank

Regional Banks that are demonstrably unable to perform the credit function could move towards an environment in which they are able to function purely as Payments Banks. While this would be an option available to all banks, it could be mandated for those Regional Banks that have a non-investment grade rating from an independent rating agency or a low internal supervisory rating from the RBI.

Branch as a Cash & Cheque Management Hub

As in the case of National Bank with branches, the branch network created by RRBs and DCCBs represents a useful infrastructure that should be leveraged effectively. Therefore existing rural branches of Regional Banks should be made inter-operable and act as acquirers for all transactions in that region and the regulator must allow Regional Banks to charge a fee for providing inter-operability. Unlike National Banks with branches, not all Regional Banks have a Core Banking solution at present, though this process is on-going. In order to even move in the direction of interoperability, this will be a fundamental prerequisite.

Chapter 3.5 Payment Network Operator

Design Description

A payment network operator is responsible for interoperability, interconnectivity, clearing, and settlement between various payment ecosystem providers such as NPCI, Visa, MasterCard, RBI, and clearing houses such as NEFT.

These are very important channels through which a very wide variety of customers, both low-income and middle-to-high income are able to access the payments systems and their savings and credit accounts with various banks and financial institutions. RuPay cards have been recently issued to farmers that have KCC accounts and represent a promising low-cost innovation. VISA, Mastercard, and RuPay are PNOs that have direct access to the settlement system without the need to process their payments through a sponsor bank even though all their cards are issued only in collaboration with a bank.

Contagion Risk Concerns

Historically ATMs in India have been an integral part of a bank network. As a recent innovation White Label ATMs (WL-ATMs) have been permitted to emerge as independent PNOs. There are currently 2 White Label ATM operators authorised by the RBI, namely Prizm and Tata Communications¹¹⁰. However, currently White Label ATMs (WL-ATMs) require a sponsor Bank at the back-end that is linked to the payment and settlement system. The WL-ATM directly does not have access to the settlements system. As discussed in Section 2, this 'nested' design where the PNO speaks to the settlements system through the Sponsor Bank is fraught with contagion risk. If the WL-ATM grows very large compared to the Sponsor Bank, it could create undesirable levels of contagion risk from the PNO to the Bank. In order to prevent this build-up of risk, the WL-ATM could be given direct access to the settlement system.

White-Label BC

A challenge faced by Corporate BCs today is the extent of dependence on the Sponsor Bank, oftentimes for simple operational decisions such as the hiring and location of agents. BCs also tend to be constrained for liquidity on account of high levels of Account Receivables from Banks¹¹¹ and a high level of variability in the interest that the bank and its branch managers have in supporting this network. This level of dependence and the business uncertainty that arises as a consequence is not conducive to long-term planning and growth of the BC channel and nor is it desirable for each bank to try and put in place parallel networks making it difficult for even one of them to be viable, on account of fragmentation of the business. The National Bank with BC design must be enabled to grow, and one way to enable this is by allowing high-quality, independent White Label BC Network Operators to emerge as PNOs which can also increase penetration of payment points in the country. This has already happened in the context of ATMs and the objective here would be to loosen the tight coupling between the BC and a Sponsor Bank by allowing the BC greater operational flexibility as well as more degrees of freedom in determining charges to customers. The White Label BC should be fully inter-operable and will have the ability to work with multiple banks at the back-end. Potential candidates for such a license could include NBFCs, existing corporate BCs, mobile phone companies, consumer goods companies, the post office system, and real sector cooperatives

Parameter	Bank ATM	Bank BC	White Label ATM	White Label BC
Independent access to settlement system	No	No	Yes	Yes
Need for a sponsor bank	Yes	Yes	No	No

Emergence of Money Services Businesses

With the emergence of NPCI’s Immediate Payments Service which can allow individuals to transmit money to each other and to and from merchants using mobile phones, even with different banks hosting their bank accounts, there is the very real and very welcome possibility that there will be rapid and spontaneous proliferation in the network of individuals and merchants that are willing to participate in “money services businesses” allowing purchase and sale of goods as well as cash-in-cash-out and remittance services using mobile based transactions to grow rapidly. In the Committee’s view the RBI should be supportive of this trend but require those individuals, merchants, or large companies that wish to become formal Money Services Businesses (MSBs) and advertise themselves as such, to register themselves with local State level authorities and place a deposit with them of an appropriate amount and sign an undertaking to follow a suitable “Fair Practices” code. This has very much been the practice followed in the USA for example to govern the behaviour of the various Check-Cashing Businesses that have proliferated.

RBI should provide an enabling environment for such MSBs to emerge and once it appears that significant players could emerge in this space, issue clear guidelines on licensing and authorisation of MSBs. MSBs in the US, for instance, are governed by State level statutes. The Vermont statutes on banking and insurance covering MSBs for example, provides detailed guidance on eligibility for becoming an MSB and the process for obtaining an MSB licence. There is a one-time application and licence fee of USD 1,000 and the issuance of a licence is based upon a thorough investigation of the applicant’s financial condition and responsibility, financial and business experience, character, and general fitness¹¹².

Recommendations:

- 3.7 In order to address contagion risk concerns, instead of requiring White Label ATMs to access the settlement systems in a “nested” manner through a sponsor bank, provide them direct access to the settlement system subject to certain prudential conditions, to mitigate operation risk.
- 3.8 In order to ensure that the BC infrastructure that is established is utilised in an optimal manner and shared by multiple banks, which may each have account holders in a specific geography, allow high-quality White Label BCs to emerge with direct access to settlement systems subject to certain prudential conditions. This would be similar to Recommendation 3.7 vis-à-vis mitigating operations risk in the White Label ATM network.

Chapter 3.6 Payments Bank

Design Description

This design is functionally equivalent to a recently introduced class of companies called pre-paid instrument providers (PPIs) that are permitted to receive cash deposits from customers, store them in a digital “wallet”, and allow customers to pay for goods and services from their digital “wallet”. These companies are currently permitted to accept a maximum amount of Rs.50,000 in their “wallet” from their customers and are required to maintain an escrow account with a scheduled commercial bank where these aggregate amounts received from customers are credited immediately upon receipt. There are currently 27 PPIs authorised by the RBI under the Payment and Settlements Act, 2007¹¹³. These players have enabled significant expansion of low-value payments services among individuals who hitherto have never used banking services.

Even globally, similar innovations have taken root and gone further than they have in India. Most jurisdictions have created room for the participation of non-bank institutions in enabling payments. In 2007, the EU adopted the Payment Services Directive (PSD) for a harmonised legal framework for retail payment services. The PSD contains both prudential requirements and civil law provisions pertaining to the various payment service providers and the payment services they provide. To promote competition, a new group of payment service providers, the so-called “payment institutions”, has been created. They can offer payment services without being a bank and do not have to cover the entire range of services provided by a bank. In addition, the rules pertaining to the execution of transactions have been clearly defined¹¹⁴. A BIS report on payments states that, in Japan, non-banks are allowed to provide funds transfers. In South Africa, non-banks can become designated clearing system participants and have full access to the clearing system provided that they meet the Central Bank’s requirements¹¹⁵.

Given all these developments, any financial inclusion strategy would not be credible if it did not envisage a clear role for independent non-bank participation in the provision of payment and deposit services.

Pre-Paid Instrument Providers

1. KYC Issues

PPIs have been provided relaxed KYC requirements for their customers¹¹⁶ in exchange for limiting the value of transacted amounts on a wallet to Rs. 50,000 and restricting cash-out on wallets to banking outlets alone. Recognising that not allowing cash-out represents a key limitation of the product, a limited pilot has recently been permitted to the PPIs for cash-out. While the restriction of transaction amounts may be justified given that the focus of PPIs is to enable payment services for unbanked individuals, these two measures do not provide adequate protection against AML/CFT risks. Given the growing spread of e-KYC, it may be feasible for PPIs to benefit from this and have KYC standards at par with banks, particularly if the stipulation to obtain documentary evidence for current local address is removed for all providers, including banks.

2. Customer Authentication

As the PPI network is sought to be scaled up, the manner in which a customer is sought to be identified and authenticated so that repudiation and fraud risks are minimised, becomes very important. As in the case of KYC, Aadhaar is the crucial piece of infrastructure in this regard. If each of the payments points is enabled with an acquiring device with biometric capability, identification and authentication of the customer

become very secure and concerns regarding AML/CFT are also addressed satisfactorily. However, there are three concerns on this issue, one that the authentication and transaction platform represents an additional investment of Rs. 15,000 for the transaction point and whether the merchant will be willing to invest in this; two, given that Aadhaar has not been activated as of this date for about 50 per cent of the population and that there are entire states such as Chhattisgarh and Madhya Pradesh which have low penetration, there may be a need for some intermediate solutions; and three, given the slow roll-out of broadband and GPRS, biometric authentication may not be feasible in the most remote parts of the country. As discussed earlier, these concerns are either not serious ones or are expected to get resolved in the near future. While Aadhaar is essential for account opening, it is not essential for account operations. The Committee recommends that authentication for the purpose of transactions happen in either of three ways:

- a. Fingerprint in combination with the Aadhaar number or the bank account number (Token-less authentication)
- b. One-time Password in combination with the Aadhaar number or the bank account number (Token-less authentication)
- c. PIN in combination with the Aadhaar number or the bank account number (Token authentication)

Developing additional alternative authentication strategies, in the Committee's view, would only delay the entire process.

3. Savings Product Designs and Payment of Interest

Currently PPIs are prohibited from paying interest on the balances held by them in the customer's digital "wallet". Given that balances in wallets may represent substantial amounts relative to the savings of low-income households in particular, it seems very important to find a mechanism to pay interest on these balances. However, in the current environment, PPIs do not earn interest on their escrow balances with the sponsor bank and hence their ability in turn to pay interest to their wallet customers also would be constrained even if they were permitted to do so.

4. Contagion Risk

There is also the concern about the safety of funds being held by the PPIs that arises from contagion risk. If the sponsor bank fails for some reason then since the amounts held by the PPI with the sponsor bank are at risk, the amounts held by individuals with the PPI are also at risk and do not enjoy the benefit of deposit protection unlike the direct depositors of the sponsor bank itself. Such a nested approach creates opacity and screens the build-up of risk in the system. The PPI has to take a view on the riskiness of its Sponsor Bank that holds its deposit balances and the Sponsor Bank has to worry about the operating quality and the likelihood of a "run" on its partner PPIs¹⁷. All nested structures have this feature and there may be greater stability obtained from independent designs where the PPI deals directly with the RBI rather than through a Sponsor Bank.

There is global evidence of a shift in this direction. Brazil's law 12865 creates a new legal entity known as a "payments institution," which will be regulated by the Brazilian Central Bank. Under the law, electronic money is not considered a deposit and is issued by a third party under a licence from the financial sector authority. Digital wallet providers, card issuers, and mobile network operators are eligible to apply for payments institution licences. Initial minimum capital requirements have been established by Circular 3683 (Brazilian Real 2 million), and Circular 3681 includes several risk management requirements (including a minimum net equity). Licensed payments institutions will be

granted access to the clearing and settlement facilities operated by the Central Bank, but they are not mandated to use it. Upcoming circulars/resolutions will likely elaborate on this point. The balance of payment accounts must be fully allocated to a specific account at the Central Bank, or else in federal government bonds, as established under Circular 3680. Moreover, this circular allows for simplified KYC procedures for low-value pre-paid payment accounts¹¹⁸.

South Africa is another country that has ventured in this direction. In 2007, the South African Reserve Bank acknowledged that non-bank Payment Service Providers (PSPs) have an important role to play in the payments system. The Reserve Bank published directives in 2007 regulating their participation in the payments system. By the end of 2008, amendments were made to the National Payment System Act to provide the Reserve Bank with the mandate to designate non-banks as designated clearing system participants, thereby formalising their participation in the payments system¹¹⁹.

Payments Bank

Given these significant concerns with the current PPI model with respect to KYC, inability to pay interest on balances, and contagion risk; and taking into account the need to urgently provide access to payment services and deposit products to millions of individuals, the Committee recommends that a set of banks may be licensed under the Banking Regulation Act, which may be referred to as Payments Banks. Potential candidates for such a license could include separately capitalised subsidiaries of NBFCs, existing corporate BCs, mobile phone companies, consumer goods companies, the post office system, and real sector cooperatives.

1. Regulation Neutrality

Payments Banks would need to have the following characteristics to balance proportionate regulation with competitive neutrality:

- a. Given that their primary role is to provide payment services and deposit products to small businesses and low-income households, they will be restricted to holding a maximum balance of Rs. 50,000 per customer.
- b. They will be required to meet the CRR requirements applicable to all the Scheduled Commercial Banks.
- c. They will be required to deposit the balance proceeds in approved SLR securities with a duration of no more than three months and will not be permitted to assume any kind of credit risks.
- d. As in the case of a full service bank, it would be required to satisfy capital adequacy requirements for both market risk and operations risk¹²⁰.
- e. In view of the fact that they will therefore have a near-zero risk of default, the minimum entry capital requirement for them will be Rs. 50 crore compared to the Rs. 500 crore required for full-service SCBs.
- f. They will be required to comply with all other RBI guidelines relevant for SCBs and will be granted all the other rights and privileges that come with that licence.
- g. Existing SCBs should be permitted to create a Payments Bank as a subsidiary¹²¹.

2. Competitive Concerns

There is also a concern regarding Payments Banks that are subsidiaries of mobile phone companies, which could potentially face a conflict of interest while serving their partner banks and operating as independent Payments Banks at the same time. In order to preempt these anti-competitive concerns, the Committee recommends that all mobile phone companies must be mandated to provide USSD connectivity as per recent TRAI regulations with the price cap of Rs 1.5 per 5 interactive sessions. In addition, they must be mandated to categorise all SMSs related to banking and financial transactions as Priority SMS services with reasonable rates and to be made available to the banking system.

3. Efficacy of Financial Inclusion

There is a concern that since customers need payments, savings, and credit services an approach that offers these to clients separately will not end up serving them adequately. No doubt customers require access to payments and credit on a convenient, continuous basis. However, there is demonstrated customer preference for a combination of differentiated channels to access payments and credit. A customer would often access payments through a 24X7 ATM whether or not owned by her bank branch or via a credit card POS terminal at a merchant location while for credit, they would be happy to go to have their application evaluated at a more central location.

NBFCs, including MFIs and HFCs, have successfully demonstrated that with no access to payments information, they have been able to build strong credit portfolios using a number of credit risk proxies as well as soft information. There is also evidence that for first time borrowers, information from mobile phone records and utility bill payments provides very strong credit intelligence. Furthermore, it is true that when a customer operates her payments account, she also generates information that would be useful for credit decision making. However, it is not clear that bundling any one of these services with credit is the best way to identify credit-worthy customers. The Committee feels that the best way to do this would be to make sure that adequate complementary infrastructure is created (as discussed in chapter 4.9) that the customer herself is able to aggregate data from all these sources and authorise usage by designated providers who assume credit risk on her, such as post-paid mobile phone accounts, utility providers, and formal lenders.

Nothing in the design limits the ability of the customer or the full service Bank to build a relationship on payments and lending. In fact, the current approach uniquely advantages a full service bank to use its own private information on the customer's payment behaviour in combination with information from credit bureaus, mobile phone records, and utility bill payments to offer competitively priced products to high-quality customers. No other provider brings this competitive advantage to the table. Even in the current landscape, customers often will seek payment and deposit services from one provider while borrowing from another provider. In any case, for equally important services such as life insurance, the underlying provider is distinct from a full service bank. Banks have reached out to providers with adjacencies such as retailers and mobile phone operators in order that they may benefit from the lower marginal cost at which they may be able to offer payment services to their customers. Finally, there is no compelling logic to suggest that customers must be forced to seek payment services only from the specific provider that offers them credit.

4. Viability of Payments Banks

There are concerns about the viability of the Payments Bank model but discussions of the Committee with existing providers suggest that with adequate regulation, the market will

be extremely competitive with participation from big and small players alike¹²², particularly if neutral but proportionate regulation is applied to them.

Recommendations:

- 3.9 Given the difficulties being faced by PPIs and the underlying prudential concerns associated with this model, the existing and new PPI applicants should instead be required to apply for a Payments Bank licence or become Business Correspondents. No additional PPI licences should be granted.
- 3.10 Under the Banking Regulation Act, a set of banks may be licensed which may be referred to as Payments Banks with the following characteristics:
- a. Given that their primary role is to provide payment services and deposit products to small businesses and low-income households, they will be restricted to holding a maximum balance of Rs. 50,000 per customer.
 - b. They will be required to meet the CRR requirements applicable to all the Scheduled Commercial Banks.
 - c. They will be required to deposit the balance proceeds in approved SLR securities with a duration of no more than three months and will not be permitted to assume any kind of credit risks.
 - d. In view of the fact that they will therefore have a near-zero risk of default, the minimum entry capital requirement for them will be Rs. 50 crore compared to the Rs. 500 crore required for full-service SCBs.
 - e. They will be required to comply with all other RBI guidelines relevant for SCBs and will be granted all the other rights and privileges that come with that licence.
 - f. Existing SCBs should be permitted to create a Payments Bank as a subsidiary.
- 3.11 RBI to work with TRAI to ensure that all mobile phone companies, including those with Payments Bank subsidiaries, be mandated to provide USSD connectivity as per recent TRAI regulations with the price cap of Rs. 1.5 per 5 interactive sessions and to categorise all SMSs related to banking and financial transactions as Priority SMS services with reasonable rates and to be made available to the banking system.

Chapter 3.7
Recommendations Regarding Payments and Savings

- 3.1 Every resident should be issued a Universal Electronic Bank Account (UEBA) automatically at the time of receiving their Aadhaar number by a high quality, national, full-service bank. An instruction to open the bank account should be initiated by UIDAI upon the issuance of an Aadhaar number to an individual over the age of 18. The bank would need to be designated by the customer from amongst the list of banks that have indicated to UIDAI that they would be willing to open such an account with the understanding that it would attract no account opening fee but that the bank would be free to charge for all transactions, including balance enquiry with the understanding that such transactions' charges would provide the host banks with adequate compensation. The Bank would be required to send the customer a letter communicating details of the account thus opened. The Committee recommends that the RBI issue a circular indicating that no bank can refuse to open an account for a customer who has adequate KYC which specifically includes Aadhaar. [Identical to Recommendation 5.1]
- 3.2 RBI should require a strong Proof of Identity (POI) for each and every customer and a documentary proof of one national address but waive the requirement of documentary proof for the current address, for the purpose of opening a full-service bank account. It should instead enjoin upon banks to carry out careful tracking of usage and transactions patterns to ascertain the risk levels of the customer and take necessary action based upon risk-based surveillance processes developed internally by each bank. [Identical to Recommendation 5.2]
- 3.3 Under the existing rural branching mandate, a qualifying branch may be understood to have specified features regarding minimum services available, minimum hours of operation, nature of employment of staff, minimum infrastructure configuration, nature of ownership of infrastructure and premises, and minimum customer protection. In addition, this mandate is to be reviewed regularly and be phased out once the goals specified in the vision statement for payments services and deposit products have been achieved.
- 3.4 Aadhaar is the key piece of infrastructure to enable a customer to be identified and authenticated so that repudiation and fraud risks are minimised and therefore should become the universal basis for authentication. However, with slow enrolment in some areas and low penetration of biometric devices and internet network connectivity in many areas, intermediate authentication methods such as PIN numbers and OTP could be used. State Governments need to coordinate more closely with UIDAI, NPR, and BBNL to ensure rapid coverage of their states for both Aadhaar and broadband.
- 3.5 Restore the permission of ND-NBFCs to act as BCs of a bank. Concerns around commingling can be effectively handled through technology-based solutions such that all settlements happen on an intra-day basis. In addition, eliminate the distance criteria between the BC and the nearest branch of the sponsor bank. Allow Banks to decide operational criteria.
- 3.6 The Taskforce on Aadhaar Enabled Unified Payment Infrastructure recommended that State Governments pay a fee of 3.14 per cent (subject to a cap of Rs. 15.71 per transaction) for Direct Benefit Transfer (DBT) payments originating from governments. RBI should enjoin upon State Governments to implement the same.

Recommendations Regarding Payments and Savings

- 3.7 In order to address contagion risk concerns, instead of requiring White Label ATMs to access the settlement systems in a “nested” manner through a sponsor bank, provide them direct access to the settlement system subject to certain prudential conditions, to mitigate operation risk.
- 3.8 In order to ensure that the BC infrastructure that is established is utilised in an optimal manner and shared by multiple banks, which may each have account holders in a specific geography, allow high-quality White Label BCs to emerge with direct access to settlement systems subject to certain prudential conditions. This would be similar to Recommendation 3.7 vis-à-vis mitigating operations risk in the White Label ATM network.
- 3.9 Given the difficulties being faced by PPIs and the underlying prudential concerns associated with this model, the existing and new PPI applicants should instead be required to apply for a Payments Bank licence or become Business Correspondents. No additional PPI licences should be granted.
- 3.10 Under the Banking Regulation Act, a set of banks may be licensed which may be referred to as Payments Banks with the following characteristics:
 - a. Given that their primary role is to provide payment services and deposit products to small businesses and low-income households, they will be restricted to holding a maximum balance of Rs. 50,000 per customer.
 - b. They will be required to meet the CRR requirements applicable to all the Scheduled Commercial Banks.
 - c. They will be required to deposit the balance proceeds in approved SLR securities with a duration of no more than three months and will not be permitted to assume any kind of credit risks.
 - d. In view of the fact that they will therefore have a near-zero risk of default, the minimum entry capital requirement for them will be Rs. 50 crore compared to the Rs. 500 crore required for full-service SCBs.
 - e. They will be required to comply with all other RBI guidelines relevant for SCBs and will be granted all the other rights and privileges that come with that licence.
 - f. Existing SCBs should be permitted to create a Payments Bank as a subsidiary.
- 3.11 RBI to work with TRAI to ensure that all mobile phone companies, including those with Payments Bank subsidiaries, be mandated to provide USSD connectivity as per recent TRAI regulations with the price cap of Rs. 1.5 per 5 interactive sessions and to categorise all SMSs related to banking and financial transactions as Priority SMS services with reasonable rates and to be made available to the banking system.

Section 4
Sufficient Access to Affordable, Formal Credit

Chapter 4.1 Introduction and Strategic Direction

The vision statement for credit is:

By January 1, 2016, each low-income household and small-business would have “convenient” access to formally regulated lenders that have the ability to assess and meet their credit needs, and offer them a full-range of “suitable” credit products, at an “affordable” price.

If this vision is to be achieved, it will require a significant expansion in the quantum and range of credit products to be provided by the banking sector. In this context, there are some significant overall trends impacting the banking sector that are worth noting.

Risk Based Supervision Regimes as a Driver of Specialisation

These include the new Basel III guidelines and the RBI’s new Risk Based Supervision (RBS) framework which will be driven by periodic stress tests and an internal Supervisory Program for Assessment of Risk and Capital (SPARC). In addition, there will be heightened regulatory and supervisory scrutiny of Systemically Important Financial Institutions (SIFIs)¹²³. A number of market observers believe that these new developments, particularly the imposition of Basel III, will result in more banks seeking to move away from “purely holding deposits and making its own loans”¹²⁴. Banks will need to manage their balance sheets actively to ensure that they are using their capital resources efficiently in order to preserve their Return on Equity. Even prior to the implementation of the Basel III Accord, the Banking System, at under 13 per cent per annum showed a low and declining Return on Equity¹²⁵, and Stress Tests carried out by the Reserve Bank of India show that, “...while the present level of [NPA] provisions is adequate, a gap may arise under severe stress scenario”¹²⁶. Increasingly, each bank will need to become inherently stronger, focus more sharply on their core capabilities, and have the flexibility and the regulatory mandate to collaborate actively with other market participants who have complementary capabilities instead of being forced to follow identical strategies as every other participant. Policy and regulatory action will need to facilitate this process in order to ensure that the vision is achieved while simultaneously enhancing the stability of the financial system as a whole. All of these will have a bearing on the strategies that Banks pursue for credit delivery.

Non-Performing Assets in the Banking System and Financial Inclusion

In India PSL guidelines require banks to allocate 40 per cent of their lending book to it, making it the most important part of the bank’s lending book and that has a significant impact on the performance of the bank as a whole. However, whenever financial inclusion goals are generally specified and strategies articulated, there is little acknowledgement of risk and cost-to-serve considerations. Banks therefore approach this sector with a complete lack of enthusiasm. Where they have a choice, they choose to under-serve this segment, and where they do not, they end up bearing enormous losses. As one of the direct consequences of this, government owned banks have ended up carrying a disproportionate share of the burden of meeting the PSL obligations, particularly as it concerns rural branching and serving the agricultural sector. This has had a severe impact on their performance overall and, as will be discussed in the next chapter, despite the loan waivers that took place a few years ago, more than half the total NPAs on their books are attributable to this sector with an NPA ratio that is close to double that of the rest of the asset book. While this would be a matter of serious concern for any bank, it is even more so for these banks because, given their ownership, as group they represent a direct contingent liability of the Government of India for their entire balance sheet and there is a grave risk of a large systemic shock if there is a large build-up of non-performing assets on their books.

A larger expectation has gradually been created in the country that this entire business has to be seen as a part of a series of hand-outs to low-income families, farmers, and small-businesses and a viable business proposition is simply impossible to construct and that rates of interest for providing an unsecured loan of Rs.25,000 to small farmers have to necessarily be lower than the rates charged to secured home-loan borrowers of Rs.10 lakh. This is seriously hurting both the banking system as well as the client on whose behalf it is being decided that a 10% rate of interest is a more important dimension than access itself.

Even at the regulator level this approach has unfortunately led to a number of gaps in both perception and implementation. For example, while for the much smaller NBFC-MFIs, linkages with credit bureaus have been made mandatory, for the rest of the banking system, particularly for the rural lending portfolio of banks, no such requirements have been imposed; despite the skew in NPA ratios the standard asset provisioning norms for PSL loans have been pegged at 0.25 per cent versus 0.40 per cent for the rest of the loan book; and most damagingly, interest rates for small loans to farmers have been permitted to be below the base rate when rates to large corporates with a far lower cost-to-serve, are restricted to be at a minimum of base rates. On the other hand, save for some work on the weather insurance side, risk management issues for these sectors have received no attention at all. When Regional Banks have failed, poor governance is usually held responsible and not also the fact that these banks were taking on concentrated risks that they could not manage in times of crisis. Development of important risk management tools such as commodity options, catastrophic portfolio insurance, and active warehouse receipt trading is moving at a very slow pace. Unless these issues are integrated in discussions on financial inclusion, banks will always be reluctant participants.

Given this important background, this Report overall and this section in particular, makes a conscious effort to redress this balance and issues of risks and costs have been kept at the very centre in the discussions of each of the strategies for providing better access to financial services to small businesses and low-income households.

Potential for Differentiated Banks in Deepening Credit Delivery

The RBI Discussion Paper on Banking Structure in India discusses the need for differentiated banks as a way to increase the size and strength of the banking sector relative to the needs of the real economy. In terms of new banks, the minimum capital requirements to license a National Bank which can perform both retail deposit taking and lending would need to be kept very high, with the result that only very few new entrants would qualify. However, for differentiated banks such as Wholesale Consumer Banks and Wholesale Investment Banks who are permitted to accept only wholesale deposits, these requirements could potentially be significantly lowered, thus permitting many more new entrants.

While National Banks is the dominant design and will remain one, it is clear that there is a need to proceed with extreme caution in creating new ones. Wholesale Consumer and Wholesale Investment Banks can significantly add strengths to the task of financial deepening without the risks of creating several new retail deposit-taking National Banks. Wholesale Consumer Banks are well placed to build deep specialisations in categories such as small business loans, student loans, and commercial vehicle finance, while Wholesale Investment Banks can effectively channel market liquidity as well as make it possible for an active market to emerge in the trading of such loans.

Role of Non-Banking Financial Companies and their Potential Transition to Banks

In addition to Banks - existing and new, there is also a continuing role for Non-Banking Financial Companies (NBFCs). The bulk of the NBFC sector in India remains very small, does not have the ability to garner public deposits, and in aggregate has performed at a very high level of quality. The sector as a whole therefore does not constitute a source of systemic instability. It has instead been playing the role of extending the reach of the banking system to the more difficult parts of the economy. While NBFCs in their current format play a useful role in credit delivery and must continue to do so with active regulatory support, they will have limits to how large they can become. This will be the case on account of differentiated capital adequacy requirements, absence of access to payment systems, constraints imposed by dual regulation, and other restrictions on the nature of business they are allowed to undertake and the nature of risks they are allowed to assume. From a systems design perspective this would be required because as players outside the banking system they would not enjoy the same degree of protection as banks would, and nor would the three principles of Stability, Transparency, and Neutrality apply to them in the same degree. The differentiated banking design offers multiple end points towards which NBFCs could head, particularly if issues such as SLR requirements, uniform applicability of CRR requirements and the current definition of PSL which is rooted in historical perspectives, are satisfactorily dealt with.

The table below provides an illustration of how various norms may be harmonised in a differentiated bank regime that also provides room for NBFCs.

	National Bank	Wholesale Consumer/Investment Bank	NBFC
Entry Capital Requirement	Rs. 500 crore	Rs. 50 crore	Rs. 2 - 5 crore
Branch Restrictions	No rural branch requirement if fewer than 20 branches	No rural branch requirement if fewer than 20 branches	Not Applicable
Minimum Tier I Capital Adequacy	4.5%	4.5%	12%
Retail Deposits	Yes	No	No, with the exception that NBFC-D's are permitted Time Deposits
Total Capital Adequacy	9%	9%	15%
Lender of Last Resort	Yes	Yes	No
Payments System Access	Yes	Yes	No
CRR	Yes. Should eventually be applicable only on demand deposits	Yes. Should eventually be applicable only on demand deposits	No
SLR	Yes. Eventual Removal	Yes. Eventual Removal	Yes for NBFC-D. Eventual Removal

PSL	Yes. Transition to a more dynamic framework	Yes. Transition to a more dynamic framework	No
Risk Weights	Differential	Differential	100% for all assets
SARFAESI	Yes	Yes	Yes, with strong customer protection guidelines
Duration to qualify for NPA	Risk-based approaches to be followed	Risk-based approaches to be followed	Risk-based approaches to be followed
Definition for sub-standard asset	Risk-based approaches to be followed	Risk-based approaches to be followed	Risk-based approaches to be followed
Definition for doubtful assets	Risk-based approaches to be followed	Risk-based approaches to be followed	Risk-based approaches to be followed
Quantum of provisioning for Standard Assets	Risk-based approaches to be followed	Risk-based approaches to be followed	Risk-based approaches to be followed
Deposit Insurance	Yes	Yes	No
Capital against market and operations risk	Yes	Yes	No

The rest of the section discusses issues in credit delivery relevant to various banking designs. The two banking designs that are relevant for the provision of credit in the Indian context are given below. Each of these design choices and their variants have been described in some detail in Chapter 2.4:

1. National Banks operating as: Branch-based lenders; or working through Agents; Wholesale Banks; Consumer Banks using credit scores and analytics.
2. Regional Banks operating through their branches.

Although not a banking design, issues around NBFCs are also examined in detail given their relevance to credit delivery.

Within each of these designs, the following chapters examine their performance and potential generally and specifically in terms of: a) small loans to low-income households for various life-cycle needs; and b) lending to small businesses.

Chapter 4.2 National Bank with Branches

This is a design that covers large scheduled commercial banks that operate on a nation-wide or supra-regional basis using traditional branch banking.

This has been the dominant model of Indian banking for several decades. In aggregate, there are 105,753 branches across all scheduled commercial banks in India¹²⁷. Of these, about 39,336 branches are in rural India. Nearly 10,000 rural bank branches have been added in the last three years (2010-2013) alone - a fourth of the total number of rural branches. While this branch network is inadequate relative to the vision of one credit access point for every 10,000 population, even this level of penetration has been achieved as a result of single-minded regulatory and policy focus. For instance, Banks are required to maintain 25 per cent of their branch network in rural India.

In the context of rural credit to low-income households, this bank branch network has been focussed on advancing loans to farmers through the Kisan Credit Card (KCC) and the General Credit Card (GCC) products and advances to non-farming households through the Self-Help Group (SHG) product. KCCs advanced through bank branches account for the largest share of credit activity under financial inclusion with a portfolio outstanding of over Rs. 2.62 lakh crore as on March 31, 2013.

Amount outstanding for various rural credit products (in Rs. crore)	Mar-11	Mar-12	Mar - 13
General Credit Card (GCC)	3,500	4,200	7,700
Self-Help Group loans (SHG)	30,000	36,000	39,375
Kisan Credit Card (KCC)	160,000	206,800	262,200

Despite this sustained effort to improve credit delivery through bank branches, rural outreach indicators remain poor in absolute terms with significant regional and segmental inequities. In 2002, non-institutional agencies accounted for 42.9 per cent of rural credit¹²⁸. A study showed that an increasingly large share of agricultural credit is going to farm sizes of more than 5 acres¹²⁹. As Chapter 2.2 points out, there is also significant regional skew in financial depth. During 2007-2012, 37.55 per cent of agricultural credit was accounted for by the Southern states despite them constituting less than 20 per cent of India's Gross Cropped Area while the Eastern and North-Eastern states accounted for only 7.71 per cent, despite having comparable Gross Cropped Area¹³⁰.

Region	Agricultural Credit During 11 th Five Year Plan (%)	Share in Gross Cropped Area (%)
Northern	27.44	20.11
North-eastern	0.44	2.83
Eastern	7.27	14.66
Central	13.20	27.26
Western	14.1	16.47
Southern	37.55	18.68
All India	100.00	100.00

Under the SHG-Bank linkage program, as on March 2012, 43.5 lakh SHGs were provided with bank loans through the commercial banks, cooperative banks and RRBs, of which 54 per cent belonged to the Southern region. With an average amount of Rs.144,086 disbursed as loan per group, the total outstanding amount to SHGs stood at Rs.36,341 crore as on March 2012. NABARD refinance of Rs.3,073 crore was provided to banks covering their lending to SHGs in the same year, amounting to 19.9 per cent of NABARD's long-term refinance disbursements¹³¹. The NPAs of banks against loans to SHGs stood at 6.38 per cent as on March 2012¹³².

Similarly for SMEs, the Economic Census of 2005-06 revealed that 90 per cent of enterprises are self-financed. Of the balance 10 per cent, Banks account for 3.25 per cent of funding. An estimate done for Bangalore Urban District which has an overall credit to GDP ratio greater than 100 per cent and ranked among the top ten financial inclusion districts by CRISIL Inclusix, revealed a presence of five lakh SMEs with a projected credit need of Rs. 17,000 crore. Against this, the total lending across all segments by all commercial banks is approximately Rs. 12,000 crore¹³³.

As far as risk and quality of this credit is concerned, Public Sector Banks are the largest participants in priority sector lending, accounting for more than 75 per cent of the over Rs.15 lakh crore of the total. The Gross Priority Sector NPA ratios for these Banks are about 50 per cent higher than their overall Gross NPA Ratios, with small loans (below Rs.25,000) having a ratio that is 4.5 times higher¹³⁴. As seen in Table 4.2.4¹³⁵ below, for private sector banks and public sector banks, non-performing loans are far higher in the priority sector than in the non-priority sector.

Year	Priority Sector			Non-priority sector	
	Overall	Agriculture	MSE	GNPA	Adjusted GNPA ¹³⁶
2009-10	3.2%	2.2%	3.7%	1.6%	2.1%
2010-11	3.6%	3.3%	3.4%	1.4%	1.9%
2011-12	4.3%	4.3%	3.9%	1.9%	2.6%

On the cost front the picture is equally grim for both Private Sector and Public Sector Banks with the cost of operations (not including interest cost) alone approximating 30 per cent to make a one year loan of Rs.10,000¹³⁷. For a Private Bank the cost of an ultra-small brick and mortar branch (USB) is estimated to require an investment of Rs.8-10 lakh and an annual recurring cost of Rs.20 lakh¹³⁸ - this high a level of expenditure may not be consistent with the level of business activity that this USB will be able to sustain.

While there may be notable exceptions from the above analysis it is very clear that the current branch-based approach is not an effective credit delivery channel. As a rule very high-cost and very high-risk strategies are being pursued by the National Banks in the context of financial deepening. If National Banks wish to act as originators of credit risk using their branches, they will have to develop far more effective, lower cost, and far lower-risk models of outreach.

How can the efficacy of branch-based lending for National Banks be increased? While the empirical evidence using data even from developed nations suggests that large banks are disadvantaged in lending to low-income households and small-businesses¹³⁹, a number of banks within India, as well as globally, have found ways of doing this by placing dedicated staff inside their branches with the full power to make local decisions and by effectively treating branches focussed on this business as stand-alone profit centres and carefully measuring their performance using Risk Adjusted Return On Capital (RAROC) type integrated performance measures. Banks in India have centralised loan processing

“factories” and rely on the separation of sales, credit, and collections to ensure focus and high-quality in their consumer finance operations. However, the lessons from successful examples of branch-based lending appear to suggest the opposite direction. Banks would have to de-centralise loan decision making and integrate sales, credit, and collections. Some of the notable examples are given below and all carry the message that if this design has to work, decision making needs to be moved very close to the customer so that “soft information” can be acted upon.

1. Bank Rakyat Indonesia is the oldest bank in Indonesia and has created a separate structure for its micro-banking business which is addressing its objectives of financial inclusion and penetrating into the mass market segment very well. This is done by creating a structure of small dedicated units (referred to as a BRI Unit) under a Branch office which caters to its mass micro business activities. The BRI unit is a small micro Branch structure established in interior places with a small compact staff team comprising 3 staff members (1 Account officer, 1 teller for Cash transactions, and 1 customer service executive for non-cash transactions). Under each BRI unit, there are separate “Teras BRI” units in the style of extension counters to expand the reach of the BRI units where warranted and “Teras mobile” units which travel to the villages for carrying out banking activities. This dedicated micro banking vertical is 100 per cent self-funded i.e., the savings/deposits from micro banking clients fund the loans to the micro banking clients. All loans below USD 10,000 are handled by micro banking branches and thus there is no overlap in customer base between different verticals of the bank. Each branch is a profit centre with a defined break-even period and incentive structure is linked to the performance of the branch¹⁴⁰. High interest rates on loans has been noted as a concern with the BRI model.
2. Lloyds Banking Group is one of the large banks in the UK which has placed dedicated relationship managers in 500 of its locations. They specialise in certain sectors such as agriculture, franchising, property, healthcare, legal, and manufacturing. They can decide on loans of up to GBP 500,000 and cover 90 per cent of lending applications at Lloyds¹⁴¹.
3. A Large US Bank: This bank (which is amongst the top five commercial banks in the US) operates more than 1500 branches and uses standardised credit scoring methodology to assess its small business loans. However, “... credit decisions ultimately reside with branches because local managers can alter credit scores on the basis of a standard set of subjective criteria [based on non-verifiable “soft” information that the branch manager has] that the final score reflects [through this process “hardening” their “soft” information]. Similarly, they can adapt loan terms including pricing to the specific circumstances of the application. However, branch managers’ career prospects and remuneration depend on the overall success of their credit decisions, and local overrides are closely monitored by the bank’s risk management”. Using this approach the bank has been able to successfully build a client base that is low risk but pays a higher margin on account of the banks’ proximity to them¹⁴².
4. HDFC Bank: They have over 1,000 branches in rural and semi-urban areas and a dedicated field force of 3,500 to serve these markets using products such as Self-Help Group loans and Joint Liability Group loans. As of this date, they have disbursed Rs. 1,600 crore during the current financial year, at lending rates ranging from 21 - 26 per cent and have reached out to over 23 lakh unique rural borrowers spread across 24 states. This dedicated field force is another example of a “bank-in-a-bank” model which, while using a shared branch infrastructure, is managed as an entirely separate unit within the bank. In terms of products, the loan product is combined with a recurring deposit product and a savings account. There has been a reasonable build-up of balances in these recurring deposit accounts. HDFC Bank expects this dedicated unit

to form the foundation of its financial inclusion efforts and over a five year period, build a commercially sustainable business. The key success drivers of this business appear to be the ability to hire local staff, maintain a low-cost structure, and control operational and credit risks in a tight manner.

It is clear that there are ways in which large branch based models can be made more effective in the context of credit delivery to low-income households and small-businesses. However, this goes well beyond the mere physical presence of a branch. Executing this strategy is going to be challenging given all the human resources and other challenges that are likely to be faced by banks in the process. Several aspects of the functioning of the Bank will have to change.

Banks will also have to develop strong risk management capability and the power to use various tools to manage their exposures to these segments. These include:

- a. Systematic Risk: Irrespective of how origination exactly happens, it is entirely possible that National Banks may end up building portfolio concentrations (to a particular sector or region) that are unhealthy and attract a higher level of penalty in their Stress Tests than they have comfort with. They will need to continually and actively rebalance their portfolio using sales and purchases of loans, bonds, securitised portfolios, and credit derivatives. They will need to move away from an exclusive originate-and-hold-to-maturity strategy and among other things, will need the ability to be able to hold bonds in their banking book without having to mark them to market and will gradually need to start to document all their loans using debenture / bond documentation so that the liquidity of their balance sheet improves.
- b. Rainfall Risk: In rural and agricultural lending, rainfall is the most important source of exogenous risks. Banks have thus far tried to get their clients to hedge this risk using crop insurance that is bundled along with a farm loan. Unfortunately however, the entire rural book is exposed to this risk even in the non-farm portion of it and the most efficient way for banks to hedge this risk is to seek to protect the entire book against these shocks. Such a strategy also allows the bank to carry out large scale waivers in case of a region-wide or a nation-wide shock to rainfall without having to request for government funded bail-outs which have created a serious distortion in the farm level credit culture.
- c. Commodity Price Risk: Commodity price risk is the other big risk that needs to be hedged using either insurance or commodity put options that the bank purchases on a wholesale basis in global options markets. These are not available in India. These could also be used to offer large scale loan-waivers in case of extremely negative price events.
- d. Moral Hazard: Since there is no uniform reporting of credit data mandated for all National Bank branches, there are weak controls against moral hazard. Universal reporting to credit bureaus of all loans, both individual and SME, but in particular SHG loans, Kisan Credit Card, and General Credit Card is important to mitigate this risk.

Irrespective of how well National Banks execute their origination and their balance sheet management strategies, given their systemic importance and the need to ensure that any signs of incipient weakness are quickly identified and dealt with, it is very important to ensure that there is complete transparency and accuracy in the financial statements of these financial institutions, including weaknesses stemming from priority sector lending. Such transparency also ensures that the competition between different types of institutions is on a level playing field and that the apparently stronger player is indeed inherently stronger and not simply being “protected” by its lower levels of disclosure. In

order to ensure complete transparency and accuracy in the financial statements of these institutions, several steps would need to be taken:

1. While NPA recognition norms in India are comparable to those currently prevailing in most countries, Indian NPA coverage ratios are far lower. Comparison with developing countries such as China, Brazil, and Mexico, who are likely to have comparable levels of risk and Loss Given Default statistics, reveals that India has both lower provisioning and higher observed NPAs¹⁴³. However, this approach to NPA recognition assumes that all banks follow similar strategies and have the same asset mix. In view of the fact that banks may choose to focus their strategies on different customer segments and asset classes, it is recommended that the regulator provide specific guidance on provisioning norms at the level of each asset class.

For instance, given the fact that historical NPAs on Micro Finance Joint Liability Group (JLG) loans are in the region of 0.7 per cent¹⁴⁴ and assuming loss given defaults to be 100 per cent, the risk based estimate of the NPA Coverage Ratio for this asset class would be 100 per cent of historical NPAs or 0.7 per cent. For KCC, currently banks formulate their own internal policies in terms of fixing the repayment period and determining the scale of finance. RBI may require banks to formulate broad guidelines so that there is some degree of standardisation in the way the KCC product is administered and it becomes possible to properly ascertain if the asset is performing as expected or not. The guidelines should prescribe various factors which banks should consider before fixing repayment period and scale of finance. The repayment period should be linked to the income generation pattern of farmers which in turn depends on numerous factors including cropping pattern, cropping season (Kharif and Rabi), harvesting season (short duration or long duration), acreage, yield, and economies of scale. For instance, a 9-12 month repayment period may be fixed for short duration crops (rice, wheat or pulses) whereas a longer repayment period of one year may be fixed for long-duration crops like sugarcane or banana. Tracking of actual repayments against these periods on a 90 past-due basis can then be used to carry out asset classification. And, over the over the last decade, since the gross NPAs in the agriculture segment have been higher than banks loans to the non-agriculture segment on an average by 1.21 times, the standard asset provisioning, for all agriculture exposures including KCC should be set at 0.5 per cent (~1.21 times of 0.4 per cent)¹⁴⁵.

Similarly, based on the data available for different asset classes, the regulator should recommend NPA Coverage Ratios for each of them. A bank's overall NPA Coverage Ratio would be a function of its portfolio asset mix.

2. Even on standard assets, provisioning levels would need to reflect the underlying level of riskiness of each asset class (combination of customer segment, product design, and collateral). For example, for a bank pursuing a broader priority sector strategy, a long-term analysis of priority sector asset quality indicates that there needs to be an increase in standard assets provisioning from the current level of 0.25 per cent to the level of 0.40 per cent.
3. Different customer-asset combinations behave very differently from each other and mechanical rules (such as a 90 day past-due rule) applied at the level of each loan may not accurately capture the riskiness of each sub-group. It is recommended that the regulator mandate NPA recognition rules at the level of each asset-class and require that all banks conform to these mandates. For instance, a 52-week, weekly repayment JLG loan to a low-income household and a 15-year, monthly repayment mortgage to a high-income household are fundamentally different type of customer-asset sub-groups that require differential NPA recognition treatment. In view of these differences, the

regulator might specify that the NPA recognition norm for the weekly JLG loan be 30 days, while that for the mortgage be 120 days.

4. Require all financial institutions to publicly disclose the results of their stress tests both at an overall balance sheet level as well as at a segmental level on an annual basis.

For a variety of reasons governments may decide to offer interest subventions to farmers and on occasion loan waivers as well. It is strongly recommended that such subventions and waivers be offered directly to beneficiaries by the governments using DBT into their bank accounts and allow banks and financial institutions to act strictly according to market principles so as not to introduce strong moral hazard and make it difficult for financial institutions to enforce contracts. This is the standard manner in which such subsidies are offered in the EU¹⁴⁶ and the US¹⁴⁷ to ensure that there are minimal distortions in the market prices and production decisions of farmers while providing them some minimum income protection.

Banks are also required to price farm loans below Rs. 3,00,000 at 7 per cent for which they receive an interest subvention of 2 per cent in the consequent period. This pricing does not appear consistent with the risk parameters discussed previously. From the perspective of Stability that entails sustainable pricing, Banks must be allowed to freely price these loans based on their risk models. The current permissions to price below their base rate must be withdrawn.

Recommendations:

- 4.1 In order to encourage banks to actively manage their exposures to various sectors, including priority sectors, a number of steps would have to be taken:
 - a. Banks must be required to disclose their concentration levels to each segment in their financial statements.
 - b. Credit facilities documented as bonds or Pass-Through Certificates (PTC), whether originated directly or purchased in the secondary markets should be permitted to be held in the “banking book” of a bank based on declared intent and not merely based on source or legal documentation. [Identical to Recommendations 4.10 and 4.30]
 - c. RBI must represent to the MoF to restore the tax-free status of securitisation SPVs as pass-through vehicles for tax treatment pointing out the role it would play in ensuring efficient risk transmission. [Identical to Recommendations 4.11 and 4.38]
 - d. Banks must be permitted to purchase portfolio level protection against all forms of rainfall and commodity price risks, including through the use of financial futures and options bought either within India or globally.
- 4.2 Universal reporting to credit bureaus should be mandated for all loans, both individual and SME, but in particular SHG loans, Kisan Credit Card, and General Credit Card. [Identical to Recommendation 4.43]
- 4.3 In view of the fact that banks may choose to focus their priority sector strategies on different customer segments and asset classes, it is recommended that the regulator provide specific guidance on differential provisioning norms at the level of each asset class. A bank’s overall NPA Coverage Ratio would therefore be a function of its overall portfolio asset mix. On standard assets, provisioning levels as well as asset classification guidelines specified by RBI would need to reflect the

underlying level of riskiness of each asset class (combination of customer segment, product design, and collateral) and not be uniform across all the asset classes. Additionally, different customer-asset combinations behave very differently from each other and it is recommended that the regulator mandate NPA recognition rules at the level of each asset-class and require that all banks conform to these mandates. [Identical to Recommendation 4.21 for NBFCs]

- 4.4 All banks should be required to publicly disclose the results of their stress tests both at an overall balance sheet level as well as at a segmental level at least annually. [Identical to Recommendation 4.22 for NBFCs]
- 4.5 From the perspective of Stability that entails sustainable pricing, banks must be required to freely price farm loans based on their risk models and any subventions and waivers deemed necessary by the government should be transferred directly to the farmers and not through interest subsidies or loan waivers. The permission to price farm loans below the base rate should be withdrawn. [Also see Recommendation 4.34]

Chapter 4.3 National Bank with Agents

This design refers to Banks that have a limited branch network but rely on sourcing credit through agents. It is one of the ways of reducing costs, improving outreach, improving Suitability, and simultaneously reducing risks associated with lending.

Agents with no Capital Commitment

Indian banks have thus far used two types of agents to carry out their lending activities - the Direct Sales Agent (DSA) and the Business Correspondent / Business Facilitator (BC/BF). The BC/BF can either be a corporate or an individual. A corporate BC/BF can either be a dedicated entity or an existing real-sector intermediary such a sugarcane company that has farmer relationships. The BC/BF currently accounts for a small share of priority sector lending, approximately Rs. 2,500 crore of KCC and GCC loans are outstanding through these channels. Not much is known about the quality of these loans. It is clear from global experiences in consumer credit¹⁴⁸ that credit-score based lending with no capital commitment by the Agent (in this case the BC/BF) is prone to significant adverse selection and moral hazard. The urban DSA model for short-term personal loans and credit cards attracted significant negative attention on account of customer protection concerns and had to be discontinued by all the National Banks.

Agents with Capital Commitment

In the rural context, ICICI Bank in 2005-06 successfully experimented with the concept of a Credit Franchisee who was similar to a Business Correspondent / Business Facilitator but was required to place a fixed deposit with the Bank of 10 per cent of the amounts of loans that he would sanction. Upon default, the deposit would function as a First Loss Deficiency Guarantee¹⁴⁹.

Globally, many banks have used agents to effectively increase penetration and reach. The factor crucial to the success of this model is the careful selection of agents. For example, shop keepers who are successful in their core business, enjoy the trust of the community, have a large cash inflow in their business and are already familiar with providing credit to the customers for their purchases, were chosen to be agents by an Indonesian bank. These selection criteria ensured that the shop keeper had the requisite skill and understanding to connect with the customers and also see the banking opportunity to do effective cash management for him. His cash inflows are used for customer withdrawals / loan disbursements / remittances and he gets paid for that, as also for getting additional footfall. In the Philippines, pawn shops have been used as agents by banks as they already have a natural interest and connect with the customers¹⁵⁰.

Dedicated Subsidiaries as Agents

For National Banks, fully owned subsidiaries can also potentially act as dedicated agents of a National Bank subject to the guidelines on investments in subsidiaries¹⁵¹. They can be a cost effective alternative which can address some of the challenges around having wage flexibility, different compensation structures, local hiring practices, contractual arrangements / outsourcing, etc. Also, a subsidiary route enables a focussed approach to economise on the cost of lending operations. This route will also be able to connect with the local community better and thus enable better quality of assets. For example, in the case of Bank Danamon in Indonesia, the vehicle finance and equipment finance business is conducted through Adira Finance, a fully owned subsidiary that sells the loans that it originates to Bank Danamon through an arm's length arrangement for funding purposes. In India, HDFC Limited has promoted a company focussed on education loans called Credila. The motivation of these banks to set-up a subsidiary has been to get the right focus and

appropriate cost structure for the specialised business and also attract other experts as investor partners in the company.

In the Indian context, however, while considering the concept of a subsidiary route, the case of Regional Rural Banks (RRBs) needs to be kept in view, which were also started by Public Sector Banks on this premise but subsequently their salary structure had to be made at par with public sector banks. So the very purpose of setting up the RRBs as low cost structures could not be served. Permitting strong National Banks to float specialised subsidiaries with an ownership structure that can address this concern may allow them to benefit from the inherent strengths of these institutions.

Real Sector Intermediaries as Agents

Real sector intermediaries such as sugarcane companies are used by Banks, particularly Private Sector Banks with limited branch networks, as agents. While this may work as an interim solution for outreach, given that credit sourcing and servicing are peripheral activities for these agents, it is unlikely that these agents will be able to provide the full range of credit products as defined in the credit vision statement. There also appear to be greater customer protection concerns here given the ability of the agent to tie credit in with its procurement activities and offer lower procurement prices to the farmer. Agents must create dedicated operations for lending so that there is separation of credit and non-credit activities.

Outsourcing Guidelines

It is clear that there are ways in which Agent based models can be made to work for providing comprehensive financial services to low-income households and small-businesses. However, while this strategy has the potential to address the costs of intermediation, it has significant risks vis-à-vis customer protection in the case of individual Agents and credit risk in the case of Agents who commit no capital to the lending business. As a consequence all of the safeguards specified earlier for National Banks with Branches would need to be adhered to here as well. Given the inherent moral hazard entailed in agent-based lending models, risk-sharing between the Bank and its agents is an important enabler to consider. Current RBI outsourcing guidelines do not permit outsourcing of credit sanctions of loans (including retail loans) by Banks¹⁵². This will need to be suitably amended so that Agents can sanction loans on behalf of Banks where risk is then managed through risk-sharing arrangements and statistical quality control processes.

Recommendations:

- 4.6 Banks are already permitted to set up specialised subsidiaries upon getting specific approvals from the RBI. However, no approvals have been granted; potentially due to concerns around circumvention of branch licensing guidelines. In light of the recent relaxation of branch licensing guidelines and the capability to carry out consolidated supervision, the requirement of prior approvals may be removed for the purpose of creating dedicated subsidiaries for financial inclusion.
- 4.7 The decision on the manner in which risk sharing and credit approval arrangements need to be structured between banks and their agents can be left to the judgment of banks. Outsourcing guidelines should be amended to permit this.

Chapter 4.4 National Consumer Bank

These banks lend directly to certain consumer segments using credit scores¹⁵³ and other analytical models, either through agents or product-market partnerships with entities such as department stores, vehicle manufacturers, mobile phone companies, and utility services providers.

At the heart of the branch and agent-based models is the assumption that proximity matters. While “soft information” and the associated need for proximity would continue to be important for many segments of customers, advances around “big data” that promise to deliver a far more accurate picture of the credit-worthiness of the individual and business than traditional branch-based under-writing or credit scores could completely transform the nature of credit decision making in the years to come. Even currently these new approaches seem particularly well-suited to specialised segments such as student loans and early stage financing for small businesses. Globally, while concerns have been expressed about the over-reliance on credit scores for credit-decision making, particularly in the context of the US subprime-mortgage crisis¹⁵⁴, longer-term trends, such as those documented for the first time by Petersen and Rajan (2002)¹⁵⁵, suggest that the distance between lenders and small business borrowers is growing and that they are communicating less and less with each other. They find that the principal factor accounting for this is the fact that technology of information gathering, aggregation, and reporting has improved dramatically and allows firms to address the traditional problems of adverse selection and moral hazard in a completely different manner.

Even in India such approaches have been found to be successful by the Credit Card industry - they permitted banks such as Citibank¹⁵⁶ which had very few branches to become one of the largest credit card issuers and ICICI Bank to reach a leadership position in mortgages. In the priority sector lending space, NBFCs have successfully used such approaches combined with some “soft” information to build large equipment and vehicle finance businesses. In the microfinance industry which deals with the poorest of clients, credit bureau records have become near universal. According to data from MFIN, in about 18 months' time, credit bureaus have been able to gather information about 10 crore loan accounts of about 2.5 crore individual customers from about 42 MFIs.¹⁵⁷

These are very welcome trends and better ability to store, analyse, and share data collected by financial institutions, mobile phone companies, and electricity utilities would allow high quality borrowers located even in remote rural locations to signal to low cost lenders such as a National Consumer Bank, their credit worthiness can go a long way towards ensuring that sufficient access to adequate levels of credit is made available to them at low prices. For several National Banks, this may even be a better strategy to grow their client and asset base rather than through a branch network as discussed previously. The value of real-sector companies like utilities and mobile phone companies may also be in the context of their information assets and not just their outreach.

In its chapter on Protection of Personal Information of Consumers¹⁵⁸, the draft Indian Financial Code recommends that the regulator may make regulations to:

- a. Provide additional requirements for the collection, storage, modification and protection of personal information by financial services providers, including:
 - i. The manner of maintenance of records of personal information and the time-periods for which the records are to be maintained; and
 - ii. The manner in which records of personal information should be dealt with after the expiry of the specified period;

- b. Exempt a class of financial services providers from the application of all or any portion of this Chapter or modify the manner in, or extent to which, all or any portion of the Chapter applies to them, subject to any specified conditions; or
- c. Establish mechanisms to ensure that consumers have access to, and are given an effective opportunity to seek modifications to, their personal information.

Recommendations:

- 4.8 There is a need to develop a robust legal and regulatory framework around customer data generated in various transactions (credit and payments, digital and off-line), with the objective of customer ownership of their own transactions data and its use, among others, for signalling credit-worthiness. RBI should constitute a Working Group comprising TRAI, CERC, and Credit Information Companies to develop a framework for sharing of data between telecom companies, electrical utilities, and credit bureaus. This framework should be in keeping with the FSLRC's draft Indian Financial Code which recommends the creation of regulations on the collection, storage, modification and protection of personal information by financial services providers; and establishment of mechanisms to ensure that consumers have access to, and are given an effective opportunity to seek modifications to, their personal information. [Identical to Recommendation 4.42]

Chapter 4.5 National Wholesale Bank

Some National Banks without the branch network or expertise of the underlying priority sector asset classes, have sought to fulfil their priority sector obligations by purchasing these assets from other banks and financial institutions, while continuing to remain wholesale in character. The strategy of international banks in India and some of the mid-sized private sector banks have been along these lines.

The RBI guidelines on securitisation have provided a strong framework for the development of this market. The performance of securitised priority sector assets has been quite robust. As an illustration, 89 per cent of securitised micro-loans rated by CRISIL were rated 'A' and above.

Given the enormous cost and informational disadvantages that National Banks face in India it is possible that this may be an entirely acceptable and even a preferred strategy for a large, systemically important bank to follow, relative to all the others that have been discussed thus far, so that it is able to maintain an extremely high level of safety in its credit ratings and can therefore act as a high quality aggregator of both deposits and loans allowing smaller and more specialised banks and financial institutions to transfer their own systematic exposures to such a Wholesale Bank.

In order to make several markets such as those relating to credit derivatives, corporate bonds, warehouse receipts, and take-out financing function well, the presence of such Wholesale Banks as aggregators and market makers is essential. The presence of such banks can have an important and beneficial impact on financial inclusion.

In order for a National Bank to successfully follow the strategy of a Wholesale Bank and act as an aggregator and market maker, significant regulatory anomalies need to be addressed:

1. Removing price caps on priority sector assets originated indirectly. Current PSL guidelines state that “investments by banks in securitised assets, representing loans to various categories of priority sector, except 'others' category, are eligible for classification under respective categories of priority sector (direct or indirect) depending on the underlying assets provided....the all-inclusive interest charged to the ultimate borrower by the originating entity should not exceed the Base Rate of the investing bank plus 8 per cent per annum”¹⁵⁹. Since there are no such price caps when the Bank originates a loan directly, this regulation appears to violate the principle of Neutrality.
2. Securitisation markets had been growing steadily in India since around 2005 owing to a strong and conducive regulatory environment. Securitised debt instruments were listed for the first time in 2013, thus improving standards of transparency and reporting and widening the potential investor base. However, post facto claims by income tax authorities in October 2011, stating that the gross income of such SPVs was liable to tax, have effectively hampered the growth of the market. The matter is presently sub-judice at the Bombay High Court. The Finance Bill, 2013, has sought to clarify the tax position by stating that a securitisation SPV is not liable to pay income tax. However, the Bill also states that trustees of such SPVs must pay tax on distributed income calling into doubt the pass-through status of these vehicles. Restoring the pass-through status of securitisation SPVs will help to develop this market and therefore, create pathways for Wholesale Banks to provide liquidity to other Banks and Financial Institutions directly originating assets in priority sectors¹⁶⁰.

3. Addressing the loan-bond arbitrage in terms of opacity of the former by allowing banks to classify (and reclassify) bonds into a held-to-maturity (HTM) or available-for-sale (AFS) bucket based on their declared intention rather than automatically based on legal documentation.
4. This design would be vastly enabled if the role of apex agencies such as NABARD, CGTMSE, SIDBI, and NHB are aligned towards the provision of risk-based credit enhancements, market-making and facilitation of listing of debt securities rather than provision of direct finance, automatic refinance or automatic credit guarantees. The professional capabilities of these apex organisations need to be built so that they can transition to these roles. This transition would considerably enhance the impact that these institutions have with their limited refinance resources and simultaneously serve to strengthen both originators as well as investors. This is also in line with the recommendations of the Rajan Committee (2009).
5. This strategy seems particularly well-suited to those Public Sector Banks that are unable to develop low-cost, low-risk, and effective direct origination strategies.

Recommendations:

- 4.9 The stipulation that the all-inclusive interest charged to the ultimate borrower by the originating entity should not exceed the Base Rate of the purchasing bank plus 8 per cent per annum should be removed. [Identical to Recommendation 4.37]
- 4.10 Credit facilities documented as bonds or Pass-Through Certificates (PTC), whether originated directly or purchased in the secondary markets should be permitted to be held in the “banking book” of a bank based on declared intent and not merely based on source or legal documentation. [Identical to Recommendations 4.1(b) and 4.30]
- 4.11 RBI should represent to the Government of India to restore the tax-free status of securitisation SPVs as pass-through vehicles for tax treatment so as to create pathways for Wholesale Banks to provide liquidity to other Banks and Financial Institutions directly originating assets in priority sectors. [Identical to Recommendations 4.1(c) and 4.38]
- 4.12 Reorient the focus of NABARD, CGTMSE, SIDBI, and NHB to be market makers and providers of risk-based credit enhancements rather than providers of direct finance, automatic refinance, or automatic credit guarantees for National Banks.

Chapter 4.6 Regional Bank

This is a design in which there are several Regional Banks, each relatively small in size, that are full-service Banks (offering credit, deposits, and payments services). This design is also sometimes referred to as “Small Banks” or “Community Banks”.

These are supervised directly by the national regulator (and depending upon their specific structure and licence also by a State Regulator) and governed on a day-to-day basis by their local boards. While these banks may borrow some amounts in wholesale markets their principal source of funds is their local deposit base. A Regional Bank does not use Capital Markets extensively for its resource raising nor does it use Agents in any form to reach its customers - its only means of serving customers is typically through its branches.

History and Global Perspective

A country where this model of banking continues to be very important, though less so each year, is the United States. It has 8,100 commercial banks, 1,200 Savings and Loans Associations, and 12,000 credit unions (cooperative banks). Its top ten banks have only 60 per cent of total assets compared to Canada or UK where 4 or 5 banks dominate the industry and have close to 90 per cent of the assets¹⁶¹. However, despite its resilience, the model is in retreat in the USA because National Banks and Non-Bank Financial Institutions have been able to bring both a wider range of products as well as lower cost of funds into the home markets of the Regional Banks. And, as Petersen and Rajan (2002) suggest, technology of information gathering, aggregation, and reporting has improved dramatically and allows firms to address the traditional problems of adverse selection and moral hazard in a completely different manner even when the distances between the bank-branch and the firm are larger. The imposition of Basel III requirements on all these banks is likely to compound the problems of survival faced by the local banks. Amongst the few countries where this model of banking continues to thrive are Germany and Switzerland and important lessons can be learnt from their experiences.

Developing countries that mandated community banks with low minimum capital requirements produced hundreds of institutions that have had solvency problems while not solving the inclusion problem (Nigeria, Tanzania) or have required intensive, subsidised upgrading programs (Philippines, Ghana). The jury is still out on Mexico, but risks are apparent. Supervisory capacity has been overwhelmed by many small institutions, leaving weaknesses uncorrected.

This is not a new idea even in India. As of March 2012, there were 1618 Urban Cooperative Banks in India, 82 Regional Rural Banks, 31 State Cooperative Banks (StCBs), and 370 District Central Cooperative Banks (DCCB) - all of which broadly meet the definition of Regional Banks. In addition there are 92,432 Primary Agricultural Cooperative Societies (PACS) which are single branch operations, but full-service. Within the rural cooperative institutions, credit disbursement for agriculture is being done by PACS, while deposit mobilisation is done by the PACS, DCCBs and StCBs. These organisations have enjoyed a great deal of support from the financial system and from the government and have achieved considerable outreach. However, with very few notable exceptions, they have performed very poorly in terms of financial performance and will need a great deal of on-going support to reach their full potential¹⁶².

Cooperative Bank Type	Gross NPA
Urban Cooperative Banks	7.0%
State Cooperative Banks	6.8%
District Central Cooperative Banks	9.7%
Primary Agricultural Credit Societies	26.8%
State Cooperative Agriculture and Rural Development Banks	33.1%
Primary Cooperative Agriculture and Rural Development Banks	38.6%

In the private sector as well, while once again there are indeed notable exceptions such as the highly profitable 110 year old City Union Bank which is focussed on the Thanjavur-Kumbakonam region of Tamil Nadu or the Jammu and Kashmir Bank, over the years many Regional Banks such as the Bank of Rajasthan, Bank of Madura, United Western Bank, and Ratnakar Bank have either failed and have had to be merged with stronger banks and substantially recapitalised, or have sought to change their character to that of a National Bank.

Benefits and Challenges

Regional Banks are likely to be lower cost and closer to the customer and therefore, better equipped to originate vis-à-vis National Banks, but their local nature also makes them more prone to “capture”. This has led to persistent governance problems and owing to the higher exposure that they have to local systematic risk (weather, crop prices, and regional economic performance), they are likely to have to pay a higher rate to their depositors which in turn, might create the need to make “riskier” loans resulting in a vicious cycle of rising non-performing assets. A design that seeks to significantly grow this category of institutions will place significantly higher regulatory and supervision demands. And, even if the local regulatory and governance issues are taken care of, while there are clear advantages to having a regional /local banking structure, there are also long-term structural issues such as concentrated risks and the gradual “hardening of soft information” that has been discussed earlier which will erode the very *raison d’être* of these institutions unless they are dealt with effectively.

There is clearly one benefit from a development and financial inclusion perspective that Regional Banks have that neither the large National Banks nor the non-bank financial institutions demonstrate - their ability to collect local deposits ends up permanently anchoring them to the local community in a way that the other institutions are not able to match. This anchoring gives them both the desire and the requirement to stay connected to the local community during both good times and bad ones. A National Bank could allow a local branch to simply stay dormant because it is experiencing some difficulties and an NBFIs can simply pull-out but neither option is available to the Regional Bank and it is forced to adapt itself to the local environment.

Improving Governance

The Regional Rural Bank which was conceived of as a subsidiary of larger National Banks was potentially a stronger design because it successfully dealt with the challenge of “capture” by local political interests owing to its relationship with its parent, but eventually did not perform as expected because gradually the culture and the cost structure of the parent National Bank permeated into the Regional Bank as well and overwhelmed the attempts at building a truly regionally focussed institution. Permitting strong National Banks to float such subsidiaries with a different ownership structure may allow them to overcome some of these difficulties and benefit from the inherent strengths of these institutions.

A study on best practices followed by community banks in the USA that were able to maintain the highest rating from their supervisors from 2006 to 2011 highlighted the following¹⁶⁴:

1. Commitment to conservative lending practices with emphasis on detailed underwriting and credit policies even if this meant losing business to some competitors who were increasing LTV ratios to gain more business
2. Presence of experienced senior management, coupled with a supportive, engaged board of directors
3. Balance between growth objectives and risk level
4. Rigorous follow-up of delinquent loans - in some cases as early as 5 days past due
5. Emphasis on relationship banking based on detailed knowledge of their markets and customers and avoiding market or products that they did not understand.

Board and management oversight is the fundamental element of ensuring a safe and sound bank and director oversight is the primary driver that keeps a bank moving in a positive direction, and is a critical component of a bank's success¹⁶⁵. Therefore there is a strong need to strengthen the board governance at the Regional Banks by ensuring that there are high standards for board composition and operations as well as by proactively grooming competent board members. Board governance for Regional Banks can be strengthened by taking the following steps¹⁶⁶:

1. Mandating high standards for Board Composition and Operations by specifying clearer “fit and proper” standards for board members that ensure some relevant experience. (e.g. mix of skills and stakeholders; independent directors; higher qualifications for board chairs; board chair and CEO not the same person; no family members of CEO on board). A few operational items could be mandated (existence of audit committee and risk committee; reporting of internal auditor directly to the board; conflict of interest standards; rotation of members). The German approach of a dual board structure: a supervisory board and an executive board that runs the bank could also be explored.
2. Grooming competent board members. Governance training could be required of all board members, or at least Chairs. Retired senior bankers may be appointed to Board roles in these institutions and institutions such as College of Agricultural Banking (CAB), Bankers Institute of Rural Development (BIRD), and Centre for Advancement in Financial Research and Learning (CAFRAL) could be requested to develop such training programmes along the lines of The Bank Director's Desktop developed by US Fed, the Global Corporate Governance Forum developed by the IFC, and the Bank Negara Malaysia sponsored Institute, the ICLIF, which offers a Financial Institution Directors Education course to board directors across Asia.

Structural Issues

While improving the regulation and supervision of these institutions will address some of the problems that they face there will be an active need to actually strengthen the capabilities of these institutions so that they are able to overcome some of the structural challenges that they face. Some of the steps, such as the adoption of Core Banking Systems by these banks is on-going¹⁶⁷ and will increase the capacity to do off-site supervision but there are several more that will need to be taken, particularly with regard to their capabilities to manage the variety of risks that they face:

1. Systematic Risk: Given their regional focus it is inevitable that in the process of originating both larger and smaller loans they will end up building portfolio concentrations that are unhealthy and attract a higher level of capital-penalty in their Stress Tests than they have comfort with. They will need to continually and actively rebalance their portfolio using sales and purchases of loans, bonds, securitised portfolios, and credit derivatives. They will need to move away from an exclusive originate-and-hold-to-maturity strategy and among other things, will need the ability to be able to hold bonds in their banking book without having to mark them to market and will gradually need to start to document all their loans using debenture / bond documentation so that the liquidity of their balance sheet improves.
2. Rainfall Risk: In rural and agricultural lending, rainfall is the most important source of exogenous risks which can have a region-wide impact. Banks have thus far tried to get their clients to hedge this risk using crop insurance that is bundled along with a farm loan. Unfortunately however, the entire rural book is exposed to this risk, even in the non-farm portion of it, and the most efficient way for banks to hedge this risk is to seek to protect the entire book against these shocks. Such a strategy also allows the bank to carry out large scale waivers in case of a region-wide or a nation-wide shock to rainfall without having to request for government funded bail-outs which have created such a massive distortion in the farm level credit culture.
3. Commodity Price: Commodity price risk is the other big risk that needs to be hedged using either insurance or commodity put options that the bank purchases on a wholesale basis in global options markets. These are not options that are permitted to be traded locally and in any case, from a national point of view there is value in laying off the risks overseas. These could also be used to offer large scale loan-waivers in case of extremely negative price events.

There are differences on this count even in the global experience. While the Swiss and the German Regional Banks have explicitly tried to address this issue of risk management, the US design has not done so and this perhaps is the main reason why the model is thriving in these two countries while it is shrinking in the US. For example, the German Sparkassen Banks are part of a national system that spreads risk across a system of Regional Banks and national institutions which include the “Joint Liability Scheme” of national and regional guarantee schemes coordinated by the *Deutscher Sparkassen und Giroverband* (DSGV: the German Savings Bank Association). Germany also has credit guarantee banks that lend within each federal region or Land organised through the *Verband Deutscher Bürgschaftsbanken* (VDB: the Association of German Guarantee Banks). They are non-profit associations of lenders that historically provided sureties worth 80 per cent of the loan value. Each guarantee bank would take on up to 35 per cent of the risk, while the federal government took 40 per cent and the Land 25 per cent. The borrower pays a fee of 1-1.5 per cent of the loan plus an annual commission of 1-1.5 per cent on the amount outstanding each year. Historically borrowers were at risk for 20 per cent of the loan value, but as a result of the recent financial crash the German Government has encouraged guarantee banks to cover 90 per cent of the risk and to take up to 50 per cent

themselves¹⁶⁸. Similarly, the Swiss cantonal banks benefit from being part of the Association of Cantonal Banks. The Association facilitates cooperation between the banks, this allows the banks to benefit from economies of scale in providing products such as pensions, investment advice and asset management. These services are provided by 20 network providers overseen by the ASCB, in an effort to 'produce centrally, provide locally'. This local provision of services allows cantonal banks to create support schemes or products specifically tailored for firms in their local market.

In India, SIDBI has been developing a pilot programme of lending to SMEs using a specialised lending tool that they have developed in which they have partnered with Urban Cooperative Banks and Regional Rural Banks. A broader set of similar partnerships would encourage the stronger institutions to grow faster and build more product depth relative to the poorer performing ones thus incentivising the weaker institutions to also improve their performance.

A review of these experiences suggests some directions for improving performance of Regional Banks in India.

Regulation and Supervision

Currently, there is considerable opacity about the true health of Regional Banks. Cooperative institutions, given their unique structure, have very little interaction with debt and equity markets - both public and private. In the context of the Cooperative Banks the Rajan Committee (2009) recommended that: "Indeed it [the Committee] would suggest rethinking the entire cooperative bank structure and moving more to the model practiced elsewhere in the world, where members have their funds at stake and exercise control, debtors do not have disproportionate power, and government refinance gives way to refinancing by the market"¹⁶⁹. This suggests that integrating Regional Banks into the more mainstream financial markets may offer one way out in which refinance by NABARD or Credit Guarantee support by CGTMSE is offered not on automatic basis but as a fairly priced second-loss deficiency guarantee allowing the Regional Bank to sell its originated loans either directly to other institutional investors, including National Wholesale Banks. All of this will serve to reveal more information about the financial health of these institutions and enable the stronger ones to forge more partnerships and grow.

While the Risk Based Supervision process has been designed for the larger and more complex institutions, a similar effort could be conceived of for the Regional Banks allowing supervisors to direct scarce on-site supervision resources to higher-risk institutions. The help of commercial ratings agencies such as CRISIL could also be taken to formally rate these Regional Banks and provide the ratings to the depositors on a regular basis - thus including them more directly into the risk-containment process. Since DICGC offers deposit insurance to these banks, the Agreement between DICGC and the bank provides an additional opportunity to both ensure that the bank is run well on an on-going basis and resolved quickly in the event that it turns insolvent. Such an Agreement would provide for risk-based pricing of deposit insurance; the right to carry out both on-site and off-site inspections; and to take possession of the bank in the event that it goes into liquidation. FDIC provides a good model for such an engagement between a deposit insurer and a Regional Bank.

Given the sheer size of the country and each state, it is clear that there will be a need to build much stronger regulatory capacity at the state level. There is a considerable amount of financial regulation that happens at the state level even today in India. For instance, the Registrar of Chits regulates the chit fund industry and the Registrar of Cooperatives regulates cooperatives in each state. In addition the RBI has recommended that regulation of NGO-MFIs also be done at the state level. However, this state level financial regulatory

framework is fragmented and there is merit in the creation of a State Finance Regulatory Commission (SFRC) into which all the existing State Government-level regulators could be merged and functions like the regulation of NGO-MFIs and local Money Services Business (referred to in Chapter 3.1) could be added on. In some states, the SFRC could be created by upgrading existing Institutional Finance Cells. There is also value in bringing regulatory function close to the enforcement function under the Economic Offences Wing (EOW), so as to ensure that they are working closely together. The RBI must be closely involved over a longer time frame in training the commissioners and licensing and accrediting the Commission itself. The local regional directors of the RBI could, for example, be ex-officio Chairs of the Commission's Board of Governors while the Commissioner could be a senior State level appointee drawn from the local Banking community. The District Magistrates would also play an important role in their respective districts. In the US which has the most varied and deep financial system relative to any other country, each state has a similar commission¹⁷⁰. This is the process through which, jointly with the FDIC, the US ends up effectively regulating the variety of institutions that make up the financial services landscape in that country¹⁷¹.

Recommendations:

- 4.13 Regional Banks continue to have a strong appeal for inclusion but low demonstrated stability in the Indian context. Robust solutions are required vis-à-vis regulation, supervision, risk management, and governance of the existing Regional Banks before any new ones are created.
- 4.14 In a manner similar to National Banks, for Regional Banks as well, refinance by NABARD or credit guarantee support by CGTMSE should be designed as risk-based guarantees and not available automatically. [Similar to Recommendation 4.12]
- 4.15 While the Risk Based Supervision process has been designed for the larger and more complex institutions, a similar effort could be conceived of for the Regional Banks allowing supervisors to direct scarce on-site supervision resources to higher-risk institutions. The help of commercial ratings agencies could also be taken to formally rate these Regional Banks and provide the ratings to the depositors on a regular basis - thus including them more directly into the risk-containment process.
- 4.16 Since DICGC offers deposit insurance to these banks, the Agreement between DICGC and the bank provides an additional opportunity to both ensure that the bank is run well on an on-going basis and resolved quickly in the event that it turns insolvent. Such an Agreement would provide for risk-based pricing of deposit insurance; the right to carry out both on-site and off-site inspections; and to take possession of the bank in the event that it goes into liquidation.
- 4.17 A State Finance Regulatory Commission (SFRC) could be created into which all the existing State Government-level regulators could be merged and functions like the regulation of NGO-MFIs and local Money Services Business could be added on. In some states, the SFRC could be created by upgrading existing Institutional Finance Cells. There is also value in bringing the regulatory function close to the enforcement function under the Economic Offences Wing (EOW), so as to ensure that they are working closely together. The RBI must be closely involved over a longer time frame in training the commissioners and licensing and accrediting the Commission itself. The local regional directors of the RBI could, for example, be ex-officio Chairs of the Commission's Board of Governors while the Commissioner could be a senior State level appointee drawn from the local Banking community. The District Magistrates would also play an important role in their respective districts.

Chapter 4.7 Non-Banking Financial Company

The total number of registered NBFCs was 12,225 as on March 31, 2013 comprising 254 deposit taking NBFCs (D-NBFCs), 418 systemically important non-deposit taking NBFCs (NBFCs-ND-SI) whose asset size exceeded Rs. 100 crore¹⁷². The ratio of the deposits of all NBFCs relative to the liabilities of the banking system is less than 1 per cent¹⁷³. NBFCs are classified on the basis of their activity into six categories: Loan Companies, Investment Companies, Asset Finance Companies, Infrastructure Finance Companies, Systemically Important Core Investment Companies, and Micro Finance Institution NBFCs. Retail NBFCs have better origination and collection capabilities and are able to reach out to the customer to perform door-step services. For instance, comparing the portfolio of housing loans originated by Banks and NBFCs, it emerges that Housing Finance Companies outperform Banks in terms of Gross NPAs with defaults of only 0.68 per cent on 2012, when compared to 2.63 per cent for Banks¹⁷⁴. Eighty per cent of AUM of all retail NBFCs in the CRISIL-rated portfolio have an outstanding rating in 'AA' or above. These institutions have anywhere between 10 to 20 per cent of capital adequacy.

One of the most important concerns expressed about the NBFCs is that they are shadow banks since they operate outside the regular banking sector but perform many of the same functions. The European Commission in its most recent paper lists entities and activities that it considers as a part of Shadow Banking¹⁷⁵. These include: Special purpose entities which perform liquidity and/or maturity transformation; for example, securitisation vehicles such as ABCP conduits, Special Investment Vehicles (SIV) and other Special Purpose Vehicles (SPV); Money Market Funds (MMFs) and other types of investment funds or products with deposit-like characteristics, which make them vulnerable to massive redemptions ("runs"); Investment funds, including Exchange Traded Funds (ETFs), that provide credit or are leveraged; Finance companies and securities entities providing credit or credit guarantees, or performing liquidity and/or maturity transformation without being regulated like a bank; Insurance and reinsurance undertakings which issue or guarantee credit products; Securitisation; and Securities lending and repo.

Based on the above definition, NBFCs fall in the category of finance companies that provide credit. However, as can be seen from the Table given below, NBFCs in India, for the most part are regulated proportionately to a Bank. Therefore in accordance with the European Commission definition, with some changes, they could be considered as an integral part of the larger banking system and not as Shadow Banks. In fact in "French banking legislation the definition of a bank arises from only the asset side of the balance sheet, that is, from lending. Consequently, in France regardless of how credit institutions fund themselves, they are considered banks, and, as such, subject to all banking regulation"¹⁷⁶.

	Banks	NBFC	Mutual Fund	SPV	Insurance Company
Capital adequacy rules on credit risk	YES	YES	NO	NO	NO
Risk-weighting of assets	YES	YES	NO	NO	NO
Provisioning and NPA norms	YES	YES	NO	NO	NO
Fair Practice Code	YES	YES	NO	NO	YES

Rationale for Differentiated Treatment of Banks and NBFCs

The gaps in the manner in which Banks and NBFCs are currently treated in India are mentioned in Table 8. It is not clear however, if full convergence is immediately possible and in some cases even desirable. For example, while it is clear that SLR as a prudential tool has outlived its utility for both Banks and NBFCs and eventually needs to be removed, it is not as obvious that even niche NBFCs which are engaged in promoter funding or specialised infrastructure lenders should be required to adhere to Priority Sector Lending norms or be given access to the Lender of Last Resort (LOLR) facilities.

While NBFCs in their current format play a useful role and will continue to do so, and every effort needs to be made to ensure that they are able to perform that role effectively, they will, of necessity, have limits to how large they can become. This will be the case on account of differentiated capital adequacy requirements, absence of access to payment systems, constraints imposed by dual regulation, and other restrictions on the nature of business they are allowed to undertake and the nature of risks they are allowed to take. From a systems design perspective this would be required because as players outside the banking system they would not enjoy the same degree of protection as banks would, and nor would the three principles of Stability, Transparency, and Neutrality apply to them in the same degree. The differentiated banking design offers multiple end points towards which NBFCs could head, particularly if issues such as SLR requirements, uniform applicability of CRR requirements, and the current definition of PSL which is rooted in historical perspectives, are satisfactorily dealt with. It needs to be borne in mind that other than a small number of entities, the bulk of the NBFC sector remains very small, does not have the ability to garner public deposits, and in aggregate has performed at a very high level of quality. The sector as a whole therefore does not constitute a source of systemic instability. It has instead been playing the role of extending the reach of the banking system to the more difficult parts of the economy.

Regulations	Banks	NBFC	Discussion
Minimum Capital Adequacy	9%	15%	No case for convergence.
Cash Reserve Ratio	4%	N.A	CRR applicable on bank deposits, shift to exclude time deposits recommended.
Statutory Liquidity Ratio	23%	15% for D-NBFCs on their deposits	Complete elimination recommended.
Duration to qualify for NPA	Non-repayment for 90 days	Non-repayment for 180 days	Case for convergence. Risk-based approaches to be followed for both types of institutions.
Definition for sub-standard asset	NPA for a period not exceeding 12 months	NPA for a period not exceeding 18 months	Case for convergence. Risk-based approaches to be followed for both types of institutions.

Definition for doubtful assets	Remaining sub-standard asset for a period of 12 months	Remaining sub-standard asset for a period exceeding 18 months	Case for convergence. Risk-based approaches to be followed for both types of institutions.
Quantum of provisioning for Standard Assets	Direct advances to agricultural and Small and Micro Enterprises (SMEs) sectors at 0.25%	0.25%	Case for convergence. Risk-based approaches to be followed for both types of institutions. For agricultural advances, this would imply at least 0.40%.
Priority Sector	40% of ANBC	NIL	No case for convergence.
Deposit Insurance	YES	NO for D-NBFCs	No case for convergence.
SARFAESI eligibility	YES	NO	Case for convergence.
Lender of Last Resort	YES	NO	No case for convergence.
Risk Weights	Differential	100% for all assets	No case for convergence.
Entry Capital Requirement	Rs. 500 crore	Rs. 2-5 crore	No case for convergence.

1. **Risk Weights:** While it is true that an NBFC may have assets on its books that have a lower expected loss rate and therefore should see the benefit in terms of Standard Asset Provisioning, it is also the presumption that an NBFC is likely to have a sectorally or regionally concentrated asset profile relative to a bank and therefore the aggregate portfolio level risk of default would not benefit from the kind of diversification that a bank would have. It would therefore be prudent to not give a lower risk weight to an asset on the books of an NBFC to compensate for the higher correlation risk between assets.
2. **Capital Adequacy:** The NBFC is presumed to be a niche participant getting into harder to reach categories, and therefore, relative to a full service National Bank which in contrast is presumed to operate in less risky categories, while permitted to enter with lower thresholds so that it can serve even very small niches, it will need to maintain a higher level of capital adequacy.
3. **Priority Sector:** While several NBFCs are deeply present in priority sectors already, for others, given their relatively small size and niche role, they may not be in a position to fulfill priority sector obligations and it may be desirable to have them focus on other sectors.
4. **Entry Capital Requirement:** Given the non-deposit taking nature of these entities, a high barrier in terms of entry capital does not seem necessary. As noted above, several of them have assets under management of less than Rs. 100 crore and may be quite regionally or sectorally specialised.

As noted previously, there are several categories of non-deposit taking NBFCs based on their activity and new ones are being proposed such as the Small Business NBFC. The Committee believes that a proliferation of categories is unwieldy, creates room for regulatory arbitrage, and hinders the evolution of NBFCs which have the ability to provide the broad range of credit products envisaged in the vision statement. The Committee recommends a consolidation of multiple NBFC definitions into a two categories: a distinct category for Core Investment Companies (CIC) and another category for all other NBFCs. Benefits that were previously available to specific NBFC types, such as tax benefits, bank limits, and priority sector status may continue to be available even after consolidation on a pro-rata asset basis. As discussed previously, the supervision strategy is recommended to be risk-based. The Rajan Committee (2009), in its report also notes¹⁷⁷ that balkanisation forced by regulation even between areas of the financial sector that naturally belong together can result in financial institutions not being able to realise economies of scope in these areas, leading to inefficiency and slower growth. The asset class differences in behaviour can be accommodated through differential provisioning on the basis of asset class rather than by creating new NBFC categories.

Funding Issues:

Given that the large majority of NBFCs are not deposit-taking, they rely on wholesale funding and this has a direct bearing on their ability to grow. Other than equity, wholesale funding includes the following sources: borrowings from banks, refinance from apex institutions, borrowings through External Commercial Borrowing (ECB), sale of securitised assets, and issuance of bonds to capital markets investors. There are constraints within each of these. These constraints need to be addressed in a systematic manner instead of creating new deposit-taking NBFCs or following an accelerated process of full-service bank licensing.

1. Banks have been an important source of funding for NBFCs and will continue to be so. While NBFCs have historically not been a source of systemic risks for the banks, it has indeed been the case that shocks to the banking system (as witnessed in 2008) have had a significant negative impact on the NBFCs¹⁷⁸. Therefore, from the perspective of diversifying the liabilities of NBFCs and minimising liquidity risks, it is important to deepen capital markets access for NBFCs. Investors such as mutual funds, insurance companies, provident and pension funds and private accredited investors could complement bank funding to this sector.
2. There has been concern around NBFCs raising public deposits via the Non-Convertible Debentures route. It is recommended that a clear framework be developed for Qualified Institutional Buyers (QIBs) and Accredited Individual Investors (AII) who may participate in these issuances and clarifications issued on NBFC eligibility for the shelf prospectus facility. Section 60A of Companies Act, 1956 had explicitly provided the eligibility list for availing the “Shelf Prospectus” facility only to public sector banks, scheduled banks and public financial institutions. Even though SEBI had amended the SEBI (Disclosure and Investor Protection {DIP} guidelines)¹⁷⁹ to this effect to give effect to the same and then through SEBI (Issue and Listing of Debt Securities) (Amendment) Regulations, 2012 issued on 12th October 2012 had permitted the availability of ‘shelf prospectus’ for a period of 180 days for any issuer going for private placement of debt. Now that Section 31 of the new Companies Act, 2013 does not prescribe the eligibility list and enables the entities as approved by SEBI to avail the said facility, it would ensure level playing field if all issuers are brought into this ambit so that the benefit of ‘shelf prospectus’ is available for one year to all issuers instead of 180 days.
3. NBFCs have been important issuers in the securitisation market, particularly in the context of priority sector assets. As discussed previously, this is a promising alternative

to forcing all Banks to originate assets directly. RBI guidelines on securitisation have been very enabling. However, the tax-exempt status of pass-through securitisation vehicles needs to be restored.

4. Norms on External Commercial Borrowing are rigidly defined and eligibility varies across different categories of NBFCs. It is recommended that there be more flexibility within this category. Specifically, ECB in Rupees needs to be permitted for all institutions. For ECB not in Rupees, eligibility to be linked to size and capacity to absorb foreign exchange risk rather than specific NBFC categories.
5. Access to various refinance schemes is restricted by institution type rather than activity, thus violating the Neutrality principle as far as NBFCs are concerned. For instance, most of NABARD's existing refinance schemes (includes schemes which amounted to Rs. 66,095 crore in 2012-13 for crop loans to farmers by commercial banks, RRBs, and cooperative banks)¹⁸⁰ and guarantees under SIDBI's Credit Guarantee Trust for Micro and Small Enterprises (CGTMSE)¹⁸¹ are not available for NBFCs even if they are engaged in eligible lending activities under these schemes.
6. As far as equity funding is concerned, the minimum capitalisation norms are provided for NBFCs based on foreign ownership. The capitalisation slabs are USD 0.5 million, USD 5 million and USD 50 million for foreign capital below 51 per cent, below 76 per cent, and above 75 per cent respectively. These limits are quite steep and, in the context of scarce domestic equity capital, make it far too difficult to access foreign sources of equity, including patient capital from DFIs and this may have a link to higher pricing of loans from NBFCs, in particular NBFC-MFIs. If the root cause of these restrictions is related to money laundering concerns, that may be mitigated by instituting additional reporting requirements on Banks/Authorised Dealers (AD) that enable these transactions.

Risk Management:

While it is indeed the case that the non-bank character of NBFCs makes them less of a systemic risk concern on a national basis, on a regional or a product market basis, failure of an NBFC can have severe consequences for clients and local economies where they may have been the sole or dominant formal provider. Research by IGIDR that studied the impact of the Microfinance Ordinance on households in Andhra Pradesh, found that consumption dropped by 19.5 per cent over the one year after the crisis across all income classes, and the income class with the highest use of micro-credit, experienced a negative impact on even food consumption¹⁸². It can therefore be concluded that failures in the NBFC sector can have negative consequences for the real sector. It is important therefore to ensure that while NBFCs may continue to enjoy some exemptions, such as that on minimum entry capital, adequate attention is paid to the manner in which they manage their risks.

1. Liquidity risk: Due to the added significance of the underserved populations to the politics of both State and Central governments, as well as the existence of more than one regulatory authority for certain types of credit institutions and the delays in attaining regulatory clarity wherever loopholes exist, extending financial services to underserved segments is fraught with risk. This in turn has real consequences for credit delivery. It drives investors in such institutions to demand a higher risk premium to mitigate this perceived risk, which translates to higher prices of offering credit to the end customer. This risk is best exemplified by the Andhra Pradesh Micro Finance crisis of 2010, where an ordinance passed by the State Government resulted in large losses to portfolios of several MFIs; impairment in the credit behaviour of borrowers and a withdrawal of credit facilities by all banks to all MFIs, even those outside Andhra

Pradesh¹⁸³. There is a need to adequately protect the sector against correlated behaviour by commercial banks and regulators. If this risk can be mitigated through catastrophic insurance or a guarantee fund, it can benefit lenders and improve ratings of these entities.

2. Provisioning: Different customer asset sub-groups behave very differently from each other and it is recommended that the regulator specify NPA recognition and provisioning rules, including for standard assets, at the level of each asset-class and require that all NBFCs conform to these mandates.
3. Risk Measurement and Disclosure: Require all NBFCs to have better on-going risk measures. These include disclosure of their stress test results both at an overall balance sheet level as well as at a segmental level on an annual basis. All NBFCs must adopt core banking systems so that they are able to do the sophisticated reporting required for effective off-site supervision.

Micro Finance Institution-NBFCs

NBFC-MFIs are a specific type of NBFC created by RBI in December 2011 as the seventh category within NBFCs. NBFC-MFIs typically serve low-income women clients in rural and urban environments through a group loan product. 22 per cent of all small borrower accounts are with MFIs. This is higher than the number of such accounts with Commercial Banks or RRBs. An NCAER study found that most MFI borrowers belonged to the 31-40 years group, in their productive years, who needed credit most in the absence of employment opportunities and a vast majority of the borrowers were either illiterate or had studied only up to primary level¹⁸⁴. These loans are used for a variety of purposes including repayment of informal debt, house repair and renovation, purchase of livestock, agriculture, education and household consumption including health expenditures.

The NBFC-MFI guidelines of 2011, subsequently amended in 2012, laid down specific requirements in terms of: minimum net owned funds requirement which at Rs. 5 crore is higher than the Rs. 2 crore requirement for regular NBFCs; margin caps of 10 per cent and 12 per cent for large and small MFIs respectively; caps on number of loans to a client; caps on loan ticket size; restrictions on loan tenure; defining qualifying assets as comprising pre-dominantly income-generating loans to clients of a certain income; and mandatory credit bureau reporting. Many of the criteria that determine whether an NBFC can be an NBFC-MFI, such as the borrower income criteria¹⁸⁵, loan size and tenure¹⁸⁶, number of borrowings¹⁸⁷, purpose of loan¹⁸⁸, have the potential to create undesirable consequences, both for the end borrowers and the lending institution.

There has been a lot of concern about the rates of interest charged by MFIs and is the reason why the NBFC-MFI regulations included a price cap, in what was viewed as a significant reversal of policy stance on interest rate deregulation being followed by RBI. This was also in contrast to recommendations of the Rajan Committee (2009), which advocated for liberalising the interest rate charged, but putting in place requirements of transparency as well as eligibility for accessing priority sector funding¹⁸⁹. Despite all this, it was a welcome first step because it assuaged the anxieties around “extreme profiteering” by MFIs and also ensured that there was a public endorsement of the critical role that these institutions play; a reaffirmation of the fact that RBI was actively involved in their oversight; and that indeed in its judgment these rates were justified on account of the higher cost to serve this very vulnerable client group.

MFI interest rates are currently around 26 per cent with cost of funds accounting for about 13-14 per cent of this. Competitive forces have not produced price competition in this sector and most MFIs have similar levels of pricing. There is a concern that the current NBFC-MFI guidelines that restrict the number of MFIs serving a client are effectively acting

as a barrier to entry thus limiting the competitive forces operating in the sector. Another reason why sharp reductions in interest rate, proportionate to costs are not being witnessed is that many MFIs finance growth through revenues rather than equity capital. Increasing the sources of equity funding is therefore an important aspect of bringing down interest rates in the MFI sector even as it continues to expand its outreach. There are wide variations in the cost structures of MFIs and the price cap has indeed created conditions in which the low cost players are no longer required to offer the benefit of these costs to their customers. Some of the ways to address this issue include the following:

1. Enable better benchmarking by requiring all NBFC-MFIs to disclose their operating costs (direct and indirect) of a mature branch to the RBI or MFIN once it becomes an SRO.
2. Total borrowing limit for the small borrower segment may be increased immediately to Rs. 100,000 across all lenders. If total indebtedness is being tracked adequately, the stipulation of a maximum number of lenders appears redundant and can be gradually removed as this would also help in creating intensified price competition. This is consistent with focus on total indebtedness of the small borrower in relation to their debt-servicing capacity and not just indebtedness per se or merely from NBFC-MFIs.
3. Gradually phase out the restriction on NBFC-MFI from making larger value loans (> Rs. 50,000). This constrains their diversification into categories such as home loans and small business loans.

Regulation such as restricting the proportion of consumption finance by NBFC-MFI has constrained lending for consumption purposes for low-income households and has overwhelmingly laid policy emphasis on credit for income-generation. That this is a misplaced notion is well-articulated by the RBI Governor Raghuram Rajan's statement of the importance of credit to smoothen consumption needs and to tide over emergencies for low-income households¹⁹⁰. A mechanical emphasis on income-generating loans also produces new risks linked to success of the project and may trigger a shift to more expensive informal loans for the purpose of consumption smoothing. There is also no empirical evidence that at the current levels increases in the quantum of formal credit has led to unsustainable levels of consumption producing higher levels of credit risk. All policy biases against consumption finance need to be removed, particularly since total formal sector indebtedness can now be tracked through credit bureaus.

Additionally, meeting the complete financial services needs through household assessments is a more promising approach to serving low-income households than narrowly assessing product requirements of individuals.

Transition of NBFCs to Differentiated and National banks

Entities that start out as a niche NBFC may over time acquire the profile of a Bank, and would need to be able to transition smoothly into either a Full Service Bank or a Wholesale Consumer Bank or a Wholesale Investment Bank.

Currently there are specific barriers that prevent several of those entities that already have the character of Banks from becoming one. These include:

1. Current definitions of PSL are restricted only to a few sectors. Specialised NBFCs operating in sectors such as infrastructure are not able to include their loans as PSL and will have to originate in sectors where they have no expertise, for example, agriculture.

2. Absence of markets to trade in PSL assets. The definitional issue in PSL is compounded by inability to buy and sell PSL assets. This forces every player to create their own origination capability and this is challenging for players who may have the liquidity to purchase PSL assets but not the expertise to build origination engines.
3. SLR is applied on all banks despite no prudential reason to do so in the presence of capital adequacy guidelines.
4. CRR is uniformly applied on demand and time liabilities, instead of just on demand liabilities.

The Committee recommends that these barriers be expeditiously addressed because they will both enhance the effectiveness of existing Banks as well as allow strong NBFCs to enter as Differentiated Banks or National Banks, without abandoning their core capabilities. As noted previously, this has the potential to significantly strengthen financial deepening in India.

This transition will have a number of benefits to the NBFCs:

1. The concerns of dual regulation will be properly addressed.
2. Being accorded the status of a bank, even if only a Wholesale Bank, will give them access to the payments system and protection under LOLR facilities.
3. There will be full convergence on all other fronts, including capital adequacy.

However, even without these changes, for a group of NBFCs, such as those that are already engaged substantially in originating loans that qualify under current PSL guidelines, may benefit from a transition even under the current regime.

Accordingly, the Committee recommends that under the Banking Regulation Act, a set of banks may be licensed which may be referred to as Wholesale Banks with the following characteristics:

1. Given that their primary role is lending and not the provision of retail deposit services, they will only be permitted to accept deposits larger than Rs. 5 crore.
2. Since they could expect to borrow large amounts from other banks, net liabilities from the banking system will be permitted to be deducted from their NDTL computation for the purposes of ascertaining their SLR obligations on par with the treatment currently given for CRR.
3. Since other banks are expected to lend large amounts to Wholesale Banks, those other banks will be permitted to deduct their net assets to the banking system from the computation of their ANBC (the amounts on which PSL requirements are to be applied).
4. In view of the fact that they will not take retail deposits, the minimum entry capital requirement for them will be Rs. 50 crore compared to the Rs. 500 crore required for full-service SCBs.
5. If the institution has fewer than twenty branches through which it operates, it will not be required to meet the 25 per cent branching requirement. Institutions with twenty or fewer branches could be referred to as Wholesale Investment Banks while those with a larger branch network could be referred to as Wholesale Consumer Banks.

6. Wholesale Consumer Banks could be permitted to act as BCs for other full service banks.
7. They will be required to comply with all other RBI guidelines relevant for SCBs and will be granted all the other rights and privileges that come with that licence.

Recommendations:

- 4.18 The Committee recognises that a partial convergence of NBFC and Bank regulations may be desirable. It recommends the following:

Regulations	Banks	NBFC	Recommendation
Minimum Capital Adequacy	9%	15%	No case for convergence.
Cash Reserve Ratio	4%	N.A	CRR applicable on bank deposits, shift to exclude time deposits recommended.
Statutory Liquidity Ratio	23%	15% for D-NBFCs on their deposits	Complete elimination recommended.
Duration to qualify for NPA	Non-repayment for 90 days	Non-repayment for 180 days	Case for convergence. Risk-based approaches to be followed for both types of institutions.
Definition for sub-standard asset	NPA for a period not exceeding 12 months	NPA for a period not exceeding 18 months	Case for convergence. Risk-based approaches to be followed for both types of institutions.
Definition for doubtful assets	Remaining sub-standard asset for a period of 12 months	Remaining sub-standard asset for a period exceeding 18 months	Case for convergence. Risk-based approaches to be followed for both types of institutions.
Quantum of provisioning for Standard Assets	Direct advances to agricultural and Small and Micro Enterprises (SMEs) sectors at 0.25%	0.25%	Case for convergence. Risk-based approaches to be followed for both types of institutions. For agricultural advances, this would imply at least 0.40%.
Priority Sector	40% of ANBC	NIL	No case for convergence.

Deposit Insurance	YES	NO for D-NBFCs	No case for convergence.
SARFAESI eligibility	YES	NO	Case for convergence subject to strong customer protection guidelines.
Lender of Last Resort	YES	NO	No case for convergence.
Risk Weights	Differential	100% for all assets	No case for convergence.
Entry Capital Requirement	Rs. 500 crore	Rs. 2-5 crore	No case for convergence.

- 4.19 Multiple NBFC definitions should be consolidated into two categories: a distinct category for Core Investment Companies (CIC) and another category for all other NBFCs. Benefits that were previously available to specific NBFC types, such as tax benefits, bank limits, and priority sector benefits should continue to be available even after consolidation, on a pro-rata asset basis.
- 4.20 The Committee recommends addressing wholesale funding constraints faced by NBFCs in a systematic manner. The following are the specific recommendations in this regard:
- a. A clear framework to be developed by RBI and SEBI for Qualified Institutional Buyers and Accredited Individual Investors who may participate in debt market issuances of NBFCs.
 - b. Benefit of 'shelf prospectus' should be available for one year to all issuers including NBFCs.
 - c. Permit ECB in Rupees for all institutions.
 - d. For ECB not in Rupees, eligibility should be linked to size and capacity to absorb foreign exchange risk rather than specific NBFC categories.
 - e. The nature of activity, rather than institution type, must be made the criterion for availing refinance from NABARD, NHB, SIDBI and credit guarantee facilities.
 - f. Current capitalisation slabs on foreign equity funding should be relaxed and money laundering concerns should be mitigated by instituting additional reporting requirements on Banks/Authorised Dealers (AD).
- 4.21 In a manner similar to banks, different customer-asset combinations behave very differently from each other and it is recommended that the regulator specify NPA recognition and provisioning rules, including for standard assets, at the level of each asset-class and require that all NBFCs conform to these mandates. [Identical to Recommendation 4.3 for National Banks]
- 4.22 Require all NBFCs to have better on-going risk measures. These include disclosure of their stress test results both at an overall balance sheet level as well as at a segmental level at least annually. All NBFCs must adopt core banking systems so

that this can enable better off-site supervision. [Identical to Recommendation 4.4 for National Banks]

- 4.23 Enable better benchmarking by requiring all NBFC-MFIs to disclose their operating costs (direct and indirect) of a mature branch to the RBI or MFIN once it becomes an SRO.
- 4.24 The regulatory focus must be on total indebtedness of the small borrower in relation to their debt-servicing capacity and not just indebtedness per se or merely from NBFC-MFIs. Keeping this in mind, the total borrowing limit for the small borrower segment may be increased immediately to Rs. 100,000 across all lenders, including bank-lending to this segment. In order to implement this, all lenders to this segment will need to be mandated to report to the credit bureau as has been the case with NBFC-MFIs. If total indebtedness is being tracked adequately, the stipulation of a maximum number of lenders appears redundant and can be gradually removed as this would also help in creating intensified price competition.
- 4.25 All policy biases against consumption finance need to be removed. An example of this is restricting the proportion of consumption finance that is permitted for NBFC-MFIs.
- 4.26 In order to enable the gradual transition of eligible and interested NBFCs to Wholesale Consumer Banks or Wholesale Investment Banks or National Banks, the Committee recommends a re-examination of PSL definitions [also see Recommendation 4.41], creating an active market for PSL assets, assessment of the relevance of SLR in light of capital adequacy norms, and application of CRR on time liabilities.
- 4.27 Under the Banking Regulation Act, a set of banks may be licensed which may be referred to as Wholesale Banks with the following characteristics:
 - a. Given that their primary role is lending and not the provision of retail deposit services, they will only be permitted to accept deposits larger than Rs. 5 crore.
 - b. Since they could expect to borrow large amounts from other banks, net liabilities from the banking system will be permitted to be deducted from their NDTL computation for the purposes of ascertaining their SLR obligations on par with the treatment currently given for CRR.
 - c. Since other banks are expected to lend large amounts to Wholesale Banks, those other banks will be permitted to deduct their net assets to the banking system from the computation of their ANBC (the amounts on which PSL requirements are to be applied).
 - d. In view of the fact that they will not take retail deposits, the minimum entry capital requirement for them will be Rs. 50 crore compared to the Rs. 500 crore required for full-service SCBs.
 - e. If the institution has fewer than twenty branches through which it operates, it will not be required to meet the 25 per cent branching requirement. Institutions with twenty or fewer branches could be referred to as Wholesale Investment Banks while those with a larger branch network could be referred to as Wholesale Consumer Banks.

Credit: Non-Banking Financial Company

- f. Wholesale Consumer Banks should be permitted to act as BCs for other full service Banks.

They will be required to comply with all other RBI guidelines relevant for SCBs and will be granted all the other rights and privileges that come with that licence.

Chapter 4.8 Priority Sector Lending

Introduction

Directed lending through efforts such as the Priority Sector Lending (PSL) program of the RBI have had a well-established history across many countries at different points in their development and have served a different purpose in each country¹⁹¹. In India while priority sector focus has existed from the 1950s in some form or the other, the Priority sector Lending (PSL) program in its current form has been implemented by the RBI since 1974, when banks were advised to raise credit to specified priority sectors of the economy to the level of 33.3 per cent by March 1979¹⁹². Currently this number stands at 40 per cent with the sectoral allocation specified in Table 4.8.1¹⁹³.

Sector	% of ANBC	Remarks
Direct Agriculture	13.5%	
Indirect Agriculture	4.5% to qualify within agriculture and excess as part of the overall 40% target	
SME	Within the overall 40% target	Sub-targets based on size of the SME
Weaker sections	10%	Includes segments such as distressed farmers, scheduled castes and tribes, women up to Rs.50,000

Starting with this sectoral allocation the two important questions that need to be answered are: how best to achieve PSL targets? and how to set these targets? This chapter discusses both of these questions and makes some recommendations on how the current approaches may be improved upon.

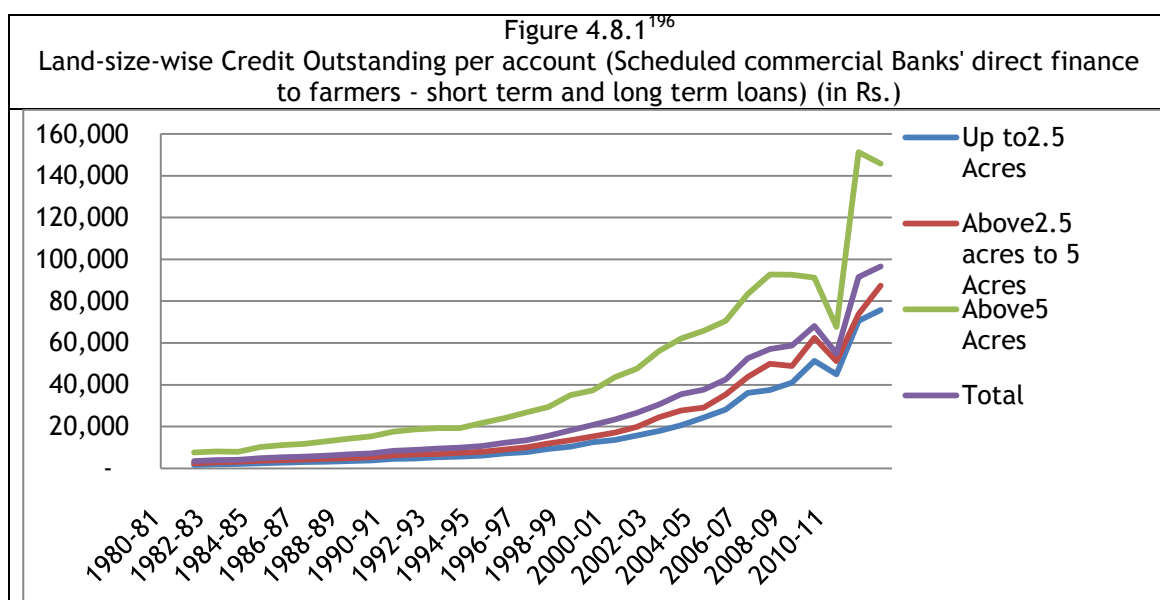
Definitional Issues

While a later section in this chapter discusses whether the current sectoral approach towards setting PSL obligations is the best one and whether, over time, there would be a case to move to an entirely different approach, there are aspects of the current PSL guidelines that need to be reaffirmed and certain anomalies that need to be addressed.

1. There have been several suggestions made to relax the eligibility criteria within current sectors of PSL. However, given the vast unmet need for credit for sectors under even current definitions, this does not appear desirable. For example, while exact data is not available, both national level and field level data indicate that agriculture continues to be heavily under-banked. At the national level, from Table 2.3 in Chapter 2.2 it can be seen that against a minimal aspiration of 50 per cent Credit to GDP for each sector, while Industry is at 87 per cent, agriculture is only at approximately 36 per cent - offering perhaps one explanation for the inflationary and supply side shocks emerging from that sector of the economy. At the field level, based on the data from a rural financial institution in Tamil Nadu and NABARD's scale of finance estimates, the demand for credit by small and marginal farmers at a Gram Panchayat level comprising fewer than 2,000 small and marginal farmer households, is about Rs. 1.95 crore¹⁹⁴. If this is assumed to be the level of demand for all the 2.46 lakh Gram Panchayats in India, it produces an estimate of Rs. 4.8 lakh crore as the credit demand from small and marginal farmers alone. This is approximately equal to the amount of total credit that currently flows to the entire agricultural sector in India

- both direct and indirect. Similarly, another field level estimate¹⁹⁵ shows credit demand for micro-enterprises just in Bangalore Urban District alone to be approximately Rs. 17,000 crore. If merely 25 urban centres have a similar level of credit demand from micro-enterprises, just this sector alone would require more than Rs.4 lakh crore of credit. From these admittedly crude approximations, it appears that there is sufficient room for growth of credit even within current definitions and that there is a fairly severe incidence of under-penetration for these very important sectors of the economy. Unless more carefully done research produces numbers that are very different from these approximations, there appears to be no case to relax and broaden the PSL definitions in the context of the current PSL guidelines.

In this context it is interesting to note that despite the many years of focus on agriculture overall as a sector it has not crossed even the very low financial depth threshold of 50 per cent Credit to GDP. Agricultural GDP in India is about Rs. 13 lakh crore. Achieving the 18 per cent agricultural targets under PSL at the current Net Bank Credit level would imply a credit number of Rs. 9 lakh crore giving a relatively healthy sectoral credit-to-GDP of 70 per cent. However, in reality, as mentioned earlier, the sectoral credit-to-GDP of agriculture is much lower. In addition, over the years, there is also a disproportionate increase in credit per capita to farmers with large land-holdings even though their share in agricultural production is lower.



This is also corroborated by the continued prevalence of informal indebtedness among farmers - AIDIS (2002) reveals that non-institutional sources account for almost 40 per cent of borrowing by cultivator households. In fact only 14 per cent of the marginal farmers (with land holdings less than 1 hectare) were taking institutional credit in 2009, with the remaining largely relying on informal sources of credit for their credit needs¹⁹⁷. It could well be the case that low credit penetration is one of the important factors responsible for the rapid decline in the share of agriculture, despite the involvement of such a large part of the rural populace in this activity.

2. Some PSL delivery models depend on lending through real sector intermediaries such as fertiliser dealers and sugarcane companies. While these channels do offer a measure of convenience to the bankers, they also run the risk of tying the hands of the farmer and leading to malpractices such as over-consumption of inputs like fertilisers and pesticides, over-pricing of inputs, and under-pricing of produce. Moreover these

non-financial channels are not bound to follow the customer protection guidelines applicable to the financial sector. These channels therefore represent at best a stop-gap arrangement and there is a need for formal financial sector channels to emerge that are capable of dealing with this customer base directly. Accordingly, it is consistent for PSL guidelines to encourage this shift by not making lending through real-sector intermediaries eligible for PSL. Similarly, lending to real-sector intermediaries has also been removed from the eligible list in the last change of PSL guidelines. This is consistent with the objectives of directing credit towards segments that experience the most credit rationing. Several real-sector intermediaries are highly rated companies and should have no constraints in accessing credit from Banks outside the PSL framework.

- Direct Agriculture lending targets, in the manner in which they are currently defined, appear however, to be biased against landless agricultural labourers as well as marginal farmers who self-supply labour. The sole factor of production available to the landless labourer is her own labour. In order to maintain this factor of production (self-supplied labour), she has to spend on health, food, life insurance and disability insurance premiums, and other critical consumption items throughout the year. In order to meet these needs, due to the seasonality of farm incomes, she will necessarily have to borrow to manage expenses particularly during the agricultural off-season. However such borrowing by a landless labourer does not qualify under Direct Agriculture and is viewed as financing consumption expenditure instead of production expenditure. In direct contrast to this, a medium-farmer who relies on farm equipment as the main factor of production can borrow to purchase and maintain such equipment even when it is not being used, and his borrowing is treated as a Direct Agriculture. This distinction between labour and other factors of production results in landless labourers systematically facing higher costs of borrowing relative to land-owning farmers. This difference in costs of borrowing could be between 20-60 per cent depending on the source of credit. The issue faced by the landless labourer also persists in the context of marginal farmers who self-supply labour as well as large farmers using labour-intensive techniques.

The Committee therefore recommends that all loans given to landless labourers and small and marginal farmers should be counted as a part of Direct Agriculture and not merely the wages component of a loan given to a farmer for financing her agricultural production.

	Landless agricultural labourer	Mechanised medium farmer
Income	Agriculture income for 6 months, at Rs.100/day = Rs.18,000 Non-agriculture income for 3 months, at Rs.100/day = Rs.9,000	Agriculture income for 1 paddy season = Rs.60,000 Non-agriculture income for 3 months, at Rs.100/day = Rs.9,000
Primary factor of production	Own Labour	Farm equipment
Borrowing for maintenance of primary factor of production during off-season	Borrowing for food & healthcare during lean season: Rs.2,000	Borrowing to maintain farm equipment: Rs.5,000
Cost of borrowing	65% p.a. from Money Lender	4% p.a. under Direct Agriculture to 26% p.a. from SHG or MFI
Difference in cost of borrowing: ranges from 61% to 29% p.a.		

4. PSL is currently defined with respect to loans made to various sectors and segments identified in the guidelines. It also includes investment by banks in securitised assets and Inter-Bank Participation Certificates where the underlying assets qualify under the PSL criteria. The Committee recommends the following with respect to PSL investments:
 - a. Investment by banks in bonds of institutions must qualify for PSL where wholesale lending to the same institutions already qualifies under PSL. The fact that loans to an NBFC-MFI qualify for PSL while bonds do not for the same institution appears to be an anomaly. Separately there is also a need to ensure that bond and other investments of banks are permitted to be held in the “banking book” of the bank based on declared intent and not merely based on source or legal documentation.
 - b. Credit facilities documented as bonds or Pass-Through Certificates (PTC), whether originated directly or purchased in the secondary markets should be permitted to be held in the “banking book” of a bank based on declared intent and not merely based on source or legal documentation.
 - c. Investment by banks in RIDF must not qualify for PSL. RIDF investments are intended only to address non-compliance and also because RIDF proceeds are made available to State Governments, who, while pursuing important development goals, are not credit constrained and could raise money from market sources and should be encouraged to do so instead of crowding out bank lending. Instead, efforts need to be directed towards ensuring that Banks are able to effectively lend to the under-banked sectors of the economy.
 - d. Investment by banks in the form of non-fund based limits (such as guarantees) should also qualify for PSL to the extent of the credit equivalent amount of the off-balance sheet facility where loans to these categories qualify for PSL. Since a bank is taking on the risk of this facility and has offered it to the client based on assessed need, this treatment would appear to be more internally consistent than excluding such facilities and therefore denying such clients access to non-fund based facilities. ANBC should also be adjusted to include such PSL-linked, non-fund based limits.
 - e. As an added category, within the overall equity investment limits of banks, RBI could permit equity investments by banks in complementary infrastructure within the purview of PSL guidelines, such as rural warehouses, market yards, godowns, silos, and NBFCs in low financial depth districts. Unlike investments in downstream enterprises, these investments would have the effect of directly contributing to increased lending to the current PSL sectors and face a severe constraint in the amount of equity available to them. These equity investments may be included as a part of the overall priority sector lending targets. They should only be permitted where debt already qualifies for PSL but with a multiplier of four, to reflect the higher risk and the illiquid character of these investments. For example, a Rs. 100 crore equity investment in a rural warehousing company by a bank would be equivalent to Rs. 400 crore of priority sector lending. The benefit must accrue as long as the equity investment is held by the Bank. This list of eligible equity investments may be varied from time-to-time and marked to market as per existing investment guidelines applicable to banks.

Strong Year End Bias in Agricultural Flows

Credit flows to agriculture under PSL display considerable seasonality not explained by cropping patterns. The Task Force on Credit Related Issues of Farmers, in its report

submitted to the Ministry of Agriculture, Government of India, in 2010, observed that while month-wise credit disbursement patterns should have been in line with ground level requirements of Kharif (June, July, September) and Rabi (December, January) seasons, one-fourth of the disbursements instead happen in March, a month that is not critical to agriculture production. This is explained by the fact that PSL is a financial year-end target for banks.

	2008-09			
	SCB	Coop	RRB	All
April	1.17	7.99	7.71	2.79
May	2.5	5.95	0.56	2.85
June	5.37	6.18	6.73	5.61
July	6.34	7.87	7.78	6.69
August	4.63	9.45	11.59	5.98
September	9.33	5.43	8.58	8.67
October	5.84	4.94	5.76	5.69
November	7.02	6.84	6.68	6.96
December	11.69	7.72	10.94	11.01
January	10.97	6.44	10.23	10.21
February	11.75	5.9	7.29	10.45
March	23.38	25.28	16.14	<u>23.09</u>
All	100.0	100.0	100.0	100

Considering the fact that a bulk of the PSL lending is focussed in March every year because there is only a year-end target, the Committee recommends that the current PSL targets be applicable on the last reporting Friday of the last month of each quarter in exactly the same manner as it is currently applicable in the month of March, so as to ensure more timely and continuous credit flow into priority sectors. In order to ensure administrative ease, requirements such as investment into RIDF can continue to be levied on an annual basis and computed on the basis of the average of the quarterly requirements. This may at first glance appear to make it more difficult for banks to achieve their priority sector targets but on careful examination it is clear that this will in fact make it easier for them to build a strong and vibrant priority sector business:

1. From a demand side there is nothing particularly significant about the March quarter relative to the other quarters. Historically this was chosen as the date because in an environment where banking data was all managed without the use of computers, it was convenient since it was also the financial year-end. In a Core Banking System enabled banking environment it is now possible to track these targets, if necessary, on a daily basis. From a supply side, therefore, spreading out the achievement of these targets will allow lenders to more closely match demand throughout the year and build a lending division that is equally active throughout the year and not overly so only at the year-end.
2. Currently those banks that lend for short-term crops during the Kharif and Rabi seasons do not get any benefit of that lending for the priority sector target computation since the crop loans are, for the most part, already repaid by the end of March. This also in

part accounts for the lack of an adequate supply response from the agricultural sector since credit is not made available in a timely manner. A more continuous lending programme would address this issue satisfactorily as well as ensure that credit risk is managed much better.

3. The need of the entire banking system to lend large amounts of credit during a single quarter end results in undue pressure on interest rates that can be charged and since the borrowers do not really need the money at that time it also increases the risk of diversion of funds and therefore of default.
4. The need to maintain a near continuous PSL portfolio outstanding rather than just at one point during the year will increase the focus of banks on investment credit, since, unlike crop loans, it has the property that it remains outstanding over a number of years.

Restrictive interest rate policies, subventions, and waivers on agricultural loans

Banks are required to price farm loans below Rs. 3,00,000 at 7 per cent for which they receive an interest subvention of 2 per cent in the subsequent period. This pricing is not consistent with the risk levels associated with loans to agriculture. The principle of Stability requires banks to price all loans, including agricultural loans, on a sustainable basis. This stipulation of 7 per cent also violates the RBI guideline that requires banks to price all loans above their Base Rate. However, the RBI has made a special exemption for crop loans up to Rs. 3,00,000 and said that banks should charge farmers the interest rates as stipulated by the Government of India. In case the yield to the bank (after including subvention) is lower than the Base Rate, such lending will not be construed as a violation of the Base Rate guidelines¹⁹⁹.

In addition, the implementation of the Debt Relief and Debt Waiver Scheme for Small and Marginal Farmers in 2008 by the Central Government has had serious negative implications for the banking system since it created the expectation in the minds of farmers that more such schemes would follow and therefore farm-loans did not have to be serviced regularly.

The Committee is of the view that if the government does desire to provide relief in any form to the small farmer, it would be best carried out as a direct benefit transfer to the bank account of the farmer and not through the mechanism of either interest subvention or debt waiver. This would ensure that the banking system is able to price loans in a sustainable manner and also protect credit discipline amongst its borrowers. Adding a universal requirement to report all defaults to credit bureaus would ensure that the borrower also builds a strong interest in protecting his credit history. Canara Bank for example recently reported that using CIBIL data there were able to halve the NPA levels on their retail asset portfolio²⁰⁰.

The Committee also recommends that in order to guard against large scale defaults resulting from catastrophic events, banks work closely with insurance companies to purchase bank-wide portfolio level insurance against events such as large scale rainfall failure on a regional or national basis, instead of having an expectation that relief would be provided from national or state budgets.

No Market for Sale and Purchase of Agricultural Credit

While a number of other financial markets have evolved in India, including for the trading of agricultural futures contracts, there has not been any impetus for the evolution of a market for the sale and purchase of agricultural credit. The Narasimham Committee II (1998) had recommended in this context that “As a measure of improving the efficiency

and imparting a measure of flexibility, the Committee recommends consideration of the debt securitisation concept within the priority sector. This could enable Banks which are not able to meet their priority sector targets to purchase debt from institutions which are able to lend beyond their mandated percentage”.

The absence of this market has meant that each financial institution has had to limit its origination of PSL loans exactly to the extent of its own deposits and market borrowings and not originate in excess of their requirements to sell to those institutions that may be flush with funds but do not have the capability or the confidence to generate an adequate quantum of PSL loans. This has also inhibited the growth of institutions that may have origination capability in low financial depth regions but not the liquidity to support it. This has not only prevented specialisations from building up but also has contributed to the imbalances in lending to those regions that have not been able to build up their own banks, as cash rich banks have chosen to focus their lending efforts in regions where they are already strong such as the Southern and Western regions of the country. As the discussion on National Banks in Chapter 4.2 reveals, in the absence of such a market, many banks are being forced to pay large penalties or to originate PSL assets directly even though in doing so, they are incurring unsustainably high costs and risk-related charges.

The creation of such a market would also enable differentiated banks with different foci and strategies such as Wholesale Investment Banks and Wholesale Consumer Banks to contribute actively to supporting the priority sectors. Such markets would also help naturally concentrated lenders such as Regional Banks (including RRBs, LABs, and Cooperative Banks) to transfer local systematic risks away from their balance sheets and thus become structurally stronger. The absence of this market has meant that the only way to redress concentration risks arising from focussed lending to specific sectors or regions has been through a broadening of origination strategy forcing them to assume risks that are inconsistent with their core capabilities.

While currently, RBI guidelines on securitisation are quite enabling vis-à-vis trading of PSL assets, one specific regulatory barrier is that the all-inclusive interest charged to the ultimate borrower by the originating entity should not exceed the Base Rate of the purchasing bank plus 8 per cent per annum. Since such a restriction does not exist on an asset directly originated by a bank and is also inconsistent with the cap on interest rates permitted to NBFC-MFIs, this should be removed for securitised assets as well.

Creation of such a market will also enable a broader group of participants in the market both as suppliers and users of credit. For example, the Food Corporation of India (FCI) and State Governments can originate warehouse receipts and raise low-cost funds against these receipts instead of being reliant only on bank credit and crowding out other borrowers that do not have the ability to access the market directly.

The Committee recommends that the RBI take steps to encourage the creation of such a market for Agricultural Credit by permitting banks to hold purchased assets within their banking book on par with assets originated directly by them, based entirely on the declared intent of the bank and not based on the legal format of the documentation.

The Committee recommends that the RBI remove the stipulation that the all-inclusive interest charged to the ultimate borrower by the originating entity should not exceed the Base Rate of the purchasing bank plus 8 per cent per annum. Further, as mentioned in Chapter 4.5, the RBI should also represent to the Government of India to restore the tax-free status of securitisation SPVs as pass-through vehicles for tax treatment so as to create pathways for Wholesale Banks to provide liquidity to other Banks and Financial Institutions directly originating assets in priority sectors.

While a market that trades PSL assets will be of critical importance, the Committee also recommends that regulation should additionally enable the use of risk-free PSL Certificates as a means to achieving PSL compliance amongst banks that wish to do so.

Specialisation through Differential Sectoral and Regional Weights

Current PSL strategies require each bank to originate assets in exactly the same manner as every other bank. While such an approach could be entirely feasible for banks with universal banking aspirations, it is not well-suited to benefit from the unique capabilities of more regionally or sectorally specialised banks. For example, rural cooperative banks or National Banks with a large rural branch network may be better suited to focus their entire attention on direct agricultural lending while their urban counterpart would do well to concentrate only on lending to small businesses. This has meant that not only are the banks as a whole not achieving their PSL targets, particularly to key sectors such as agriculture but are also experiencing a very high incidence of loan losses.

Year	Priority Sector			Non-priority sector	
	Overall	Agriculture	MSE	GNPA	Adjusted GNPA ²⁰²
2009-10	3.2%	2.2%	3.7%	1.6%	2.1%
2010-11	3.6%	3.3%	3.4%	1.4%	1.9%
2011-12	4.3%	4.3%	3.9%	1.9%	2.6%

An alternate way of achieving the same overall goals would be to not impose a uniform sectoral allocation on each and every bank but instead to reflect the importance of a particular sector through an adjustment factor and replace the current 40 per cent PSL requirement with a 50 per cent Adjusted PSL (APSL) requirement. Banks could achieve their APSL requirement either by concentrated origination in a sector of their choice or through market purchases of qualified assets. The sector weightages can be derived every three years on the basis of relative shortfalls in achievements by banks. This is illustrated below:

PSL in 2013	Public Sector Banks	Private Sector Banks	Target
Agriculture (%)	15.0	12.8	18.0
MSE (%)	13.7	16.1	-
Weaker Sections (%)	9.8	5.7	10.0
Total PSL (%)	36.3	37.5	40.0
Total PSL outstanding (Rs lakh crore)	12.8	3.3	
Total shortfall in PSL (%)	3.7	2.5	
Total shortfall in Agriculture (%)	3.0	5.2	
Total shortfall in MSE (%)	-	-	
Total shortfall in Weaker Sections (%)	0.2	4.3	
Overall Banking Sector Shortfall in Agriculture (%)			3.4
Overall Banking Sector Shortfall in Weaker Sections (%)			1.0

According to the relative shortfalls seen in the above, sectors like Agriculture and Weaker Sections may receive higher weightages than export. Even within agriculture, Direct Agriculture would receive a higher weightage, while Indirect Agriculture would not, based on the difficulty banks face in specifically achieving their Direct lending targets. There is evidence²⁰³ to show that credit deepening in the indirect finance category has been much

more pronounced than in the direct finance category. Based on the data in Table 4.8.5, the weightages for Direct Agriculture and Weaker Sections are calculated depending on the extent of underachievement relative to the target; all other sectors do not have sub-targets and it is not obvious that banks find it difficult to lend to these sectors. The following multipliers for investments in different PSL sectors are proposed for the FY 2014-15 to FY 2016-17 period:

PSL Sector	Target	Extent of Achievement	Multiplier
Direct Agriculture	13.5%	74.5%	1.25
Weaker Sections	10.0%	89.9%	1.10
Other Sectors	16.5%	100%	1.00

As the scheme in Table 4.8.6 indicates, Rs.1 lent by a bank for direct agriculture (or 1 per cent of Net Bank Credit) would be multiplied by a factor of 1.25, and the Adjusted PSL achievement would be equal to Rs. 1.25 (or 1.25 per cent of Net Bank Credit). The objective of this design is to incentivise banks and others to lend to sectors that are severely starved for credit and to build specialisations in those sectors.

In addition to the shortfalls associated with the credit flows to specific sectors, there also exist large regional disparities both in the total quantum of credit disbursed by the banking system as well as for each sector. During the 11th Five Year Plan²⁰⁴, 37.6 per cent of agricultural credit was disbursed in Southern India, which accounts only for 18.7 per cent of India's gross cropped area. On the other hand, Eastern India received only 7.3 per cent of agricultural credit with 14.7 per cent of gross cropped area and Central India received only 13.2 per cent of agricultural credit with 27.2 per cent of gross cropped area. To address this regional disparity, there is a need for differential regional multipliers that will value Rs. 1 invested in a credit starved district more than in a district well-penetrated by credit. These differential multipliers for districts are constructed based on an objectively measured index of financial inclusion - Inclusix published by CRISIL²⁰⁵. The index provides a score out of 100, with 100 indicating a fully financially included district. Scores in the index range from 96.2 for Pattanamthitta district in Kerala to a low of 5.5 for Kurung Kumey district in Arunachal Pradesh. A raw district weightage for each district is calculated based on the distance of the score for that district from that of the best performing district, i.e., the worst performing district would have the highest weightage. However, in order to ensure that the district weightages do not become too high, they need to be damped down by a factor which ensures that the district with a CRISIL Inclusix score of 50 gets an APSL of 50 per cent for achieving 40 per cent ANBC in PSL. Based on the data, Faridkot (Inclusix Rank: 141, Score: 50) in Punjab is the district for which achieving 40 per cent ANBC should yield a APSL of 50 per cent. By adjusting for this, the damping factor is obtained, which is applied to the raw district weightages. Table 4.8.7 illustrates the damped district weightages and the PSL sector weightages, which together yield the district-sector combination weightages that will need to be applied to the PSL portfolios to calculate APSL.

CRISIL Inclusive Rank	District	Direct Agriculture (Weightage: 1.25x)	Weaker Sections (Weightage: 1.1x)	Other Sectors (Weightage: 1x)
1	Pattanamthitta (Weightage: 1.0000)	1.250	1.100	1.000
100	Namakkal (Weightage: 1.1069)	1.3887	1.2190	1.1069
141	Faridkot (Weightage: 1.1239)	1.4100	1.2377	1.1239
200	Rajkot (Weightage: 1.1409)	1.4313	1.2565	1.1409
300	Muzaffarnagar (Weightage: 1.1658)	1.4625	1.2838	1.1658
400	Birbhum (Weightage: 1.1804)	1.4808	1.2999	1.1804
500	Nabarangapur (Weightage: 1.1939)	1.4977	1.3147	1.1939
600	Paschimi Champaran (Weightage: 1.2114)	1.5197	1.3341	1.2114
632	Kurung Kumey (Weightage: 1.2449)	1.5617	1.3709	1.2449

Based on this analysis, it emerges that Rs. 1 invested in Direct Agriculture in Pattanamthitta district (Rank: 1) yields an APSL of Rs. 1.25, while if it were invested in Kurung Kumey district (Rank: 632), it would yield an APSL of Rs. 1.56. Depending on the sector and the district that different PSL investments are made in, the overall APSL for the portfolio is calculated.

It must however be noted that the APSL is designed to be an incentive for institutions to go into more difficult-to-do regions and sectors, as well as to promote greater specialisation; it is not meant to be a disincentive for banks from lending in more better covered regions and sectors. As is clear from the design, each Rupee invested into PSL anywhere in India, in any sector, yields an adjusted value of at least 1, there is no penalty for operating in “easy” regions and sectors. What the APSL design instead offers is the choice of going to more excluded regions and sectors to get the benefits of increased weightages.

As an illustration, three different banks could choose three completely different strategies to fulfil PSL obligations based on their specialisations and strengths:

1. Bank 1 follows a strategy to lend 40 per cent of ANBC to the sectors and sub-sectors in proportions defined in the PSL guidelines and lends to a number of districts above and below the middle score district, which yields an APSL of 50 per cent.
2. Bank 2 focuses all of its lending in Direct Agriculture to be done equally among all districts, so as to get an overall weightage benefit (sectoral and regional combined) of 1.45. Such a strategy will need the bank to lend only 34.5 per cent of its ANBC to reach its 50 per cent adjusted PSL requirement. If, however, the bank were to focus all its Direct Agriculture lending to top ranked district, it would need to lend 40 per cent of its ANBC to get to an APSL of 50 per cent, while, focusing only on Direct Agriculture to the bottom ranked district would require it to lend 32 per cent of ANBC.

3. Bank 3 focuses all of its lending on SMEs in the major Indian cities, thereby foregoing any sectoral weightage benefit, but gaining some regional benefit, yielding an overall weightage of 1.16. In this case, so as to reach the APSL target of 50 per cent, the bank will need to lend 43.2 per cent of its ANBC to SMEs.

The Committee recommends that the RBI revise the PSL targets and require banks to meet an Adjusted PSL target of 50 per cent against the current requirement of 40 per cent of ANBC. The adjusted sectoral and regional weights to be used in computing the APSL for the three year period from FY 2014-15 to FY 2016-17 are specified in Annexure A.

A Fresh Examination of the PSL Framework

While the banking sector in India has grown substantially since the 1970s, the size of the banking sector in India is still inadequate to meet all the needs of the real economy. This is evident in the low financial depth ratio and the concentrated nature of balance sheets of banks. These data point to the real possibility that in a completely deregulated environment, there might not be adequate flows to sectors of the economy that have a particular importance, even if they are credit-worthy and can be served profitably. In order to ensure that India exhibits balanced growth and uses its scarce banking system resources in a manner best suited to the needs of the economy it therefore becomes necessary to “nudge” the system towards these sectors. The definition provided in the Narasimhan Committee Report I (1991) suggests that directed credit policies in India have fundamentally aimed to extend bank credit to under-banked regions as well as sectors that are deemed important to national growth and otherwise neglected sectors. All of this builds the rationale for a continuation of a priority sector lending policy until the overall financial system acquires enough depth so that no critical sector of the economy or region of the country is so starved of access to finance that it eventually starts to exert a deleterious influence on the growth of the entire economy and weakens its ability to address the challenges of deep seated underdevelopment in those parts.

However, the basis of the total quantum of PSL obligations and how that is allocated across various sectors is not clear and appears to be lacking any dynamic features. As a consequence, even though the structure of the economy has changed quite dramatically, the priority sector requirements have remained essentially unaltered for four decades, since they were first specified in 1974.

Currently, priority sectors include agriculture, which has historically contributed a major portion to India’s GDP; weaker-sections, which represent the most marginalised groups in society; and housing and education, which are deemed to require investment for creating long-term social benefits. However, since its inception, the scope of priority sector has been widened to include more and more sectors. For instance, since the 1970s there have been several additions to the sectors covered under directed bank credit - infrastructure, retail traders, small businesses, and education (1970) and the addition of a sub category of weaker sections (1980). These additions have been frequently modified and even repealed in the subsequent years. This apparent lack of any particular pattern strongly suggests that there is a need to closely examine the fundamental design of the PSL program and its designated sub-targets for different sectors in order to ensure that indeed the sequestered resources are being put to the best possible use and serving the purpose for which they were originally intended. For example, the logic for higher education loans being reckoned as PSL and primary education loans not being eligible is not clear. There are also inadvertent biases that have gotten created in PSL definitions. The issue of labourers and marginal farmers versus mechanised farmers was discussed earlier. Another concern is the bias towards ownership housing and not rental housing by making home loans up to a specific amount eligible for PSL.

Credit: Priority Sector Lending

In order for PSL targets to automatically reflect the needs of the underlying economy, the Committee recommends that since in accordance with its vision, each “significant” sector or sub-sector (with more than a 1 per cent contribution to the GDP) of the economy should achieve at least a 50 per cent credit to GDP ratio (financial depth) in order to ensure that the absence of finance is not retarding its growth, the difference between actual financial depth and this 50 per cent goal should determine the weight assigned to it.

The Committee also recommends that since, in accordance with its vision, each district of the country should achieve at least a 50 per cent credit to GDP ratio (financial depth) in order to ensure that the absence of finance is not retarding its growth, the difference between actual financial depth and this 50 per cent goal should determine the weight assigned to it. The table below gives the weights that are assignable to each sector of the economy using this approach.

For the illustration below, only the three main sectors of the economy have been used (agriculture, manufacturing and services), and two customer segments (sub-sectors) under each of the sectors. A deeper exercise with accurate district GDP data²⁰⁶, more granular sectors and detailed customer sub-segments would be required to design a more precise mechanism for PSL.

		Sector	Agriculture		Industry		Services	
		Customer Segment	Marginal & Small	Medium and Large	MSME	Large	MSME	Large
		Sector-Segment Credit to GDP ratio	44.9%	26.4%	55.7%	101.0%	25.3%	42.6%
		Sector-Segment Weightage	1.05	1.24	1.00	1.00	1.25	1.07
District	District Credit to GDP ratio	District Weightage	REGION-SECTOR-CUSTOMER SEGMENT MATRIX FOR APSL					
Nicobar	1.8%	1.48	1.558	1.832	1.482	1.482	1.848	1.592
Karimnagar	16.6%	1.33	1.402	1.649	1.334	1.334	1.664	1.433
Raigarh	26.0%	1.24	1.304	1.533	1.240	1.240	1.546	1.332
North Goa	36.1%	1.14	1.197	1.408	1.139	1.139	1.420	1.224
Karnal	45.8%	1.04	1.095	1.288	1.042	1.042	1.299	1.119
Bengaluru Urban	118.9%	1.00	1.051	1.236	1.000	1.000	1.247	1.074

To reiterate, a comprehensive measure to assess the sectors and regions eligible for PSL would be built on two broad parameters:

1. District level Credit Depth
2. Sector and sub-sector level Credit Depth

The Committee recommends that RBI seriously examine moving to a new framework in which two parameters: District level credit depth, and sector and sub-sector level credit depth be used to determine the sector, sub-sector, and regional weights which are

published every three years. Using these weights banks would be required to reach an adjusted PSL target of 150 per cent of ANBC.

Recommendations

- 4.28 All loans given to landless labourers and small and marginal farmers should be counted as a part of Direct Agriculture and not merely the wages component of a loan given to a farmer for financing her agricultural production.
- 4.29 Investment by banks in bonds of institutions must qualify for PSL where wholesale lending to the same institutions already qualifies under PSL.
- 4.30 Credit facilities documented as bonds or Pass-Through Certificates (PTC), whether originated directly or purchased in the secondary markets should be permitted to be held in the “banking book” of a bank based on declared intent and not merely based on source or legal documentation. [Identical to Recommendations 4.1(b) and 4.10]
- 4.31 Investment by banks in the form of non-fund based limits (such as guarantees) should qualify for PSL to the extent of the credit equivalent amount of the off-balance sheet facility where loans to these categories qualify for PSL. ANBC should also be adjusted to include such PSL-linked, non-fund based limits.
- 4.32 Equity investments by banks in complementary infrastructure within the purview of PSL guidelines, such as rural warehouses, market yards, godowns, silos, and NBFCs in low financial depth districts. These equity investments should be eligible for contribution to the overall priority sector lending targets. They should be permitted where debt already qualifies for PSL but with a multiplier of four, to reflect the higher risk and the illiquid character of these investments. The benefit must accrue as long as the equity investment is held by the Bank. This list of eligible equity investments may be varied from time-to-time. [Identical to Recommendation 4.44]
- 4.33 PSL targets should be applicable on the last reporting Friday during the last month of each quarter in exactly the same manner as it is currently applicable in the month of March, so as to ensure more timely and continuous credit flow into priority sectors. In order to ensure administrative ease, requirements such as investment into RIDF can continue to be levied on an annual basis and computed on the basis of the average of the quarterly requirements.
- 4.34 If the government does desire to provide relief in any form to the small farmer, it would be best carried out as a direct benefit transfer (DBT) to the bank account of the farmer and not through the mechanism of either interest subvention or debt waiver. This would ensure that the banking system is able to price loans in a sustainable manner and also protect credit discipline amongst its borrowers. Adding a universal requirement to report all defaults to credit bureaus would ensure that the borrower also builds a strong interest in protecting his credit history, even if he is a recipient of DBTs. [Similar to Recommendations 4.2 and 4.43]
- 4.35 In order to guard against large scale defaults resulting from catastrophic events, banks should be permitted to work closely with insurance companies to purchase bank-wide portfolio level insurance against events such as large scale rainfall failure on a regional or national basis, instead of having an expectation that relief would be provided from national or state budgets.

Credit: Priority Sector Lending

- 4.36 For the provision of food-credit, Food Corporation of India (FCI) and State Governments should be required to originate warehouse receipts and raise low-cost funds in the market against these receipts instead of being reliant only on bank credit. [Identical to Recommendation 4.46]
- 4.37 The stipulation that the all-inclusive interest charged to the ultimate borrower by the originating entity should not exceed the Base Rate of the purchasing bank plus 8 per cent per annum should be removed. [Identical to Recommendation 4.9]
- 4.38 The RBI should represent to the Government of India to restore the tax-free status of securitisation SPVs as pass-through vehicles for tax treatment so as to create pathways for Wholesale Banks to provide liquidity to other Banks and Financial Institutions directly originating assets in priority sectors. [Identical to Recommendation 4.11]
- 4.39 While a market that trades PSL assets will be of critical importance, regulation should additionally enable the use of risk-free PSL Certificates as a means to achieving PSL compliance amongst banks that wish to do so.
- 4.40 In order to enable greater regional and sectoral specialisation among Banks, the Committee recommends that the RBI revise the PSL targets and require banks to meet an Adjusted PSL target of 50 per cent against the current requirement of 40 per cent. Districts and sectors are weighted based on the difficulty in lending to them, and a Bank lending to a difficult sector in a difficult to reach district can benefit from a multiplier value based on the specific sector and district. Every sector-district combination has a weight associated with it and the Bank will have to reach an adjusted PSL value of 50% taking these weightages into account.
- 4.41 The Committee recommends that RBI seriously examine moving to a new framework in which two parameters: District level credit depth, and sector and sub-sector level credit depth be used to determine the sector, sub-sector, and regional weights which are published every three years. Using these weights banks would be required to reach an Adjusted PSL target of 150 per cent of ANBC.

Chapter 4.9 Complementary Infrastructure

In order for credit to be delivered in a sustainable manner and for it to be distributed in an equitable manner across regions, there are several elements of complementary infrastructure that need to be encouraged. This Chapter discusses some of the important elements of complementary infrastructure including:

- a. Customer Data Architecture
- b. Warehousing Infrastructure
- c. Land Registries
- d. Weather Stations
- e. Registries for Movable Collateral
- f. Development of second-hand asset markets

Customer Data Architecture

Robust customer data architecture is critical infrastructure for financial deepening in the country. In particular, it enables Banks to extend their outreach beyond physical branch networks. A large number of borrowers lack access to formal credit since they do not have acceptable forms of collateral or verifiability of income. These borrowers consequently don't have formal credit histories or payment histories, which further limits their ability to access formal credit. Such borrowers are called 'thin-file' borrowers in the credit reporting world. The following steps can be taken to ensure that such customers can build credit histories over a period of time:

1. Use of Alternative or Non-Traditional Data: Most borrowers, the poor included, have alternate payment history track records that do not include making repayments on formal loans or credit. This could be the payment of utility (water, gas, telephone, cable) bills, rentals, and instalment payments for consumer goods and appliances, which occur on a recurring basis. These recurring payments provide an alternative method of tracking payment behaviour for potential borrowers. For instance, the Italian credit bureau, CRIF, set up a credit scoring model, the "water score," which took up to 3 years of payment of water bills into consideration. More than 83 per cent of water customers who previously had no credit history now have a positive one thanks to paying their water bills, which made it easier for them to obtain credit.

The most significant example of a service with far-reaching impact is that of mobile service providers. Mobile service providers operate in virtually every economy today, and serve large segments of the population in these economies. Mobile phones have deep outreach and penetrate the poorest segments of the population - those without access to basic amenities, or regular phones/landlines. Mobile service providers are, therefore, natural collectors of information on the entire range of financial clients (including the unbanked), and are likely participants in credit reporting systems.

Such non-traditional or alternative data allows lenders to make more reliable assessments of applicants that have sparse "formal" credit histories, and increase access to credit to those that are typically left out of formal lending channels. For example, a 2006 study by the Policy and Economic Research Council (PERC) in the United States, that looked at 80 lakh thin-file consumer records held by a mainstream credit bureau in the United States, found that including non-traditional data increased acceptance rate (by 10 per cent in the case of energy utility data and 9 per cent in the case of telecom data). With the introduction of alternative data, a larger per cent of the thin-file population became score-able (using traditional lending models). In a one-year observation period, the study found that 16 per cent of thin-file borrowers whose

credit report included alternative data had opened a new credit account as compared with 4.6 per cent of thin-file borrowers whose credit report did not include alternative data.

2. Use of Big Data: The use of transactional data such as mobile minutes, top-ups, and Voice and SMS usage to create scoring models that predict consumer behaviour presents the next frontier in credit scoring. This new set of data can be a lot richer and more voluminous. For example, a mobile account may generate hundreds or even thousands of calls and text messages per month, each carrying a rich data set that includes when the call was made, the location of the caller at the time of the call, who received the call, the type of information accessed via text messaging, and the types and number of payment transactions made through the device.

However, big data is more than financial data or mobile data. It includes all types of digital data that can be studied and analysed to construct the profile of an individual and provide tailored products and services catering to this individual. Several start-up companies have emerged around the globe that use social data feeds (like Twitter, Facebook, LinkedIn) to develop credit profiles and scores of people that are not traditionally banked, and offer credit to them.

One example is Cignifi, a start-up that partnered with Oi Telecom, Brazil's largest telecom operator, to develop a pilot scorecard using consumer call data records that would predict creditworthiness of low-income borrowers in Brazil's poorest region. Specifically Cignifi worked with data of Oi Telecom's 'Oi Paggo' product which provided pre-pay customers with a credit card delivered entirely through their mobile phone. Oi Paggo was looking for ways to improving its risk assessment of pre-pay customers, the majority of whom did not have formal credit histories, to reduce loan loss rates and improve uptake of the product. Cignifi used call data records (CDR) of 27 lakh pre-pay mobile consumers in 21 cities in north-east Brazil specifically looking at detailed calls, SMS, and top-up activity. The scoring model they built was back tested against loan and payment data from a portfolio of 40,000 virtual credit cards issued to a set of those same customers by Oi Paggo. Cignifi was able to develop a scorecard that provided Oi Paggo a comprehensive underwriting strategy for targeting low-income consumers in a profitable manner while limiting risk exposure. Cignifi analysis showed that if Oi Paggo had used their scorecard during preapproval and underwriting, they would have approved 24 per cent net new customers and reduced default rate in its portfolio from 12 per cent to 9 per cent. Even though big-data related developments are at a nascent stage in India, creating robust customer data architecture will be a critical complementary infrastructure for financial deepening in the future.

3. Credit Bureaus to cover all credit institutions: With the integration of microfinance borrowers into main stream credit reporting, a larger segment of the borrowing population (around 2.5 crore microfinance loan records are uploaded monthly on the credit bureaus) is being included in the coverage of bureaus. However, to play a more effective role in inclusion, credit bureaus will eventually have to cover all credit institutions including banks, cooperatives, and NBFCs. There is an urgent need for credit bureaus to tap into such sources of credit information in order to build credit histories of people. The regulator should require that all loans by regulated institutions should be reported to at least one credit bureau.
4. Expand list of specified users for Credit Bureau data: The Credit Information Companies Act (CICA), 2005 provides for specified users, notified by the RBI, who can get access to bureau data. The list of specified users, as well as non-credit

contributors needs to be expanded as India gains experience with credit information. Extant regulations denote cellular and phone service providers (amongst others) as specified users. However, while these entities are not 'banking companies' and are therefore not mandated to share data with the bureaus, they are allowed to access bureau data in making decisions relevant to their activity. Good practice credit reporting systems generally operate on the principle of reciprocity²⁰⁷, whereby a data provider would only be allowed to access credit bureau data if it had provided its own data to the bureau.

In this context, customer data protection assumes great importance. India needs to move to a system where any person having a written authorisation of the borrower or entity on whom information is being sought, ought to be able to have access to the credit records in question, with only the truly necessary safeguards. Among potential users should include a prospective employer, landlord, or creditor, whether bank or non-bank. One of the best ways to limit unauthorised use of credit information is to develop systems, which record all queries for an individual's report. Consumers can review this information if they think their data has been used in an inappropriate manner. This simple reporting tool can greatly help to detect misuse of the data by lenders and others who may request this information, as well as by staff of the credit reporting firm.

5. Incentives to "Clean Up": Procedures should be in place to facilitate challenges to erroneous data. Consumers should be able to review their reports and identify reporting errors via the Internet and by phone. It is particularly important that consumers have access to reports when an adverse action has been taken. Clear procedures should be established in regulations specifying the steps in the dispute resolution process and the time that credit reporting firms have to verify and respond to complaints. International best practice is to establish time limits on the length of the credit history available to a potential lender. Economic research shows that recent credit payment record is of most relevance for predicting future default. Moreover, the fact that after a certain period of time, information, especially regarding defaults, will not be distributed to lenders creates additional incentives for the borrower to improve credit repayment behaviour and to 'clean up' the record. For example, records are available only for 5 years in Australia, Brazil, Germany, Ireland, Peru, and Spain, and for 7 years in the US, and Mexico.
6. Ownership of Customer Data: There is a need to develop a robust legal and regulatory framework around customer data generated in various transactions (payments and credit, digital and off-line), with the objective of customer ownership of their own transactions data and its use for signalling credit-worthiness. One approach to this is the architecture developed by companies like Idcubed.org who have an open source software that can be built as standard into every smartphone, tablet and wearable digital device that allow users to own their data through a highly secure 'core identity', which makes it harder for the state and companies such as Google and Facebook to scrape private data for their own ends. The availability of such a 'lock box' of data, authentication and 'priming' by the phone vendor, and employer requirement to 'log in' such authentication, provide alternative approaches to developing an architecture that enables use of data while respecting individual rights. In countries where a separate data protection authority or privacy commissioner exists, all data providers/users of a credit reporting system would fall under the purview of this authority, since the authority's reach extends across sectors and thus overcomes some of challenges associated with overlapping regulatory boundaries. In Australia and New Zealand for instance, the respective Data Privacy Commissioner is responsible for regulating all entities participating in the credit reporting system and ensuring their

compliance with the respective credit reporting legislations. Data protection is still largely in its infancy in India, although privacy is afforded through several acts, like the Information Technology Act of 2000, Information Technology (Reasonable Security Practices and Procedures and Sensitive Personal Information) Rules 2011 (IT RSPSPPI Rules), the Indian Constitution, to name a few. As the data landscape evolves in India, it becomes critical that a cogent framework for data protection is developed.

Warehousing Infrastructure:

Warehouse receipts finance can play an important role in smoothing income for farmers by providing liquidity against the harvested commodity. When delivering the product to an accredited warehouse, the farmer obtains a Warehouse Receipt that can be used as collateral for short-term borrowing to obtain working capital. The Rajan Committee (2009) estimated that this had the potential to inject over Rs. 1 lakh crore of agricultural credit, based on a projection that at any time, about 15-20 per cent of the annual agricultural produce is stored in warehouses.

With the promulgation of the Warehousing (Development and Regulation) Act, 2007, warehouse receipts have become negotiable instruments. They offer reliable form of collateral in the agricultural sector. Warehouse receipts can be in physical or electronic form and must be issued by registered warehouses, which will be accredited by the Warehousing Development and Regulatory Authority. The warehousing capacity available in India, in public, cooperative and private sector is about 11.24 crore MTs (Table 4.9.1²⁰⁸).

#	Name of the organisation /Sector	Storage Capacity (in Crore MT)
1.	Food Corporation of India (FCI)	3.36
2.	Central Warehousing Corporation (CWC)	1.01
3.	State Warehousing Corporations (SWCs)	2.30
4.	State Civil Supplies	1.13
5.	Cooperative Sector	1.54
6.	Private Sector	1.90
Total		11.24

The storage space available in the country is not sufficient to cater to the procured stocks. As a result, substantial quantity of food grains (wheat) is stored in Covered and Plinth (CAP), an open storage system. For instance, in the Rabi Marketing Season (RMS) 2012-13, the Food Corporation of India (FCI) had procured 3.8 crore tonnes of wheat which was around 1 crore tonnes higher than the earlier record procurement.

Land Registries:

A critical barrier to financial access is the frequent inability of small and informal borrowers to secure loans with collateral, often a necessary condition for participation in formal credit markets. One frequently cited contributing factor is the fact that in much of

the developing world a large percentage of both rural and urban property is untitled²⁰⁹. In Peru, introduction of land titling was associated with a 9-10 percentage point increase in loan approval rates from the public sector bank for housing construction materials, while there appears to be no effect on the loan approval rate of private sector lenders. However, conditional on receiving a loan, private sector interest rates are an average of 9 percentage points lower²¹⁰ for clients with a clear title to their land.

As per Indian law, while the compulsory registration of sale of land and property is mandated, the Registration Authority does not need to verify the history or ownership of the property from the seller. The deeds registry simply gives public notice of a transaction and does not imply any inference about the legal validity of the transaction or that the parties were legally entitled to carry out that transaction. Therefore, land registration does not mean registration of title of land; it is only a deed of transaction. This considerably weakens the protection offered by the system to property holders.

Considering the multiple gaps in the present system of land registration, the Government of India needs to lead an urgent initiative to establish the legal and institutional framework aimed at establishing a transparent and streamlined process for surveying, recognising, validating, registering, issuing and guaranteeing land titles. Several State Governments including Rajasthan and Andhra Pradesh have taken the lead in moving towards this approach.

It has been recommended by the Working Group on Partnerships for Land Title Implementation in Urban Management (PLATINUM)²¹¹, that the long-term solution to the issue of land titling will require State Governments to constitute Land Titling Authorities (LTA), which will undertake surveys of all lands and issue title certificates after undertaking the required enquiries and maintain registers of titles issued. It may also administer a system of indemnification of the titles issued against errors. For this purpose, the Authority could constitute specialised divisions working under its control and supervision.

In a guaranteed land title registration system, the title register shows the accurate legal situation of the land and therefore removes the need for retrospective examination of title and maintenance of deeds. This system is based on three basic principles:

1. Curtain: There is no requirement of further proof of ownership beyond the Title Certificate and the entry in the title registry of the LTA. The LTA will maintain an accurate and updated Title Register of all land through a system of Unique Property Identification Numbers (UPIN). Any conveyance registered with the Stamps and Registration Department is updated in the LTA's Title Registry, and a fresh title is issued by the authority indicating all the changes in the title.
2. Mirror: Under this principle, the LTA ensures that what is shown on the title certificate reflects the ground reality. The LTA will survey, geo-locate and allocate UPINs to land parcels before the first title is issued.
3. Indemnity: The title is guaranteed by the State Government to the title holder and any legitimate counter claimant is indemnified against loss by the government. The land Tribunal will hear appeals against orders of the Authority and adjudicate on them.

This approach has also been endorsed by the Rajan Committee (2009) and offers a systematic long-term path to land titling. However, considering the fact that land is a subject in the State List of the Constitution, the establishment of a nation-wide system that guarantees land titles is bound to be a long process. As interim measures that pave

the way for creation of guaranteed land titling system, the immediate steps outlined by the Rajan Committee (2009) were:

1. Full Computerisation and Integration of land records: Government measures to encourage computerisation could include:
 - a. Clarifying the policy and establishing clear criteria and accountability mechanisms for allocation of central funds on this;
 - b. Identifying and publicising best practices on technical and legal issues and promoting exchange and communication among technical staff across states; and
 - c. Prioritising full functional integration between records and registry.
2. Full cadastral mapping of land: An important problem is that existing cadastral survey records are largely limited only to agricultural land. The inhabited portions of villages, as well as towns and cities, have largely remained un-surveyed. Identification of urban property is, therefore, only by means of description of boundaries. This has to be remedied. A relatively low cost method to implement basic cadastral mapping is to combine satellite imagery with existing village maps and other readily available spatial products.
3. Reduction of stamp duty: All states receiving funds under JNNURM are required to provide a roadmap for reducing stamp duties to no more than 5 per cent in a definite timeframe.
4. Compulsory registration of all transactions: A large number of land transactions, especially in case of succession, do not need to be registered, partly because it is deemed unreasonable to charge stamp duty on these. Requiring that any change in the revenue records as a result of succession triggers a corresponding change in the land registry, without any payment in stamp duty, will go some way in ensuring registries are complete.
5. Elimination of restrictions on land markets: Widespread prohibition of land leasing is not consistent with efficient resource allocation. It raises the cost to rural-urban migration as villagers are unable to lease their land, and often have to leave a family member (typically the wife) behind to work the land. Lifting these restrictions can help the landless (or more efficient large land owners) get land from those who migrate, and allow those who currently lease land informally to formalise their transactions and thus obtain institutional credit and other benefits.

Weather stations:

One of the ways in which the risk of loss of crop yield on account of adverse weather has been mitigated in lending to farmers is through the use of a crop insurance protection linked to the crop loan. Weather based insurance products are designed to provide insurance protection against losses in crop yield resulting from adverse weather incidences. For example, the Weather Based Crop Insurance Scheme (WBCIS) provides payout against adverse rainfall incidence (both deficit and excess) during Kharif and adverse incidence in weather parameters like frost, heat, relative humidity, and un-seasonal rains during Rabi season. The weather index insurance market in India is the world's largest, having transitioned from small-scale and scattered pilots to a large-scale weather based crop insurance program²¹². In the 2010-11 agricultural year over 90 lakh Indian farmers held WBCIS policies with premium volume of over Rs. 1,300 crore and total sum insured over Rs. 16,000 crore²¹³. For the purposes of compensation, the State Government notifies a Reference Unit Area (RUA), which is deemed to be a homogeneous

unit. All the insured cultivators of a particular insured crop in that area are deemed at par in the assessment of claims. Each RUA is linked to a Reference Weather Station (RWS), on the basis of which current weather data and the claims would be processed. Claims arise when there is a certain adverse deviation in actual weather parameter incidence in RUA as per the weather data measured at RWS. According to the India Meteorological Department (IMD), there are 701 departmental hydro-meteorological observatories in the country. Further, the IMD operates 125 Automatic Weather Stations and 500 automatic rain gauge stations²¹⁴. In addition, there are 8,579 non-departmental rain gauge stations²¹⁵.

In weather based insurance products, the insured holds the 'basis risk'. Basis risk is defined as the variability in the relationship between the value of losses as measured by a weather index and the value of losses experienced on the farm by the farmer²¹⁶. Basis risk could occur due to spatial variation in weather variables (particularly where there are local micro-climates) as well as differences in management practices, soil quality or crop varieties. Because no individualised loss adjustment occurs with weather index insurance, the policy-holder must always carry the basis risk. Geographic basis risk, which is likely to arise from the distance between a farmer's plot of land and the contractual weather station, can be reduced by an increase in granularity of weather stations²¹⁷. Paucity of weather stations in the country limits demand for weather insurance since the farmer knows that she holds the risk of receiving no claim payment despite having experienced a severe crop loss.

Further, "suggestive evidence of the role of liquidity constraints implies that policies should be designed to provide payouts as quickly as possible, especially during the monsoon when measured discounting of future cash flow is high. For example, payouts from a policy covering the first phase of the monsoon, if paid immediately, could be used to help fund crop replanting later in the monsoon. In practice to date, payouts are not made until after the end of the monsoon, in part because of delays in receiving certified rainfall data from government rainfall stations."²¹⁸ Private entities like ICICI Lombard, for instance has begun using automated rain gauges that report rainfall immediately. This allows payouts to be made more quickly, and reduces basis risk by increasing the density of rainfall stations.

More geographically dispersed weather stations therefore reduce basis risk and increase the speed and accuracy of weather data. This could lead to a higher take-up of weather indexed insurance and higher rate of acceptance of weather-indexed contracts by reinsurers, translating into improved reinsurance rates. According to the Draft Guidelines for setting up Automatic Weather Stations (AWSs) and Automatic Rain Gauge (ARGs), crops within a radius of 5 km from a weather station can be insured with a reasonable reduction in basis risk, while anything beyond 5 km tend to increase the uncertainty. Assuming the 5 km radius, about 40,000 weather stations would be required at the national level to service weather insurance²¹⁹. Private entities like ICICI Lombard have started to form partnerships with National Collateral Management Services Limited (NCMSL) to install automated weather stations throughout India. Such initiatives need to be strongly encouraged by the Government. A wide network of weather stations also enables the growth of the domestic weather risk market and the placement ability of domestically underwritten weather contracts in the international market.

Registries for movable collateral and development of second-hand markets:

According to World Bank Enterprise Surveys performed in over 100 countries, collateral was required in over 75 per cent of all loans. Studies have noted that the availability of collateral remains a binding constraint on financing, and that this constraint binds harder

in underdeveloped financial markets, where insufficient collateral remains one of the main reasons firms are rejected when they apply for bank credit²²⁰.

Movable assets, as opposed to fixed assets such as land or buildings, often account for most of the capital stock of private firms and comprise an especially large share for micro, small and medium-size enterprises. For example, in the developing world, it is estimated that 78 per cent of the capital stock of businesses is typically in movable assets such as machinery, equipment or receivables, and only 22 per cent is in immovable property²²¹. Hence, movable assets are the main type of collateral that firms, especially those in developing countries, can pledge to obtain bank financing. However, banks in developing countries are usually reluctant to accept movable assets as collateral due to the inadequate legal and regulatory environment in which banks and firms co-exist. In this context, movable assets become “dead capital”. For instance, studies have estimated that nearly 90 per cent of movable property that could serve as collateral for a loan in the United States would likely be unacceptable to a lender in an underdeveloped financial market²²².

While a sound legal and regulatory framework is essential to allow movable assets to be used as collateral, registries for movable assets fulfil two key functions:

1. to notify parties about the existence of a security interest in movable property (of existing liens) and
2. to establish the priority of creditors vis-a-vis third parties

Therefore, without a well-functioning registry for movable assets, even the best secured transactions laws could be ineffective. A recent study that explored the impact of introducing collateral registries for movable assets on firms' access to bank finance across 73 countries found that the introduction of registries for movable assets is associated with an increase in the likelihood that a firm has a bank loan, line of credit, or overdraft; a rise in the share of the firm's working capital and fixed assets financed by banks; a reduction in the interest rates paid on loans; and an increase in the maturity of bank loans²²³. In 2007, China enacted the new Property Law which adopted important principles of modern secured transactions system and it opened up the scope for movables lending (including receivables), set up a clearer priority rule, and provided a better basis for enforcement. A modern security interest registry for account receivables was created in October 2007. It was China's first nation-wide, central and internet-based filing system for secured transactions. The new receivables registry incorporated all the key features of a modern movable collateral registry such as on-line accessibility to the users and public, user accounts, notice based registry in which information limited to the creditor, debtor, loan amount and the description of assets, centralised information, and reasonable fee. As a result, the total number of commercial loans involving movable assets grew by 21 per cent per year in 2008-2010. Further, 84 per cent of loans secured with movables (receivables) went to SMEs. Almost none of the SMEs surveyed had any loans secured with receivables before the reform.

The Rajan Committee (2009) notes the need for establishing a comprehensive registration regime. India has a “system for registration of security interests created by companies incorporated under the Companies Act, 1956, but there is no registration process mandated for certain types of security interests created by individuals, partnership firms, cooperative societies and trusts. Additionally, for certain categories of movable assets, there are asset specific registration systems in operation, and registration is required in respect of charges created on such assets irrespective of who holds the asset.²²⁴” The Rajan Committee (2009) pointed to three possible paths to establishing a comprehensive registration regime:

Credit: Complementary Infrastructure

1. Using the network of Registrar of Companies and the Ministry of Corporate Affairs' "MCA 21" e-governance initiative.
2. Using credit information companies (or alternatively, the depository infrastructure— which serves the capital markets)
3. Using the SARFAESI Act provisions dealing with the registry of security interests: The Central Registry of Securitisation Asset Reconstruction and Security Interest of India (CERSAI) was set up under Section 20 of the SARFAESI Act. The object of setting up the Registration System under Chapter IV of the SARFAESI Act was to create a public data base about encumbrances created on properties to secure loans and advances given by the banks and financial institutions, as also transactions of securitisation or asset reconstruction undertaken pursuant to the provisions of the SARFAESI Act.

A liquid market for second-hand assets increases the ability of banks to do asset backed lending to small businesses as it serves to minimise loss given default in segments such as commercial vehicles finance, tractor finance and finance of other farm equipment. The second-hand asset market is often dominated by brokers and other intermediaries who have constrained access to finance. Initiatives that increase the transparency and liquidity of these markets are significant.

Recommendations:

- 4.42 There is a need to develop a robust legal and regulatory framework around customer data generated in various transactions (payments and credit, digital and off-line), with the objective of customer ownership of their own transactions data and its use, among others, for signalling credit-worthiness. RBI should constitute a Working Group comprising TRAI, CERC, and Credit Information Companies to develop a framework for sharing of data between telecom companies, electrical utilities, and credit bureaus. This framework should be in keeping with the FSLRC's draft Indian Financial Code which recommends the creation of regulations on the collection, storage, modification and protection of personal information by financial services providers; and establishment of mechanisms to ensure that consumers have access to, and are given an effective opportunity to seek modifications to, their personal information. [Identical to Recommendation 4.8]
- 4.43 Universal reporting to credit bureaus should be mandated for all loans, both individual and SME, but in particular SHG loans, Kisan Credit Card, and General Credit Card. [Identical to Recommendation 4.2]
- 4.44 Equity investments by banks in complementary infrastructure within the purview of PSL guidelines, such as rural warehouses, market yards, godowns, silos, and NBFCs in low financial depth districts. These equity investments should be eligible for contribution to the overall priority sector lending targets. They should be permitted where debt already qualifies for PSL but with a multiplier of four, to reflect the higher risk and the illiquid character of these investments. The benefit must accrue as long as the equity investment is held by the Bank. This list of eligible equity investments may be varied from time-to-time. [Identical to Recommendation 4.32]
- 4.45 For the provision of food-credit, Food Corporation of India (FCI) and State Governments should be required to originate warehouse receipts and raise low-cost funds in the market against these receipts instead of being reliant only on bank credit. [Identical to Recommendation 4.36]

Credit: Complementary Infrastructure

- 4.46 RBI needs to write to each of the State Governments expressing its support for the recommendations of both the PLATINUM Group and the Rajan Committee (2009) and urge them to implement those ideas by pointing out the potential benefits to the expansion of banking and financial activity in their respective states.
- 4.47 Banks and Financial Institutions should be required to verify the land records of their clients at the time of making loans and in those states where this is possible, to insist that transfers take place before a loan can be renewed for a second time.
- 4.48 Equity investments by banks in private companies engaged in the task of installing and operating weather stations, or in creating markets for second-hand assets should be eligible for PSL treatment. These investments should also get a multiplier of four, to reflect the higher risk and the illiquid character of these investments. [Also see Recommendation 4.44]

Chapter 4.10
Recommendations Regarding Credit

- 4.1 In order to encourage banks to actively manage their exposures to various sectors, including priority sectors, a number of steps would have to be taken:
- a. Banks must be required to disclose their concentration levels to each segment in their financial statements.
 - b. Credit facilities documented as bonds or Pass-Through Certificates (PTC), whether originated directly or purchased in the secondary markets should be permitted to be held in the “banking book” of a bank based on declared intent and not merely based on source or legal documentation. [Identical to Recommendations 4.10 and 4.30]
 - c. RBI must represent to the MoF to restore the tax-free status of securitisation SPVs as pass-through vehicles for tax treatment pointing out the role it would play in ensuring efficient risk transmission. [Identical to Recommendations 4.11 and 4.38]
 - d. Banks must be permitted to purchase portfolio level protection against all forms of rainfall and commodity price risks, including through the use of financial futures and options bought either within India or globally.
- 4.2 Universal reporting to credit bureaus should be mandated for all loans, both individual and SME, but in particular SHG loans, Kisan Credit Card, and General Credit Card. [Identical to Recommendation 4.43]
- 4.3 In view of the fact that banks may choose to focus their priority sector strategies on different customer segments and asset classes, it is recommended that the regulator provide specific guidance on differential provisioning norms at the level of each asset class. A bank’s overall NPA Coverage Ratio would therefore be a function of its overall portfolio asset mix. On standard assets, provisioning levels as well as asset classification guidelines specified by RBI would need to reflect the underlying level of riskiness of each asset class (combination of customer segment, product design, and collateral) and not be uniform across all the asset classes. Additionally, different customer-asset combinations behave very differently from each other and it is recommended that the regulator mandate NPA recognition rules at the level of each asset-class and require that all banks conform to these mandates. [Identical to Recommendation 4.21 for NBFCs]
- 4.4 All banks should be required to publicly disclose the results of their stress tests both at an overall balance sheet level as well as at a segmental level at least annually. [Identical to Recommendation 4.22 for NBFCs]
- 4.5 From the perspective of Stability that entails sustainable pricing, banks must be required to freely price farm loans based on their risk models and any subventions and waivers deemed necessary by the government should be transferred directly to the farmers and not through interest subsidies or loan waivers. The permission to price farm loans below the base rate should be withdrawn. [Also see Recommendation 4.34]
- 4.6 Banks are already permitted to set up specialised subsidiaries upon getting specific approvals from the RBI. However, no approvals have been granted; potentially due to concerns around circumvention of branch licensing guidelines. In light of the

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recent relaxation of branch licensing guidelines and the capability to carry out consolidated supervision, the requirement of prior approvals may be removed for the purpose of creating dedicated subsidiaries for financial inclusion.

- 4.7 The decision on the manner in which risk sharing and credit approval arrangements need to be structured between banks and their agents can be left to the judgment of banks. Outsourcing guidelines should be amended to permit this.
- 4.8 There is a need to develop a robust legal and regulatory framework around customer data generated in various transactions (credit and payments, digital and off-line), with the objective of customer ownership of their own transactions data and its use, among others, for signalling credit-worthiness. RBI should constitute a Working Group comprising TRAI, CERC, and Credit Information Companies to develop a framework for sharing of data between telecom companies, electrical utilities, and credit bureaus. This framework should be in keeping with the FSLRC's draft Indian Financial Code which recommends the creation of regulations on the collection, storage, modification and protection of personal information by financial services providers; and establishment of mechanisms to ensure that consumers have access to, and are given an effective opportunity to seek modifications to, their personal information. [Identical to Recommendation 4.42]
- 4.9 The stipulation that the all-inclusive interest charged to the ultimate borrower by the originating entity should not exceed the Base Rate of the purchasing bank plus 8 per cent per annum should be removed. [Identical to Recommendation 4.37]
- 4.10 Credit facilities documented as bonds or Pass-Through Certificates (PTC), whether originated directly or purchased in the secondary markets should be permitted to be held in the "banking book" of a bank based on declared intent and not merely based on source or legal documentation. [Identical to Recommendations 4.1(b) and 4.30]
- 4.11 RBI should represent to the Government of India to restore the tax-free status of securitisation SPVs as pass-through vehicles for tax treatment so as to create pathways for Wholesale Banks to provide liquidity to other Banks and Financial Institutions directly originating assets in priority sectors. [Identical to Recommendations 4.1(c) and 4.38]
- 4.12 Reorient the focus of NABARD, CGTMSE, SIDBI, and NHB to be market makers and providers of risk-based credit enhancements rather than providers of direct finance, automatic refinance, or automatic credit guarantees for National Banks.
- 4.13 Regional Banks continue to have a strong appeal for inclusion but low demonstrated stability in the Indian context. Robust solutions are required vis-à-vis regulation, supervision, risk management, and governance of the existing Regional Banks before any new ones are created.
- 4.14 In a manner similar to National Banks, for Regional Banks as well, refinance by NABARD or credit guarantee support by CGTMSE should be designed as risk-based guarantees and not available automatically. [Similar to Recommendation 4.12]
- 4.15 While the Risk Based Supervision process has been designed for the larger and more complex institutions, a similar effort could be conceived of for the Regional Banks allowing supervisors to direct scarce on-site supervision resources to higher-risk institutions. The help of commercial ratings agencies could also be taken to formally rate these Regional Banks and provide the ratings to the depositors on a regular basis - thus including them more directly into the risk-containment process.

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- 4.16 Since DICGC offers deposit insurance to these banks, the Agreement between DICGC and the bank provides an additional opportunity to both ensure that the bank is run well on an on-going basis and resolved quickly in the event that it turns insolvent. Such an Agreement would provide for risk-based pricing of deposit insurance; the right to carry out both on-site and off-site inspections; and to take possession of the bank in the event that it goes into liquidation.
- 4.17 A State Finance Regulatory Commission (SFRC) could be created into which all the existing State Government-level regulators could be merged and functions like the regulation of NGO-MFIs and local Money Services Business could be added on. In some states, the SFRC could be created by upgrading existing Institutional Finance Cells. There is also value in bringing the regulatory function close to the enforcement function under the Economic Offences Wing (EOW), so as to ensure that they are working closely together. The RBI must be closely involved over a longer time frame in training the commissioners and licensing and accrediting the Commission itself. The local regional directors of the RBI could, for example, be ex-officio Chairs of the Commission's Board of Governors while the Commissioner could be a senior State level appointee drawn from the local Banking community. The District Magistrates would also play an important role in their respective districts.
- 4.18 The Committee recognises that a partial convergence of NBFC and Bank regulations may be desirable. It recommends the following:

Regulations	Banks	NBFC	Recommendation
Minimum Capital Adequacy	9%	15%	No case for convergence.
Cash Reserve Ratio	4%	N.A	CRR applicable on bank deposits, shift to exclude time deposits recommended.
Statutory Liquidity Ratio	23%	15% for D-NBFCs on their deposits	Complete elimination recommended.
Duration to qualify for NPA	Non-repayment for 90 days	Non-repayment for 180 days	Case for convergence. Risk-based approaches to be followed for both types of institutions.
Definition for sub-standard asset	NPA for a period not exceeding 12 months	NPA for a period not exceeding 18 months	Case for convergence. Risk-based approaches to be followed for both types of institutions.
Definition for doubtful assets	Remaining sub-standard asset for a period of 12 months	Remaining sub-standard asset for a period exceeding 18 months	Case for convergence. Risk-based approaches to be followed for both types of institutions.

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Quantum of provisioning for Standard Assets	Direct advances to agricultural and Small and Micro Enterprises (SMEs) sectors at 0.25%	0.25%	Case for convergence. Risk-based approaches to be followed for both types of institutions. For agricultural advances, this would imply at least 0.40%.
Priority Sector	40% of ANBC	NIL	No case for convergence.
Deposit Insurance	YES	NO for D-NBFCs	No case for convergence.
SARFAESI eligibility	YES	NO	Case for convergence subject to strong customer protection guidelines.
Lender of Last Resort	YES	NO	No case for convergence.
Risk Weights	Differential	100% for all assets	No case for convergence.
Entry Capital Requirement	Rs. 500 crore	Rs. 2-5 crore	No case for convergence.

- 4.19 Multiple NBFC definitions should be consolidated into two categories: a distinct category for Core Investment Companies (CIC) and another category for all other NBFCs. Benefits that were previously available to specific NBFC types, such as tax benefits, bank limits, and priority sector benefits should continue to be available even after consolidation, on a pro-rata asset basis.
- 4.20 The Committee recommends addressing wholesale funding constraints faced by NBFCs in a systematic manner. The following are the specific recommendations in this regard:
- A clear framework to be developed by RBI and SEBI for Qualified Institutional Buyers and Accredited Individual Investors who may participate in debt market issuances of NBFCs.
 - Benefit of 'shelf prospectus' should be available for one year to all issuers including NBFCs.
 - Permit ECB in Rupees for all institutions.
 - For ECB not in Rupees, eligibility should be linked to size and capacity to absorb foreign exchange risk rather than specific NBFC categories.
 - The nature of activity, rather than institution type, must be made the criterion for availing refinance from NABARD, NHB, SIDBI and credit guarantee facilities.

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- f. Current capitalisation slabs on foreign equity funding should be relaxed and money laundering concerns should be mitigated by instituting additional reporting requirements on Banks/Authorised Dealers (AD).
- 4.21 In a manner similar to banks, different customer-asset combinations behave very differently from each other and it is recommended that the regulator specify NPA recognition and provisioning rules, including for standard assets, at the level of each asset-class and require that all NBFCs conform to these mandates. [Identical to Recommendation 4.3 for National Banks]
 - 4.22 Require all NBFCs to have better on-going risk measures. These include disclosure of their stress test results both at an overall balance sheet level as well as at a segmental level at least annually. All NBFCs must adopt core banking systems so that this can enable better off-site supervision. [Identical to Recommendation 4.4 for National Banks]
 - 4.23 Enable better benchmarking by requiring all NBFC-MFIs to disclose their operating costs (direct and indirect) of a mature branch to the RBI or MFIN once it becomes an SRO.
 - 4.24 The regulatory focus must be on total indebtedness of the small borrower in relation to their debt-servicing capacity and not just indebtedness per se or merely from NBFC-MFIs. Keeping this in mind, the total borrowing limit for the small borrower segment may be increased immediately to Rs. 100,000 across all lenders, including bank-lending to this segment. In order to implement this, all lenders to this segment will need to be mandated to report to the credit bureau as has been the case with NBFC-MFIs. If total indebtedness is being tracked adequately, the stipulation of a maximum number of lenders appears redundant and can be gradually removed as this would also help in creating intensified price competition.
 - 4.25 All policy biases against consumption finance need to be removed. An example of this is restricting the proportion of consumption finance that is permitted for NBFC-MFIs.
 - 4.26 In order to enable the gradual transition of eligible and interested NBFCs to Wholesale Consumer Banks or Wholesale Investment Banks or National Banks, the Committee recommends a re-examination of PSL definitions [also see Recommendation 4.41], creating an active market for PSL assets, assessment of the relevance of SLR in light of capital adequacy norms, and application of CRR on time liabilities.
 - 4.27 Under the Banking Regulation Act, a set of banks may be licensed which may be referred to as Wholesale Banks with the following characteristics:
 - a. Given that their primary role is lending and not the provision of retail deposit services, they will only be permitted to accept deposits larger than Rs. 5 crore.
 - b. Since they could expect to borrow large amounts from other banks, net liabilities from the banking system will be permitted to be deducted from their NDTL computation for the purposes of ascertaining their SLR obligations on par with the treatment currently given for CRR.
 - c. Since other banks are expected to lend large amounts to Wholesale Banks, those other banks will be permitted to deduct their net assets to the banking

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system from the computation of their ANBC (the amounts on which PSL requirements are to be applied).

- d. In view of the fact that they will not take retail deposits, the minimum entry capital requirement for them will be Rs. 50 crore compared to the Rs. 500 crore required for full-service SCBs.
- e. If the institution has fewer than twenty branches through which it operates, it will not be required to meet the 25 per cent branching requirement. Institutions with twenty or fewer branches could be referred to as Wholesale Investment Banks while those with a larger branch network could be referred to as Wholesale Consumer Banks.
- f. Wholesale Consumer Banks should be permitted to act as BCs for other full service Banks.

They will be required to comply with all other RBI guidelines relevant for SCBs and will be granted all the other rights and privileges that come with that licence.

- 4.28 All loans given to landless labourers and small and marginal farmers should be counted as a part of Direct Agriculture and not merely the wages component of a loan given to a farmer for financing her agricultural production.
- 4.29 Investment by banks in bonds of institutions must qualify for PSL where wholesale lending to the same institutions already qualifies under PSL.
- 4.30 Credit facilities documented as bonds or Pass-Through Certificates (PTC), whether originated directly or purchased in the secondary markets should be permitted to be held in the “banking book” of a bank based on declared intent and not merely based on source or legal documentation. [Identical to Recommendations 4.1(b) and 4.10]
- 4.31 Investment by banks in the form of non-fund based limits (such as guarantees) should qualify for PSL to the extent of the credit equivalent amount of the off-balance sheet facility where loans to these categories qualify for PSL. ANBC should also be adjusted to include such PSL-linked, non-fund based limits.
- 4.32 Equity investments by banks in complementary infrastructure within the purview of PSL guidelines, such as rural warehouses, market yards, godowns, silos, and NBFCs in low financial depth districts. These equity investments should be eligible for contribution to the overall priority sector lending targets. They should be permitted where debt already qualifies for PSL but with a multiplier of four, to reflect the higher risk and the illiquid character of these investments. The benefit must accrue as long as the equity investment is held by the Bank. This list of eligible equity investments may be varied from time-to-time. [Identical to Recommendation 4.44]
- 4.33 PSL targets should be applicable on the last reporting Friday during the last month of each quarter in exactly the same manner as it is currently applicable in the month of March, so as to ensure more timely and continuous credit flow into priority sectors. In order to ensure administrative ease, requirements such as investment into RIDF can continue to be levied on an annual basis and computed on the basis of the average of the quarterly requirements.

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- 4.34 If the government does desire to provide relief in any form to the small farmer, it would be best carried out as a direct benefit transfer (DBT) to the bank account of the farmer and not through the mechanism of either interest subvention or debt waiver. This would ensure that the banking system is able to price loans in a sustainable manner and also protect credit discipline amongst its borrowers. Adding a universal requirement to report all defaults to credit bureaus would ensure that the borrower also builds a strong interest in protecting his credit history, even if he is a recipient of DBTs. [Similar to Recommendations 4.2 and 4.43]
- 4.35 In order to guard against large scale defaults resulting from catastrophic events, banks should be permitted to work closely with insurance companies to purchase bank-wide portfolio level insurance against events such as large scale rainfall failure on a regional or national basis, instead of having an expectation that relief would be provided from national or state budgets.
- 4.36 For the provision of food-credit, Food Corporation of India (FCI) and State Governments should be required to originate warehouse receipts and raise low-cost funds in the market against these receipts instead of being reliant only on bank credit. [Identical to Recommendation 4.46]
- 4.37 The stipulation that the all-inclusive interest charged to the ultimate borrower by the originating entity should not exceed the Base Rate of the purchasing bank plus 8 per cent per annum should be removed. [Identical to Recommendation 4.9]
- 4.38 The RBI should represent to the Government of India to restore the tax-free status of securitisation SPVs as pass-through vehicles for tax treatment so as to create pathways for Wholesale Banks to provide liquidity to other Banks and Financial Institutions directly originating assets in priority sectors. [Identical to Recommendation 4.11]
- 4.39 While a market that trades PSL assets will be of critical importance, regulation should additionally enable the use of risk-free PSL Certificates as a means to achieving PSL compliance amongst banks that wish to do so.
- 4.40 In order to enable greater regional and sectoral specialisation among Banks, the Committee recommends that the RBI revise the PSL targets and require banks to meet an Adjusted PSL target of 50 per cent against the current requirement of 40 per cent. Districts and sectors are weighted based on the difficulty in lending to them, and a Bank lending to a difficult sector in a difficult to reach district can benefit from a multiplier value based on the specific sector and district. Every sector-district combination has a weight associated with it and the Bank will have to reach an adjusted PSL value of 50% taking these weightages into account.
- 4.41 The Committee recommends that RBI seriously examine moving to a new framework in which two parameters: District level credit depth, and sector and sub-sector level credit depth be used to determine the sector, sub-sector, and regional weights which are published every three years. Using these weights banks would be required to reach an Adjusted PSL target of 150 per cent of ANBC.
- 4.42 There is a need to develop a robust legal and regulatory framework around customer data generated in various transactions (payments and credit, digital and off-line), with the objective of customer ownership of their own transactions data and its use, among others, for signalling credit-worthiness. RBI should constitute a

Recommendations Regarding Credit

Working Group comprising TRAI, CERC, and Credit Information Companies to develop a framework for sharing of data between telecom companies, electrical utilities, and credit bureaus. This framework should be in keeping with the FSLRC's draft Indian Financial Code which recommends the creation of regulations on the collection, storage, modification and protection of personal information by financial services providers; and establishment of mechanisms to ensure that consumers have access to, and are given an effective opportunity to seek modifications to, their personal information. [Identical to Recommendation 4.8]

- 4.43 Universal reporting to credit bureaus should be mandated for all loans, both individual and SME, but in particular SHG loans, Kisan Credit Card, and General Credit Card. [Identical to Recommendation 4.2]
- 4.44 Equity investments by banks in complementary infrastructure within the purview of PSL guidelines, such as rural warehouses, market yards, godowns, silos, and NBFCs in low financial depth districts. These equity investments should be eligible for contribution to the overall priority sector lending targets. They should be permitted where debt already qualifies for PSL but with a multiplier of four, to reflect the higher risk and the illiquid character of these investments. The benefit must accrue as long as the equity investment is held by the Bank. This list of eligible equity investments may be varied from time-to-time. [Identical to Recommendation 4.32]
- 4.45 For the provision of food-credit, Food Corporation of India (FCI) and State Governments should be required to originate warehouse receipts and raise low-cost funds in the market against these receipts instead of being reliant only on bank credit. [Identical to Recommendation 4.36]
- 4.46 RBI needs to write to each of the State Governments expressing its support for the recommendations of both the PLATINUM Group and the Rajan Committee (2009) and urge them to implement those ideas by pointing out the potential benefits to the expansion of banking and financial activity in their respective states.
- 4.47 Banks and Financial Institutions should be required to verify the land records of their clients at the time of making loans and in those states where this is possible, to insist that transfers take place before a loan can be renewed for a second time.
- 4.48 Equity investments by banks in private companies engaged in the task of installing and operating weather stations, or in creating markets for second-hand assets should be eligible for PSL treatment. These investments should also get a multiplier of four, to reflect the higher risk and the illiquid character of these investments. [Also see Recommendation 4.44]

Section 5
Universal Access to Investment and Risk Management Products

Chapter 5.1 Introduction and Strategic Direction

The vision statements that are relevant to ensuring universal access to investment and risk management products are as follows:

Universal Access to a Range of Deposit and Investment Products at Reasonable Charges: By January 1, 2016, each low-income household and small-business would have “convenient” access to providers that have the ability to offer them “suitable” investment and deposit products, and pay “reasonable” charges for their services. By that date each District would have a Total Deposits and Investments to GDP ratio of at least 15 per cent. This ratio would increase every year by 12.5 per cent with the goal that it reaches 65 per cent by January 1, 2020.

Universal Access to Range of Insurance and Risk Management Products at Reasonable Charges: By January 1, 2016, each low-income household and small-business would have “convenient” access to providers that have the ability to offer them “suitable” insurance and risk management products, which, at a minimum allow them to manage risks related to: (a) commodity price movements; (b) longevity, disability, and death of human beings; (c) death of livestock; (d) rainfall; and (e) damage to property, and pay “reasonable” charges for their services. By that date each District would have a Total Term-Life Insurance Sum Assured to GDP ratio of at least 30 per cent. This ratio would increase every year by 12.5 per cent with the goal that it reaches 80 per cent by January 1, 2020.

Financial inclusion can be said to be complete only when there is access to a suite of appropriate products and services for all the financial needs of a household or enterprise. Households planning for long-term goals such as retirement require inflation adjusted returns on investment over substantial time-periods. Parents planning for the education of children need to manage inflation risk. Households whose asset profiles are concentrated in the local village economy need access to investments that will provide them exposure to the national economy. Farmers planning for their next crop require credit bundled with weather insurance that will pay out in case of extreme weather outcomes. Each and every household has a combination of such crucial needs that need fulfilment. It is the function of the nation’s financial system to provide accessible and economical product solutions that meet these needs.

In order to assess the current state of access to investment and insurance products for low-income households, the case study of an actual rural household and the challenges it faces in accessing appropriate savings, investment and risk management is particularly instructive:

Shivani Devi (45) and her husband Chaman Singh (47) belong to the village of Sagavan Gaon in Uttarakhand. They have four children - Vinod (14), Savita (13) and Rohit (10) are in school, while the youngest Rajesh (7) has not yet started schooling. The household had an annual income of around Rs. 65,000. Shivani Devi kept 13 goats, which they sold as and when money was needed. This usually amounted to selling 3 goats on average each year, with each goat fetching approximately Rs. 3,000. The availability of NREGA work is erratic and contributed an income of Rs. 4,000 annually. Shivani Devi cultivated a patch of land they owned, and incurred expenses for seeds and fertilisers. The entire produce from the land was used up for household consumption with little remaining for sale in the market. The sale of milk from their buffalo earned them Rs. 16,000 annually. Chaman also undertook some construction work, which earned the household Rs.36,000 annually. Shivani Devi was involved in an accident and lost her life in December 2011. Shivani Devi was bringing in more than half of the family’s income by being involved in multiple activities, besides also taking care of her family’s needs. Her death triggered a chain of events in its wake.

1. To meet the urgent need for money such as for funeral and household expenses, the family resorted to selling off a few goats, as well as selling off their buffalo for a price of Rs.29,000, which was 35 per cent lower than the price at which they had purchased it. Selling off the buffalo meant the loss of Rs.1500/month as income from the sale of its milk. The lack of any liquid assets in the household, such as savings in a bank account, meant that the household had to undertake distress sales of its productive assets. Shivani Devi had taken out some insurance cover that enabled her family access to some insurance payouts after her death.
2. Shivani Devi had purchased an accident insurance policy for Rs. 1,00,000, Chaman received the claim amount after 3 months of her death. Chaman plans to save this money for his kids' marriage and education.
3. Shivani Devi had a life insurance cover (endowment policy) in her name where she used to remit Rs.138 on a monthly basis. She had been saving in this manner for almost 6 years till her death. This came to around Rs. 9,384 in the account. Chaman hoped to receive a payout of Rs. 25,000 with bonus, from this scheme. Endowment policies, such as this rural life insurance product, are 3-4 times costlier than a term life insurance cover. However, in the absence of adequate access to a term life policy, Shivani Devi had deployed her funds in the more expensive endowment product that was available to her. In addition, the formalities in accessing the insurance payout have taken a long time and, as a result, Chaman was not sure when he will get the payout.
4. Shivani Devi contributed 40 per cent of the family's income by utilising her human capital to the extent possible. This income-stream has been lost as a result of her death and the insurance protection she had taken was inadequate to cover the future income lost (present value estimated at Rs. 150,000) as a consequence of her death. As a result, the household will not be able to sustain the standard of living they enjoyed while Shivani Devi was alive.
5. Since her death, cultivation has been neglected and the reduced produce from the land meant an increase in their consumption expenditure for food. Chaman dedicated a lot more of his time to his children, in addition to taking care of the land and their goats. Because of this, he finds it difficult to find enough work since opportunities in the local labour markets are available mostly in the mornings when he is busy taking care of his children. He estimates that he will lose at least Rs. 10,000 in the form of labour income which he used to earn previously.
6. The family has not considered the expenses the household will have to incur for higher education of the children beyond school. In considering long-term education expenses, they will also need to think about long-term inflation risk. They will need access to financial mechanisms that will enable them to systematically save over the long-term and at the same time ensure that the value of their savings keeps up with inflation and earns sufficient returns over this period - so that it can be used to meet the education expenses as they become due.

A well-functioning financial system would help Shivani Devi's family by providing a range of financial services in the following ways:

1. Supply Shivani Devi and Chaman Singh with adequate life insurance that allows the family to continue living (upon the event of either's death) without compromising their living standards. This would entail access to an insurance policy that would cover them to the extent of their remaining human capital in the event of death. This would amount to human capital of Rs. 150,000 for Shivani Devi, assuming that she sustained her current income-earning capacity till the age of 60. The corresponding cover for

Chaman would be Rs. 270,000. They would also have access to purchase accident insurance, which would give them additional disability cover in case of disability due to accidents.

2. Enable her family to collect insurance payouts in an efficient manner without administrative delays, at a physical location that is easily accessible, and store the payout in a financial instrument which offers growth for the corpus as well as liquidity. Liquidity would enable Chaman to receive periodic payouts or to withdraw from the corpus as and when required to meet expenditures.
3. Provide long-term options to save funds for children's education and to plan for retirement, with inflation protection so as to enable the household to secure the future of their children as well as the retirement needs of Chaman.

Low Income households and small businesses need access to a range of investment and risk management products in order to enable financial well-being. These need to be easily accessible to the household. There are therefore two sets of strategic issues that need to be addressed here, one relating to distribution channels for these services and the other related to the types of products that need to be made available through these channels. The issues related to distribution channels will be addressed in this Chapter while those relating to specific products would be addressed in later Chapters which are specific to each regulator.

Integrated Distribution Channels

The current distribution channels available to most households comprises the local post office as a means to save, the agents of one or more insurance companies who offer pure life insurance or endowment plans, besides the possibility of a local bank branch or credit cooperative or MFI that she can approach for her credit needs. Options to invest in the national debt and equity markets as a way to reduce concentration of household investments in local physical assets are virtually non-existent.

The current delivery framework is characterised by dispersed entities focussed on a single product or product category. Even if a rural or semi-urban customer has access to such a front-end, she is unable to avail all the financial services she needs so as to secure herself. Such a situation severely compromises the financial wellbeing of the customer on account of the paucity of access, the absence of comprehensive service providers and the lack of customised solutions, leading to outcomes such as: (a) financial stress due to mismatches between frequency of cash-inflows and debt servicing frequencies; (b) over-investment in assets whose value is highly correlated with the state of the local economy; and (c) under-insurance against risk of accidental death of self or the death of livestock. From the perspective of providers as well a fragmented approach towards the provision of comprehensive financial services has also proved to be very expensive.

While, for access to payments services and routine transactions relating to deposit and investment products, a far more granular and therefore "lighter" presence would be required, for comprehensive financial services to be offered to customers, the Committee envisages the presence of financial institutions that would have a seamless front-end interface for clients to access a full range of services, all of which can be accessed through a one-time KYC process and an enrolment process that meets the requirements of all financial institutions and regulators. The institution may have physical branches that service remote pockets and target every last household and enterprise within its geography. The geographical spread of these local institutions may well be limited, but their strength will be the depth of penetration into local geographies enabling them to harness the benefits from economies of scope. Such a deep branch network will make it possible to build a granular understanding needed to design a range of financial products

and services required by those in that geography, be they individuals, households or enterprises. It would make possible the effective use of “soft” local information. With a granular understanding of the segments they serve, these institutions will be ideally placed to negotiate with AMCs/Insurance Companies and provide products and services that are suited to the context of the customer’s and her household’s realities. For instance, if a customer requires a life insurance cover for Rs. 10 lakh, the institution must be able to provide just that, and not end up under-insuring or over-insuring her due to the rigidity in pre-designed product features. If a customer needs a facility where she can make small investments and redemptions in a debt-linked mutual fund, of as small as Rs.10 a day, she must be able to do so in cash in a seamless manner.

In the context of the architecture discussed in this report, these comprehensive financial services providers would be either branches of Banks or NBFCs or their agents and would be stand-long agents of insurance companies or Asset Management Companies. One example of this is Cashpor Micro Credit, a Micro Finance Institution based in Uttar Pradesh.

Cashpor is established as a Section 25 Company and was one of the first Micro Finance Institutions in India. Cashpor is the Banking Correspondent of IndusInd Bank and mobilises savings on behalf of the bank. So far, in FY 2013 Cashpor has opened 69,458 savings accounts in 131 branches across 8 districts, of which 66 per cent have non-zero balances, with a total transaction volume of Rs. 12 crore - aggregate deposits of Rs. 7 crore and aggregate withdrawals of Rs. 5 crore. Cashpor also brought out two new products in this financial year to add to the BC savings account offering: recurring deposit accounts and fixed deposit accounts, with an eye to encouraging customers to develop stable, long-term, and consistent savings habits, earning higher rates of interest on their deposited funds. So far, 542 fixed deposit accounts have been opened with an aggregate balance of Rs. 1 crore, and 2,545 recurring deposits account opened, with an aggregate balance of Rs. 4 lakh.

Cashpor is a lender with its own balance sheet, where it largely provides the classic Micro Finance Joint Liability Group (JLG) loan, which it offers in weekly, fortnightly, and monthly repayment options. The ticket size of these loans ranges from Rs. 2,000 to Rs. 25,000 and the rate of interest charged is in the range of 25 per cent. Cashpor has also started branching out into newer credit products as indicated in the table below.

Cashpor’s Credit Products		Cashpor’s Savings and Investment Products	
Micro Finance: Joint Liability Group (JLG) Loans	Women Empowerment Loan Safety (Emergency) Loan Energy Loan Health (Water, Sanitation) Loan	Micro savings: Savings and Deposit accounts available with IndusInd Bank via BC model	Old Age Pension: NPS-Swavalamban

In addition to mobilising savings and providing credit, Cashpor is also an Aggregator for the NPS-Swavalamban scheme, providing a pension like product for households in the

unorganised sector. The NPS-Swavalamban scheme was launched on a pilot basis in four branches in two districts in November 2012, with an uptake of 17,000 customers within two months. This was later expanded to 206 branches in nine districts by February 2013. By the end of March 2013, a total of 20,012 clients had been enrolled. Most of these customers were eligible for the NPS-Swavalamban contribution of Rs. 1000.

However, to ensure that there is an orderly growth in the number and reach of such integrated providers, particularly in the context of small businesses and low-income households, a number of issues would need to be addressed including, the need for a Universal Electronic Bank Account (UEBA), consistent cross-regulator KYC guidelines, and consistent cross-regulator guidelines on agents.

Universal Electronic Bank Account

IRDA's AML/CFT Guidelines for General Insurers permits cash remittance of premiums up to a limit of Rs. 50,000. Beyond this amount, premium payments are only allowed through cheques, demand drafts, credit cards or other banking channels, excluding cash, in order to ensure that premiums are paid out of clearly identifiable sources of funds. Payments from insurance companies on account of realisation of claims are required to be made into the bank account of the beneficiary. This is done in order to ensure that funds reach the appropriate person. In the case of life insurance, claim payments upon death where the payment exceeds Rs.10,000 can be done only through Account Payee Cheques, or electronic payment methods approved by RBI.

As indicated earlier, customers can pay insurance premiums up to amounts of Rs. 50,000 in cash. However, there are restrictions on the routing of cash premiums that specifically impact NBFCs. NBFC customers are required to pay their premiums directly to the insurance company without the money touching the account of the NBFC²²⁵. In the current environment, this is a critical barrier in the ability of NBFCs to meaningfully provide insurance services. Since NBFCs do not have deposit taking capability, the committee recommends that the restriction on NBFCs being BCs of Banks be removed. Permitting NBFCs to source deposits on behalf of Banks will mean that customers of NBFCs can get a bank account (with the Sponsor Bank) that will enable savings and also allow insurance premiums to be paid directly from customer accounts. The concern around commingling of funds from deposit mobilisation and the NBFC's lending business can be addressed with the help of technology today which enables intra-day clearance of funds to greatly minimise this risk.

In this context, the Committee reiterates the need for a universal full-service electronic bank account for every citizen of India above the age of 18. Without this bank account a citizen can find herself excluded from many financial services crucial to her well-being. It also recommends that rather than being barred by regulation from doing so individual Banks be permitted to decide if NBFCs (including NBFC-MFIs) can be appointed as their BC or not. This will ensure that a full range of providers can start to serve the customer in a seamless and a low-cost manner.

Cross-Regulator KYC Guidelines

IRDA's AML/CFT Guidelines for General Insurers²²⁶ places the responsibility of a robust AML/CFT on the insurer. It also requires a strengthening of the control of insurers (both general and life) over Corporate Agents through a list of rules and regulations covering performance of agents including mandatory assessment of KYC norms. The KYC process requires verification of documented identity and address proofs and a recent photograph. SEBI's circular on Uniform KYC for the Securities Markets²²⁷ requires verification of both Proof of Identity and Proof of Address by the Asset Management Company.

As indicated in Chapter 3.1, proof of identity can be obtained by the individual from local authorities at the place at which they were born but proof of local address is much harder to obtain. The Committee therefore believes that a superior approach would be to insist on a strong proof of identity like Aadhaar in all cases and to require financial institutions to internally develop their own risk based processes which are linked to transactions monitoring and usage patterns to identify and address high risk cases once identity has been clearly established. And, since the UIDAI letter containing the Aadhaar number is itself not a very secure form of authentication, as there is the possibility that it can be forged. Aadhaar e-KYC provides for greater security with verification done through biometric authentication of the customer with the Aadhaar database. IRDA, SEBI and PFRDA have all issued circulars²²⁸ permitting Aadhaar e-KYC to be used as proof of identity and address.

The Committee also recommends that instead of requiring each of their regulated entities to carry out their own KYC checks, Insurance Companies, Asset-Management Companies, Banks, and Non-Banking Financial Companies be permitted to rely on the KYC carried out by each other. Since all regulators have permitted the use of e-KYC, effectively UIDAI becomes the central repository for identity related information for the entire system.

Cross-Regulator Suitability Guidelines

A multi-product environment blurs the lines between regulatory domains and the worry with such an environment would be the task of ensuring protection of customers from miss-sale and from any dishonouring of post-sale service agreements. It is essential that a uniform framework for consumer protection be applicable across all regulators. This will be discussed in detail in Section 6.

Recommendations

- 5.1 Every resident should be issued a Universal Electronic Bank Account (UEBA) automatically at the time of receiving their Aadhaar number by a high quality, national, full-service bank. An instruction to open the bank account should be initiated by UIDAI upon the issuance of an Aadhaar number to an individual over the age of 18. The bank would need to be designated by the customer from amongst the list of banks that have indicated to UIDAI that they would be willing to open such an account with the understanding that it would attract no account opening fee but that the bank would be free to charge for all transactions, including balance enquiry with the understanding that such transactions' charges would provide the host banks with adequate compensation. The Bank would be required to send the customer a letter communicating details of the account thus opened. The Committee recommends that the RBI issue a circular indicating that no bank can refuse to open an account for a customer who has adequate KYC which specifically includes Aadhaar. [Identical to Recommendation 3.1]
- 5.2 RBI should require a strong Proof of Identity (POI) for each and every customer and a documentary proof of one national address but waive the requirement of documentary proof for the current address, for the purpose of opening a full-service bank account. It should instead enjoin upon banks to carry out careful tracking of usage and transactions patterns to ascertain the risk levels of the customer and take necessary action based upon risk-based surveillance processes developed internally by each bank. RBI must take the lead in developing this as a convergent approach to KYC across all regulators for their respective products. [Identical to Recommendation 3.2]

Chapter 5.2 Appointment of Agents

There are large variations in the guidelines relating to the appointment of agents by each regulator for each type of channel which are acting as an active barrier for the spread of investment and risk management products.

National Banks

Banks offer life and general insurance through the 'bancassurance' model where a bank and an insurance company form a partnership so that the insurance company can sell its products to the bank's customer base. Banks can carry out bancassurance through the Corporate Agent, Broker and 'Referral' models. Banks have traditionally relied on taking the Corporate Agent licence²²⁹ for selling life and non-life insurance products, where the Bank is a tied agent to one life and one non-life insurance company. In this model, there is no risk participation by Banks and they are compensated by commissions from the Insurance Companies²³⁰. For instance, State Bank of India is a Corporate Agent for SBI Life Insurance, and HSBC is Corporate Agent for Tata AIG General Insurance.

Until 2013, Banks were not permitted to be brokers as per the Broker Guidelines of 2002²³¹. This was because brokers were deemed to be entities that performed the insurance business alone. However, the new IRDA Licensing of Banks as Insurance Brokers Regulations 2013²³² now permit a Bank to act as insurance broker without the need to set up separate entity for the same, as was the case previously. This has been done so as to ensure that banks have the opportunity to represent the interests of customers and use their wide branch networks to offer greater choice and better service to customers. As in the case of Corporate Agents, there is no risk participation by Banks, and they are compensated by commissions from Insurance Companies²³³. Recent Draft Guidelines laid out by RBI on the subject clarify that Banks offering insurance broking services shall not enter into any arrangement for corporate agency or insurance referral business²³⁴. Banks are also permitted to enter into "referral" arrangements with Insurance Companies²³⁵, whereby they offer branch space to personnel of the insurance company to operate in and sell their insurance products. Banks do not participate in the risk and are remunerated in the form of a fee that is negotiated with the insurance company.

Banks can also act as distributors of Mutual Funds and as Investment Advisors with prior approval of the RBI. Banks can be distributors of mutual funds but only in the capacity of agent of the customer (even if the AMC is a subsidiary of the Bank). As agents, Banks can forward investors' applications for purchase or sale of MF units to the Mutual Funds or the Registrars or the transfer agents. Banks should not acquire MF units from secondary market, or from customers²³⁶. Entry loads are not permitted and there are no transaction charges for subscriptions less than Rs. 10,000. Beyond that, there is a charge of Rs. 100 for existing customers and Rs. 150 for first time customers²³⁷. Banks can also act as Investment Advisors. All of the bank's remuneration in this case will be from the client, with nothing from the Asset Management Company. It is expected that the Investment Advisor will disclose any conflict of interest due to other activities to the client. There should be an arms-length relationship of the investment advisory services with rest of the activities of the Bank²³⁸.

Regional Banks

Scheduled or licensed State Cooperative Banks and licensed District Central Cooperative Banks having a minimum net worth of Rs.50 crore are permitted by RBI to undertake insurance sales both as Corporate Agents (with permission from RBI) and on a referral basis (without permission from RBI)²³⁹. Many Regional Banks are Corporate Agents for the sale of insurance products. For example, Saraswat Cooperative Bank is a corporate agent for

Bajaj Allianz General Insurance and Tirunelveli District Central cooperative bank is an agent for United India Insurance.

AMFI has created two new categories of distributors, one containing Regional Rural Banks, DCCBs and NBFCs, and the other for UCBs and has considerably reduced distributor fees for these categories (now set at Rs. 50,000 and Rs. 10,000 respectively, as compared to previous fees of Rs.250,000), in order to increase retail participation from beyond Tier I and II cities²⁴⁰.

Business Correspondents

Banks are permitted to appoint Business Correspondents (BCs) whose scope of activities includes the sale of mutual fund products, pension products, and micro-insurance products²⁴¹ and other third party products. A Microsave study²⁴² on the state of BCs in India finds that most BCs are mono-product, with a focus on deposit mobilisation on behalf of the Sponsor Bank. A few are dual product, offering savings accounts and remittances. Some BCs however provide insurance. For instance, Syndicate Bank²⁴³ and Allahabad Bank²⁴⁴ have tied up with Tata AIG and LIC respectively to sell their micro-insurance products through the banks' BCs. However, it appears that there is almost no activity in terms of investment and pension products being offered through bank BCs.

Non-Banking Financial Companies

Similar to Banks, NBFCs offer life and general insurance through the 'bancassurance' model where an NBFC and an insurance company form a partnership so that the insurance company can sell its products to the NBFC's customer base. NBFCs are also permitted to be Corporate Agent licencees²⁴⁵ for selling life and non-life insurance products, for which the NBFC receives commissions from the insurance company it is the agent of²⁴⁶. In this model, there is no risk participation by the NBFC.

NBFCs are not permitted to be brokers as per the IRDA Broker Regulations. However, the IRDA "Report on Insurance Sub-broking in India" published in January 2013 envisages increasing the penetration of insurance products in rural locations by appointment of sub-brokers. This is an important pre-requisite for deepening insurance access in Tier 5 and Tier 6 locations of the country and consistent with the initiatives of other regulators such as the Aggregator and Sub-aggregator framework of PFRDA and the Business Correspondent framework of the RBI. NBFCs are ideally suited to this mission and the recommendations of this report now need to be implemented as soon as possible so that work on the ground can begin in earnest. There are however two issues that the recommendations must address:

1. It would be important to allow sufficient flexibility to Brokers and Insurance Companies to respond to the diversity in the distribution landscape. For example, the Report currently recommends limits on the total business volumes of Rs. 10 crore and premium per policy of Rs. 1 lakh for sub-brokers. Such specific operational details of the sub-broker arrangement may be best left to the judgment of the respective Brokers depending on the circumstances.
2. Only formal institutions (such as NBFCs) should be eligible to become sub-brokers rather than individual agents or unincorporated bodies. Stipulating some minimum capital requirement for sub-brokers would be effective in this regard. This would ensure that only serious entities are eligible and policies such as customer protection, and product Suitability, and online issuance of insurance policies becomes the norm since such entities would have the capacity to put in place the necessary infrastructure.

NBFCs are not permitted to enter into “referral” arrangements with Insurance Companies²⁴⁷. However, until 2010 there were no restrictions on such an arrangement. The 2010 regulations clarify that the referral company cannot be in the business of extending loans and advances, accepting deposits, trading in securities on its own account or on the accounts of customers. It is again unclear as to why this is a specific concern in the case of NBFCs alone and not Banks. As long as the same restrictions apply in both cases, such as the prohibition on the forced bundling of insurance with credit, in view of the Neutrality principle, NBFCs must be allowed to be able to enter into referral arrangements with Insurance Companies. Additionally, considering the need to reach out to un-served segments of the population, it is essential that an effective channel such as the NBFC be leveraged to its fullest potential in the delivery of insurance and other services.

NBFCs can act as distributors of Mutual Funds with prior approval of RBI. However, they are subject to some additional conditions such as: NBFCs need to have a minimum net owned funds of Rs. 100 crore, minimum capital adequacy levels, and net NPA levels and at least a 3-year history of profitability²⁴⁸. These requirements mean that the majority of NBFCs in operation currently will be unable to function as distributors of MFs and unable to use their branches to provide comprehensive financial services. Reaching out to all corners of the country and ensuring broad based participation by retail investors will require significantly large number of NBFCs operating in partnership with AMCs, offering at the very least access to Money Market Mutual Funds and Index Funds. They should be subject to a more dynamic set of criteria on eligibility and experience. NBFCs are permitted to be ‘Aggregators’ for the NPS-Swavalamban Scheme.

Recommendations

- 5.3 In keeping with the goal of creating integrated providers for financial services delivery, RBI should publish a guideline towards the appointment of entities regulated by it, including National Banks, Regional Banks, or NBFCs, as agents. This guideline should set out the following eligibility criteria for agents:
- a. The Agent must not have been subjected to any disciplinary proceedings under the rules, regulations and bye-laws of a stock exchange, SEBI, RBI, IRDA, FMC, or any other regulator with respect to the business involving either organisation, partners, directors, or employees;
 - b. All Agents must be required to commit some capital against operating risks and customer protection risks for the business that they are engaged in. While the minimum amount may be structured as a Rs. 5 lakh security deposit from the agent, the amount may vary depending on the number of customers and volume of transactions;
 - c. There must be suitable limits on cash holding as also limits on individual customer payments and receipts;
 - d. Transactions should be accounted for and reflected in the Principal’s books by end of day or next working day. Where the transfer of money from agent to Principal happens on the next working day, there should also be a stipulation that the agent should transfer the day’s collections to a non-operative pooled collections account on the same day itself. To ensure this, the Agent has to maintain the account with a bank which has online fund transfer facility with standing instructions to transfer the funds to the designated pool account at

the end of each day. This ensures that the clients' funds are secure even if the agent goes bankrupt;

- e. To counter the risk of repudiation of transactions, RBI should insist that every transaction be initiated by the customer. Biometric authentication can help achieve this. The log of each transaction must be maintained at the agent level. Each transaction must carry a transaction number and customer must receive the transaction receipt at the time of the transaction;
- f. The Agent must have trained staff that can communicate with the clients about the details of the products and take full responsibility for communicating with the clients. The Agent must have a comprehensive human resource policy, including an incentive plan for staff that not only encourages them to achieve the business objectives but more importantly prevents mis-selling;
- g. The Agent should adopt the Suitability principles of the RBI as well as those of the Principal's regulator. The Agent should also have a mechanism to address queries and grievance of the customer about the services rendered by it and publicise it widely through electronic and print media. All customer grievances should be addressed within a defined time frame.

RBI could then request each regulator to follow this integrated approach to Agent appointment for its respective products.

Chapter 5.3

Recommendations Regarding Investment and Risk Management Products

- 5.1 Every resident should be issued a Universal Electronic Bank Account (UEBA) automatically at the time of receiving their Aadhaar number by a high quality, national, full-service bank. An instruction to open the bank account should be initiated by UIDAI upon the issuance of an Aadhaar number to an individual over the age of 18. The bank would need to be designated by the customer from amongst the list of banks that have indicated to UIDAI that they would be willing to open such an account with the understanding that it would attract no account opening fee but that the bank would be free to charge for all transactions, including balance enquiry with the understanding that such transactions' charges would provide the host banks with adequate compensation. The Bank would be required to send the customer a letter communicating details of the account thus opened. The Committee recommends that the RBI issue a circular indicating that no bank can refuse to open an account for a customer who has adequate KYC which specifically includes Aadhaar. [Identical to Recommendation 3.1]
- 5.2 RBI should require a strong Proof of Identity (POI) for each and every customer and a documentary proof of one national address but waive the requirement of documentary proof for the current address, for the purpose of opening a full-service bank account. It should instead enjoin upon banks to carry out careful tracking of usage and transactions patterns to ascertain the risk levels of the customer and take necessary action based upon risk-based surveillance processes developed internally by each bank. RBI must take the lead in developing this as a convergent approach to KYC across all regulators for their respective products. [Identical to Recommendation 3.2]
- 5.3 In keeping with the goal of creating integrated providers for financial services delivery, RBI should publish a guideline towards the appointment of entities regulated by it, including National Banks, Regional Banks, or NBFCs, as agents. This guideline should set out the following eligibility criteria for agents:
- a. The Agent must not have been subjected to any disciplinary proceedings under the rules, regulations and bye-laws of a stock exchange, SEBI, RBI, IRDA, FMC, or any other regulator with respect to the business involving either organisation, partners, directors, or employees;
 - b. All Agents must be required to commit some capital against operating risks and customer protection risks for the business that they are engaged in. While the minimum amount may be structured as a Rs. 5 lakh security deposit from the agent, the amount may vary depending on the number of customers and volume of transactions;
 - c. There must be suitable limits on cash holding as also limits on individual customer payments and receipts;
 - d. Transactions should be accounted for and reflected in the Principal's books by end of day or next working day. Where the transfer of money from agent to Principal happens on the next working day, there should also be a stipulation that the agent should transfer the day's collections to a non-operative pooled collections account on the same day itself. To ensure this, the Agent has to maintain the account with a bank which has online fund transfer facility with standing instructions to transfer the funds to the designated pool account at

Recommendations Regarding Investment and Risk Management

the end of each day. This ensures that the clients' funds are secure even if the agent goes bankrupt;

- e. To counter the risk of repudiation of transactions, RBI should insist that every transaction be initiated by the customer. Biometric authentication can help achieve this. The log of each transaction must be maintained at the agent level. Each transaction must carry a transaction number and customer must receive the transaction receipt at the time of the transaction;
- f. The Agent must have trained staff that can communicate with the clients about the details of the products and take full responsibility for communicating with the clients. The Agent must have a comprehensive human resource policy, including an incentive plan for staff that not only encourages them to achieve the business objectives but more importantly prevents mis-selling;
- g. The Agent should adopt the Suitability principles of the RBI as well as those of the Principal's regulator. The Agent should also have a mechanism to address queries and grievance of the customer about the services rendered by it and publicise it widely through electronic and print media. All customer grievances should be addressed within a defined time frame.

RBI could then request each regulator to follow this integrated approach to Agent appointment for its respective products.

Section 6
Customer Protection

Chapter 6.1 Introduction and Current Approaches

The vision statement that is relevant to customer protection is as follows:

Each low-income household and small-business would have a legally protected right to be offered only “suitable” financial services. While the customer will be required to give “informed consent” she will have the right to seek legal redress if she feels that due process to establish Suitability was not followed or that there was gross negligence.

Consumer protection could embody a wide range of measures including disclosure requirements, conduct of business rules, codes of conduct, product design related regulations, Suitability and assessment related requirements and would require the establishment of an appropriate institutional mechanism for implementing such measures and for redressing consumer complaints that arise from the use of financial services and in their interactions with financial services providers.

The role of financial services is to help customers maximise the benefit from the human and other resources that they possess while minimising the impact of adverse shocks on their lives. Financial products do this by interacting with the “natural” financial flows of households. This interaction is crucial. The same product that enhances well-being for one type of customer could do harm in the case of another. An apparently “simple” and “transparent” product such as a loan with fixed monthly payments, while entirely suitable and value enhancing for an urban salaried household with fixed monthly incomes, can exacerbate the consumption volatility of a rural household with highly uncertain farm incomes in a manner identical to a highly leveraged position in equity, and is an entirely unsuitable product for that household. In fact, on their own both savings and loans could be unsuitable strategies for such a household that may need an additional capability to manage income variability. From this example it is clear that the best way for financial providers to innovate while ensuring that the financial well-being of the customer is not negatively impacted is by granting the customer the Right to Suitability, which requires the provider to:

1. Fully understand the products that they offer to their customers.
2. Have a clearly laid out process including a customer due-diligence process which is Board-approved and demonstrably ensures that if it is followed it does result in the sale of financial products that are designed to enhance the financial well-being of the customer. This would go beyond standardised literacy and disclosure methods.
3. Have a process of customer audit that regularly reviews the actual adherence to this process by the staff of the financial services provider.
4. Accept legally enforceable liability for non-adherence to the process and for gross negligence in the manner in which it offers products to its customers. There would be no liability for specific customer outcomes per se.

Global customer protection regulation (such as in Australia and the USA) is steadily gravitating towards a Suitability based regime and in keeping with this directional shift in the nature of consumer protection, India should also move towards establishing a Right to Suitability for customers of financial products and services. Australia, for instance, has passed the Future of Financial Advice Act 2012, which introduced a duty for financial advisors to act in the best interests of their clients, subject to a ‘reasonable steps’ qualification, and to place the best interests of their clients ahead of their own when providing personal advice to retail clients. In the USA, the CFPB has amended Regulation Z, which implements the Truth in Lending Act (TILA). Under regulation Z, a creditor is

prohibited from making a higher-priced mortgage loan without regard to the consumer's ability to repay the loan. This rule implements sections of the Dodd-Frank Wall Street Reform and Consumer Protection Act which require creditors to make a reasonable, good faith determination of a consumer's ability to repay any consumer credit transaction secured by a dwelling.

Suitability also encompasses the ex-post grievance redressal mechanism available to aggrieved customers and it would be advisable for the institutional mechanism offering grievance redressal to be common across financial regulators to concentrate expertise and improve efficiencies. Although there are product or sector specific concerns which would require specialisation, a common agency that identifies, implements, and tackles customer protection related concerns in the financial services sector working closely with sector-specific prudential regulators would be an essential step in ensuring for customers, ease of access to a one-stop point for all financial services related issues.

While the focus of this discussion is on low income households and small businesses, the same issues are true even for middle and high-income households and large companies.

Failures of Customer Protection

Even as India has continued to rely on mandated information disclosure and financial literacy to ensure the best outcomes for customers, the experienced reality for a significant section of customers indicates that their financial well-being continues to be compromised on account of the rampant mis-sale of products and services. India has witnessed significant customer protection failures in the recent past. For instance, it has been estimated that there has been a loss of about Rs.1.5 lakh crore to investors owing to mis-selling of insurance over the 2004-05 to 2011-12 period²⁴⁹. Entry loads in mutual funds is another example that led to mis-sale, where agents got unsuspecting customers to churn their portfolios in order to cash in on the entry-loads each time the customer bought into a new mutual fund. A recent example of a large scale customer protection failure is the case of the Saradha Group. The now defunct Saradha Group is estimated to have received deposits from about 17 lakh people and about 10 lakh people have so far filed for compensation²⁵⁰.

The customer protection failures specific to different banking designs are examined in the following paragraphs:

1. National bank with branches: The RBI has noted on multiple occasions the customer protection challenges associated with this institutional design. The Damodaran Committee (2011) notes that banks are "focusing excessively on achievement of quantitative targets rather than rendering quality service to select customers after having carried out the process of due diligence." This highlights the potential for mis-sale or unsuitable sale of products due to conflicted remuneration structures that place excessive importance on the achievement of sales targets. In a speech²⁵¹ dated 30 April 2013, Deputy Governor Dr. K.C Chakrabarty noted that "the product-based incentives for staff in banks selling insurance products or mutual funds creates perverse incentives and, thereby, shifts the focus from the customer's original need. The staff is keen on bundling insurance along with term deposits (and in some cases, in lieu of term deposits) only because of the product-based incentive structures. Sadly, they lose sight of customer convenience, product suitability and blatantly indulge in mis-selling." Providing such incentives to bank employees leads them to not act in the best interest of the customer.

The RBI has also previously observed that some banks follow the practice of sanctioning housing loans to customers at teaser rates i.e., at comparatively lower

rates of interest in the first few years, after which rates are reset at higher rates. This practice raised a concern as some borrowers found it difficult to service these loans once the normal interest rate (which is higher than the rate applicable in the initial years) became effective. The regulator took into consideration the fact that many banks were not taking the repayment capacity of the customer at higher interest rates into account at the time of their loan appraisal. Considering the higher risk that these loans carry as a consequence, the RBI directed banks to increase standard asset provisioning on the amount outstanding from 0.40 per cent to 2 per cent²⁵².

Many studies have pointed that over-indebtedness of farmers in the Vidarbha region of Maharashtra have led to detrimental outcomes for farmers²⁵³. The financial situation, existing debts, and cash flows of these farmers were not taken into account by banks in these cases leading to the unsuitable sale of loans. The Central Government later announced a debt waiver for farmers in six districts of this region²⁵⁴.

2. National Bank with Agents: Banks in India outsource financial services including applications processing (loan origination, credit card), document processing, and loan recovery through Direct Sales Agents and Recovery Agents. As observed by the RBI, “some banks set very stiff recovery targets or offer high incentives to recovery agents. These have, in turn, induced the recovery agents to use intimidating and questionable methods for recovery of dues.²⁵⁵” There were also widespread reports regarding “misrepresentation and misleading information provided by direct selling agents and marketing agents as also non-fulfilment of such promises made by agents or bank officials while marketing the products²⁵⁶”. This led the RBI to remind banks that they as principals are responsible for the actions of their agents and that “...their agents engaged for recovery of their dues should strictly adhere to the above guidelines and instructions, including the BCSBI Code, while engaged in the process of recovery of dues.”

The mis-sale of Unit-Linked Insurance Policies (ULIP) also presents the possibilities of mis-sale in an institutional design that relies on agents. Certain product features and misaligned incentive structures encouraged the mis-sale of ULIPs to customers²⁵⁷:

- a. ULIPs typically had a lock-in period of three years. If a policy was discontinued during the lock-in period, companies were allowed to deduct up to 100 per cent of the value of the policy post costs.
- b. Although the ULIP was a long-term (15 year) product, up to 40 per cent of the commissions from the product could be collected in the first year. This ‘front-loading’ of commissions offered considerable scope for mis-sale of the product.

The case of mis-sale of ULIP to customers highlights the conflict of interest that arises as a result of skewed incentive structures to agents. In such cases, agents do not act in the best interest of their clients and even in the presence of disclosure mechanisms, the possibility of an unsuitable sale is high.

3. NBFCs: This institutional design has been successfully leveraged in reaching out to customers in underserved locations and income segments.

There are two main customer protection challenges relating to access to grievance redressal mechanisms specific to this institutional design. First, since most NBFCs operate in traditionally underserved areas, customers have limited access to ex-post grievance redressal mechanisms. Many customers that this institutional design serves are first-time customers of formal financial services. Their unfamiliarity with formal services could prevent them from accessing grievance redressal mechanisms. Secondly,

the first port of call for these customers is the internal redressal mechanism of the NBFC while the second port of call is the RBI's regional office²⁵⁸. Accessing the second port of call, in this case, involves substantial costs for these customers and could deter them from reporting complaints. As mentioned in the vision for customer protection, such customers must have ease of recourse to ex-post grievance redressal mechanisms.

Analysis of Dominant Approaches to Customer Protection

While India does not have legislation governing customer protection for financial services, customers have recourse to the consumer courts set up by the Consumer Protection Act, 1986. In addition, consumers of financial products and services may also resort to mechanisms set up by product and services-specific regulators. With the product-based regulatory structure, customer protection responsibilities for financial services are embedded in multiple regulators. India has six primary regulators- RBI, SEBI, IRDA, PFRDA, EPFO, and FMC. In addition NABARD, SIDBI, NHB are also involved in regulation and supervision, as subsidiaries of the RBI. As many as six Ministries of the Government of India and State Governments have an implicit or direct (as in the case of Ministry of Corporate Affairs) role.

The current regulatory approach to customer protection in India can be divided into two complementary ex-ante approaches, namely, mandated information disclosure, and financial literacy and education. These approaches are predicated on the principle of caveat emptor or 'buyer beware'. In addition, there are ex-post mechanisms for grievance redressal to enable wronged customers to be compensated by financial services providers. The ex-ante approaches are discussed below, while ex-post mechanisms are discussed in Chapter 6.3.

Mandated Information Disclosure

Information disclosure is the most popular ex-ante approach to implementing customer protection because there is a belief that more information enables the customer to reach a more reasoned decision on buying that product. Dependence of a regime based primarily on disclosure, such as is the case in India, has been fraught with many limitations. These can be broadly grouped into the following aspects - the nature of financial products, the nature of the transaction, the 'expertise' of the buyer to ascertain what she requires, and whether she is indeed getting what she needs.

In India, all regulators have required information disclosure from institutions regulated by them. For example, the RBI requires banks and other financial institutions to clearly disclose material terms on loans. The RBI Guidelines on Fair Practices Code for Lenders²⁵⁹ advises banks to transparently disclose to the borrower:

1. all information about fees and charges payable for processing the loan application;
2. the amount of fees refundable if loan amount is not sanctioned or disbursed;
3. pre-payment options and charges, if any;
4. penalty for delayed repayments if any;
5. conversion charges for switching loan from fixed to floating rates or vice versa;
6. existence of any interest reset clause; and
7. any other matter which affects the interest of the borrower.

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Further, the Fair Practices Code for NBFCs²⁶⁰ mandates the following disclosures in the loan agreement:

1. all the terms and conditions of the loan;
2. that the pricing of the loan involves only three components: the interest charge, the processing charge, and the insurance premium (which includes the administrative charges);
3. that there will be no penalty charged on delayed payment;
4. that no Security Deposit / Margin is being collected from the borrower;
5. that the borrower cannot be a member of more than one SHG / JLG;
6. the moratorium between the grant of the loan and the due date of the repayment of the first instalment; and
7. an assurance that the privacy of borrower data will be respected.

Other regulators like the IRDA also mandate extensive disclosure requirements of insurance companies for insurance policies.

Disclosure based regimes hinge on eliminating the information asymmetry between the customer and the provider. However, studies have shown that disclosure can have the opposite effect of what is intended. For example, customers are often 'over-loaded' with information and this leads them to take sub-optimal decisions²⁶¹. Moreover, mandated disclosure can crowd out useful information. Since disclosers can proffer, and disclosees can receive, only a limited amount of information, mandated disclosures effectively keep disclosees from acquiring other (potentially more useful) information²⁶². Disclosure may therefore have evolved as a means for providers of financial services to 'absolve' themselves of their fiduciary responsibilities towards their customers, especially in standard form contracts that exist between providers and retail customers. These responsibilities are those placed on providers to act in the best interests of their clients, failing which the transaction would tantamount to a mis-sale. Mandated disclosure can also cause inequity in customer protection outcomes. For instance, "mandated disclosure helps most those who need help least and helps least those who need help most. Information is most useful to well-educated and well-off people who have the resources and sophistication to locate, interpret and use the revealed information.²⁶³" Several studies²⁶⁴ have found that customer knowledge of credit markets is closely related to family income and education. In the Indian mutual fund context, studies²⁶⁵ have shown that "firms respond to disclosure policy (relating to 'unshrouding' of fees) by altering products to essentially maintain lack of clarity in pricing." It is estimated that investors in India lost and mutual fund firms gained approximately Rs. 3,000 crore due to the shrouding of fees by closed-end mutual funds.

Disclosures have been shown to have limited value in improving customer well-being over time and across countries, and cannot be the basis for a customer protection framework. While there are specific benefits to having disclosures for financial services, the fundamental framework that underpins customer protection cannot be predicated on putting the onus on the customer. In fact, there needs to be a move in the opposite direction, requiring more from the financial services provider in ensuring protection of customers.

Financial Literacy and Education

The expectation with this approach has been that over time creating a more financially literate citizenry will contribute to enhanced decision making as well as improved financial wellbeing. Regulators in India have promoted financial literacy and education schemes as mechanisms to improve customer outcomes. For instance, the RBI recently announced the National Strategy for Financial Education aimed at promoting inclusive growth, financial inclusion, and financial education. SEBI implements financial literacy campaigns through the Resource Person (RP) model. Under this model, SEBI trains RPs who in turn conduct workshops for target groups like school children, young investors, home makers, SHGs etc. In 2009, RBI initiated the Financial Literacy and Credit Counselling (FLCC) model with the objective of providing free financial literacy/education and credit counselling. The specific objectives of the FLCC were the following²⁶⁶:

1. To educate the people in rural and urban areas with regard to various financial products and services available from the formal financial sector.
2. To make the people aware of the advantages of being connected with the formal financial sector.
3. To formulate debt restructuring plans for borrowers in distress and recommend the same to formal financial institutions, including cooperatives, for consideration.
4. To provide financial counselling services including education on responsible borrowing, proactive and early savings, and offering debt counselling to individuals who are indebted to formal and/or informal financial sectors.

The RBI encouraged banks to set up trusts or societies for running FLCCs and to induct respected local citizens on the Board of such a trust or society. The Eastern Area of the RBI (a region comprised of 12 states and 1 union territory) has 186 FLCCs²⁶⁷.

In June 2012, the RBI modified the FLCC scheme and lead banks were advised to set up Financial Literacy Centres (FLCs) in each of the Lead District Manager (LDM) Offices²⁶⁸. The FLCs are expected to impart financial literacy through monthly outdoor camps and collaboration with local NGOs. As of September 2013, there are 822 FLCs in the country²⁶⁹.

While financial literacy is seen as a way to create 'empowered' customers who would be sufficiently competent to take the right decisions, many studies have pointed to the weak relationship between financial literacy and financial behaviour, especially among low-income households²⁷⁰. For example, a recent meta-analysis of the relationship between financial literacy and financial behaviour in 168 research papers finds that interventions to improve financial literacy explain only 0.1 per cent of the variance in financial behaviours studied, with weaker effects in low-income samples. Like other education, financial education decays over time. Evaluation studies of financial literacy and education programs conducted in India provide further evidence of their lack of impact on the customer. These studies find that even after intensive training sessions (some lasting two days), there is insignificant or no impact on the customer's financial behaviour²⁷¹.

While building financial capabilities of customers is obviously desirable, it is clear from the evidence that a strategy for customer protection cannot be built around this approach. The level of expertise required to understand financial products and services will always mean that the provider will know more than the customer.

Chapter 6.2 Suitability as an Approach

When the fact is considered that imbalances in information, expertise, and power between the buyer and seller of financial products will only be exacerbated in the future, then it becomes clear that existing approaches to customer protection have severe limitations. As argued earlier, the “caveat emptor” principle has led to fundamental flaws in India’s customer protection architecture and has created large welfare losses for customers. As the recent examples of customer protection failure in India highlight, there is a pressing need to shift away from this approach to financial customer protection. There is a need to move to a customer protection regime where the provider is held accountable for the service to the buyer, by ascertaining that the products sold or the advice given is suitable for the buyer considering her needs and current financial situation, i.e. the customer must have a Right to Suitability.

The RBI has already signalled its intent to proceed along these lines in the Report on Trend and Progress of Banking in India 2012-13²⁷² where it notes the importance of the Treating Customers Fairly (TCF) model. The TCF framework however has a number of differences from the Suitability regime. First, the TCF framework does not impose a legal liability on the financial services provider to ensure Suitability. Second, the TCF approach talks about the need to ensure that products and services sold meet the needs of identified customer groups. The Suitability framework goes a step further and mandates that the provider ensure that the products meet each customer’s needs and objectives; not just customer groups. Third, TCF mandates that Suitability needs to be considered only in the case of advice given to customers while the Suitability regime requires that both sale and advice be tied to Suitability requirements. While the adoption of the TCF model by the RBI would be an important step in shifting away from the caveat emptor approach, progress towards a Suitability centric regime of customer protection in India would be much more appropriate.

In this context, it must also be noted that the FSLRC’s recommendation on customer protection “marks a break with the tradition of caveat emptor, and moves towards a position where a significant burden of customer protection is placed upon financial firms²⁷³.” The Draft Code establishes basic rights for financial customers. These include the right to professional diligence, protection against unfair contract terms, protection against unfair conduct, protection of personal information, requirement of fair disclosure, right to redress of complaints, right to suitable advice and protection from conflict of interest of advisors. It is especially significant that the FSLRC has recommended that retail customers have the right to receive suitable advice in relation to the purchase of a financial product or service, and that the provider must collect all relevant information on the needs and financial situation of the customer in making its recommendation. This shift in equilibrium, from caveat-emptor to provider-liability, will ensure that financial services providers compete on the provision of solutions that are appropriate for customer households (and not just revenue-maximising for the provider), thus aligning the incentives of the provider with the customer.

Suitability as a Process

Suitability should be viewed as a process of the provider rather than as an outcome for a customer. Outcomes can be driven by many factors and in most cases it will be near impossible to specifically assess the extent to which unsuitable provider actions were responsible for it. Suitability as a process would require every financial services provider to have a Board approved Suitability Policy that the company must follow in all interactions with customers - the policy must lay down the processes for customer data collection, analysis, communication of recommendations (both advice and product sale),

Customer Protection: Suitability as an Approach

and follow-up. It is the implementation of the Suitability process that should determine if a financial services provider has indeed acted in the best interests of the customer.

The power of the Suitability approach is that it will be necessary for the financial services provider to repeat the process on an on-going basis - in every interaction with every customer. At all points of time, therefore, the financial services provider is incentivised to follow the Suitability process and act in the best interests of the customer.

As mentioned earlier, financial customer protection regimes in Australia, UK, and USA have shifted to a provider-liability regime and mandated a process for ensuring Suitability. For example, in the case of a standard home loan product, regulators in these countries require that Suitability assessment take into account two parameters- one, the customer's requirements and objectives and two, the customer's financial situation. Both parameters are examined in some detail below.

1. Customer's requirements and objectives: The Australian Suitability assessment (under the Responsible Lending Conduct²⁷⁴) mandates that the financial services provider look into the following aspects of the customer's requirements and objectives:
 - a. the purpose for which the credit or customer lease is sought and the benefit to the customer;
 - b. whether the customer seeks particular product features or flexibility, the relative importance of different features to the customer, and whether the customer is prepared to accept any additional costs or risks associated with these features;
 - c. the nature of the credit requested by the customer;
 - d. if the customer has more than one requirement or objective, the relative importance of each to the customer (e.g. whether the cost of the credit or flexibility to make later changes is more important to the customer);
 - e. the customer's understanding of the proposed contract; and
 - f. if the credit is to purchase a specific item, the term of the credit relative to the likely useful life of the asset
2. Financial Situation of the customer: The Consumer Financial Protection Bureau (CFPB) regulations mandate that eight underwriting factors should be looked into while determining the financial situation or 'ability to repay' of the customer. They are:
 - a. Current income or assets;
 - b. Current employment status;
 - c. Credit history;
 - d. Monthly payment for the mortgage;
 - e. Monthly payments on other mortgage loans got at the same time;
 - f. Monthly payments for other mortgage-related expenses (such as property taxes);
 - g. Other debts; and

- h. Monthly debt payments, including the mortgage, compared to your monthly income (“debt-to-income ratio”). The lender may also look at how much money you have left over each month after paying your debts.

The regulations require that monthly payments be calculated based on the highest payment that will apply in the first five years of the loan and that the customer have a total debt-to-income (pre-tax monthly income) ratio that is less than or equal to 43 per cent.

The UK Mortgage Conduct of Business Rules require that the firm assume (in the absence of evidence to the contrary) that any regular payments under a regulated mortgage contract will be met from the customer's income. A firm should therefore take account of the customer's actual or reasonably anticipated income, or both and determine whether the customer intends to, repay, either wholly or partly, from resources other than income. The Australian regulations deem credit contracts to be unsuitable if the customer will be unable to meet their payment obligations, either at all or only with substantial hardship²⁷⁵.

3. Other parameters: Apart from the two parameters described above, certain regulations like the CFPB guidelines deem certain characteristics of a home loan product to be ‘globally unsuitable’ for all categories of customers. For instance, loans with negative amortisation, interest-only payments, balloon payments, terms exceeding 30 years and the so-called “no-doc” loans where the creditor does not verify income or assets are deemed unsuitable for all customers. Products with these features do not enjoy a ‘safe harbour’, i.e., the customer can challenge the sale of the product in court if the customer's income and debt obligations left insufficient residual income or assets to meet living expenses.

In the Indian context, examples of such globally unsuitable products would include teaser-rate home loans, and ‘no-doc’ loans, where creditor does not verify income or assets before lending to the customer.

Further, under ASIC's guidelines, Suitability requirements are ‘scalable’ or more stringent under certain circumstances. For example, if the potential impact on the customer of entering into an unsuitable contract is high, i.e., if the size of the loan is large in comparison to the customer's capacity to repay, financial services providers are expected to conduct extensive inquiries about the customer's objectives and requirements. Similarly, in the case of reverse mortgages, where customers are often senior citizens, the service provider is expected to make inquiries about the customer's requirements and objectives in relation to certain future needs, including the possible need for aged care accommodation and whether the customer prefers to leave equity in their dwelling or land to the customer's estate.

Legal Liability

In order for a framework of Suitability to have teeth, there is a need for the imposition of legal liability on the financial services provider, as this will mean that it is in the firms' self-interest to ensure suitable recommendations and product sales to customers.

Every individual and small enterprise must have the right to be provided suitable advice or recommended suitable products. The interpretation of suitable behaviour is best determined by the build-up of case laws over time, thus ensuring that the understanding of Suitability comes from the realities of the financial marketplace and its evolution over time. The combination of ex-ante legal liability and a strong threat of ex-post

Customer Protection: Suitability as an Approach

enforcement provide credible dis-incentives to financial services providers from acting in ways that promote their own self-interest at the cost of customers. A Suitability framework underpinned by legal liability is the most effective way of ensuring that the design and sale of financial services is suitable for the customer.

Australia's market conduct regulator, the Australian Securities and Investments Commission (ASIC) administers the Financial Services Reform Act 2001 (FSR Act), which requires persons who provide financial product advice to retail customers to comply with certain conduct and disclosure obligations. The obligations vary depending on whether the advice given is personal advice or general advice. According to the FSR Act, personal advice is financial product advice that is directed to a person (including by electronic means) in circumstances where the provider of the advice has considered (and is reasonably expected to have considered) one or more of the person's objectives, financial situation and need (all other financial product advice is general advice). All personal advice must meet the Suitability rule while all general advice must be accompanied by a "general advice warning"²⁷⁶.

ASIC also places legal obligations on financial services firms to meet specific conduct, disclosure, skills as well as professional indemnity insurance requirements, amongst others, to implement the Suitability requirement. In the case of a breach of law, ASIC is empowered to take a variety of actions such as:

1. Punitive action such as court order, prison terms, criminal and civil financial penalties;
2. Administrative action (without going to court) such as ban on providing financial services, revocation, suspension or variation of conditions of licences, public warning notices;
3. Preservative actions such as injunctions; and
4. Negotiated resolutions such as through enforceable undertakings, and others

ASIC can decide on which remedy to take depending on various factors such as the severity of the suspected misconduct, the extent of losses, the compliance history of the individual or firm in question, and so on. The Australian Government has further passed the Future of Financial Advice Act 2012, which introduced a duty for financial advisors to act in the best interests of their clients, subject to a 'reasonable steps' qualification, and to place the best interests of their clients ahead of their own when providing personal advice to retail clients. To complement this, the Act also introduced a prospective ban on conflicted remuneration structures including commissions and volume-based payments, in relation to the distribution of and advice about a range of retail investment products (not applicable to some products and advice services including general insurance, basic banking products and for financial product advice given to wholesale clients).

Interpreting Suitability

In Australia, the interpretation of principles of Suitability is dependent on case law. For example, consider the following case regarding maladministration in the case of a 'low-doc' loan²⁷⁷. Mr. and Mrs. Z applied for a 'low-doc' loan from a Financial Services Provider (FSP) for two stated objectives- to refinance an existing loan and to obtain additional finance of AUD 200,000 to assist them in purchasing property. The FSP approved the loan based on the income disclosed in the application and a declaration stating that the loan was within their ability and capacity to service. Mr. and Mrs. Z declared a partnership income of AUD 400,000, rental income of AUD 40,000, and a parenting allowance of AUD 20,000. The FSP did not make any independent enquiries to verify this information.

Mr. and Mrs. Z subsequently claimed that the FSP's decision to lend amounted to maladministration as they did not have the capacity to service the additional loan of AUD 200,000. The case manager of the Financial Ombudsman Service (FOS), Australia's external redressal ombudsman, found that the level of income was, at first glance, inconsistent with an entitlement to a parenting allowance of AUD 20,000. Further, the case manager obtained from Mr. and Mrs. Z a copy of their partnership tax return prepared one month prior to their loan application. The tax return revealed a net partnership income of AUD 45,000. The case manager also found that Mr. and Mrs. Z had made two previous loan applications in which they had made similar income declarations (although these loans had not proceeded), and two opportunities to correct their misquoted income, and failed to do so. As the FSP had failed to make enquiries, the case manager concluded that the FSP's approval of the loan was maladministration in lending. However, the case manager also took into account the principle of fairness in the circumstances of the case and the principle of proportionate liability in claims of misleading conduct, and concluded that Mr. and Mrs. Z should bear two thirds of their loss and the FSP was responsible for one third of the loss. The FSP disagreed with the case manager's evaluation and appealed against it.

The final decision of the Ombudsman agreed with the case manager's assessment. In the decision, the Ombudsman noted that the common law and the Code of Banking Practices require an FSP to exercise the care and skill of a diligent and prudent lender in the case of 'low-doc' lending, and arguably a diligent and prudent lender would not rely solely on information provided by the customer to get a loan. The Ombudsman noted that a customer's self-declaration of financial details does not protect the FSP from having the loan considered maladministration or unjust if the circumstances were such that the FSP ought to have made enquiries but chose not to do so. This decision relied on extant case law and the comments of the trial judge in *Permanent Mortgages Pty Ltd v Cook (2006)*²⁷⁸, where it was ruled that a customer's false declaration, whether knowingly or inadvertently, is a relative factor to be taken into account, but is not decisive, such that the FSP should avoid liability for maladministration in lending.

The interpretation of Suitability by case law around the world has also reinforced the notion of Suitability as a process-oriented, not outcome-based approach. For instance, consider the FOS's final decision in a case involving an elderly couple in the UK. Mr. and Mrs. W, an elderly couple who were both 73 years of age, had built up a corpus of savings over the years²⁷⁹. They decided to invest some of their money and approached their bank for some advice. The couple spoke to an investment adviser at the bank. The adviser enquired about the type of investment the couple sought to make (needs and objectives) and asked for information regarding their personal circumstances. As part of this process, the adviser asked them some questions about their health taking their age into account. The adviser recommended that Mr. and Mrs. W invest GBP 40,000 in a 'capital guaranteed multi-index equity bond deposit plan' and the couple followed the recommendation. Under the terms of the investment, the couple were obliged to keep the corpus for six years to retain the capital guarantee. Unfortunately, Mr. W died just 15 months after the couple had made the investment. Mrs. W asked the bank to cancel the plan since she felt that the bank had recommended an unsuitable investment plan for the couple. The bank disagreed with Mrs. W's view that the couple had been given inappropriate or unsuitable advice and it refused to cancel the plan. It pointed out to Mrs W that the adviser had recorded their health as 'good' during the fact-finding process that he had gone through with them. Subsequently, Mrs. W approached the FOS and in her complaint, she pointed out that her husband had clearly been in poor health when they had taken out the investment plan - and that such a long-term investment could not have been right for them and therefore, should not have been recommended.

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On examination of the bank's records, the FOS found that Mr. and Mrs. W were not experienced investors. The FOS took the view that the couple's age should also have prompted the bank to make sure the couple had understood they would not necessarily receive their investment back in full - if they did not keep the bond for six years. Further, Mr. W's medical records showed that he was using a wheelchair at the time of the sale - and that given his particular medical history, he had already exceeded his life expectancy by four years. Using this, the FOS argued that it was unlikely that the couple would have confirmed that they were both in 'good health' when the adviser had asked them. The FOS was of the opinion that the bank needed to make further enquires about the couple's health in order to arrive at an accurate picture of their circumstances.

In its final decision, the FOS concluded that the bank had not given the couple appropriate advice. The bank was required to put Mrs. W in the financial position she would now be in if she and her husband had left the money where it was in the first place.

These cases highlight the importance of creating timeless principles for the Suitability process that can be interpreted in specific contexts and reinforces the notion of Suitability as a process-oriented approach. The first case also serves to underpin the responsibilities of the customer in a Suitability based regime - for instance, in honestly and accurately disclosing information about her extant financial situation, and her needs and objectives to the financial services provider.

Suitability in India

Regulators in India have also established Suitability guidelines for several financial products and services. For example, the RBI has issued Suitability and Appropriateness guidelines²⁸⁰ for derivative products. These guidelines mandate that "market-makers should undertake derivative transactions, particularly with users with a sense of responsibility and circumspection that would avoid, among other things, mis-selling. It is imperative that market-makers offer derivative products in general, and structured products, in particular, only to those users who understand the nature of the risks inherent in these transactions and further that the products being offered are consistent with users' business, financial operations, skill & sophistication, internal policies as well as risk appetite." Further, market-makers are advised to adopt a Board-approved 'Customer Appropriateness & Suitability Policy' for derivatives business. It is pertinent to note that small business have been provided protection under these guidelines.

Several counterparties to derivative transactions have alleged that such transactions were wagers and have also sought to argue that the transactions did not follow RBI guidelines requiring that such transactions be undertaken only for risk mitigation. The aforesaid argument has generally not been entertained by courts. For example, in the case of *Rajshree Sugars and Chemicals Limited v. Axis Bank Limited* (AIR 2011 Mad 144), the company contended that Axis Bank entered into structured products in violation of the aforementioned guidelines and the Master Circular On Risk Management as the company did not have a risk management policy in place. The Court held that the contention of the company could not be maintained since their authorised signatory had signed a Risk Disclosure Statement that showed that the company was aware of a variety of risks associated with the deal, such as market risk, basis risk, operational risk and legal, regulatory and tax risks. The Risk Disclosure Statement also contained an undertaking by the Company that they will get only into those derivatives transactions as are permitted by the laws of the country including RBI guidelines. Hence, in conclusion, the bank was found to have not violated the guidelines.

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Apart from the RBI, other regulators in India have also issued Suitability guidelines. For example, SEBI's Investment Advisers Regulations, 2013 mandates the following Suitability requirements of investment advisers:

1. "All investments on which investment advice is provided is appropriate to the risk profile of the client;
2. It has a documented process for selecting investments based on client's investment objectives and financial situation;
3. It understands the nature and risks of products or assets selected for clients;
4. It has a reasonable basis for believing that a recommendation or transaction entered into:
 - a. meets the client's investment objectives;
 - b. is such that the client is able to bear any related investment risks consistent with its investment objectives and risk tolerance;
 - c. is such that the client has the necessary experience and knowledge to understand the risks involved in the transaction.
5. Whenever a recommendation is given to a client to purchase a particular complex financial product, such recommendation or advice is based upon a reasonable assessment that the structure and risk reward profile of financial product is consistent with clients experience, knowledge, investment objectives, risk appetite and capacity for absorbing loss."

IRDA has introduced guidelines for the development and implementation of a Suitability Index - Prospect Product Matrix by insurance companies. These guidelines are intended to help direct sales personnel, brokers and agents to recommend products based on the need and Suitability of customers. These guidelines are currently applicable to all life insurance policies (Traditional, ULIPs, Pension and Health) sold as individual policies. The Prospect Product Matrix will indicate the suitable products for a customer on the basis of Life stage (Single, Married, Married with children, Married with grown-up children or Retirement) Generic need (Protection (Life), Protection (Health), Goal based savings for wealth creation, Investment, Income) and Income segment of the customer (Mass, Mass affluent or HNI). For example, a married person with grown up children will need goal based savings products, investments and health cover more than life protection products. So the matrix will indicate 100 per cent Suitability of products intended for goal based savings, investments and health cover. The insurer will then recommend appropriate products from its portfolio for this purpose.

Regulating Suitability

An environment where Suitability is at the heart of customer protection will also require fundamental changes in regulatory approaches and instruments. Regulators in such an environment should be focussed on creating the rules-of-the-game as opposed to constant intervention in the functioning of institutions and markets. This would mean that the regulator sets the ground rules on what it expects in terms of Suitability from financial services providers, coupled with clear and mandatory guidelines on effective grievance redressal mechanisms. The regulator should prescribe requirements of Suitability to ensure that service provider recommendations match the needs of the customers as expressed and understood at the point of sale in the expert, objective opinion of the provider. Ideally, the regulator would provide guidance, but not legislate tightly, on the assessment of Suitability in different product contexts. This would ensure that financial

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services providers are incentivised to continually innovate on products and discover better models for assessing Suitability.

Beyond the regulatory guidance, there should be no requirement for regulatory approvals that inordinately delay go-to-market timelines, but regulators could have the opportunity to respond to new designs in a timely manner. This is to ensure that regulation does not have a chilling effect upon financial innovation, while at the same time allowing regulators the leeway of preventing poorly designed products from reaching the market. Regulators, therefore, need to be non-interventionist to the extent possible so as to avoid curbing the process of innovation, given its importance to the objective of meaningful financial inclusion in India. Such a non-interventionist approach to the creation of products would mean that regulatory oversight would shift towards detailed monitoring and surveillance of the market place.

For instance, in Australia potential breaches of the law are brought to ASIC's notice through reports of misconduct from the public, through referrals from other regulators, statutory reports from auditors and the licencees themselves, and through ASIC's own monitoring and surveillance work using regular surveillance visits and mystery shopping studies, the results of which are shared in the public domain.

It is apparent that only through the creation of an enabling legal and regulatory framework can the power of Suitability to drive improved customer protection be realised. However, until a dedicated legislation for customer protection in financial services is passed, there will be a need to rely on strengthening regulatory action and wherever relevant, the existing provisions of the Customer Protection Act, 1986.

The RBI should however issue regulations on Suitability, applicable specifically for individuals and small businesses, to all regulated entities within its purview, i.e., banks, NBFCs and payment institutions (under Sections 35 A of the BR Act, Section 45 JA of the RBI Act and Section 38 (2) of the Payments and Settlement System Act, 2007); so that the violation of such regulations would result in penal action for the institution as contemplated under the aforesaid statutes through a variety of measures, including fines, cease-and-desist orders, and modification and cancellation of licences.

These regulations should be applicable specifically for individuals and small businesses defined under the term "retail customer" by FSLRC. FSLRC defines a retail customer as "an individual or an eligible enterprise, if the value of the financial product or service does not exceed the limit specified by the regulator in relation to that product or service." Further, an eligible enterprise is defined as "an enterprise that has less than a specified level of net asset value or has less than a specified level of turnover."

All financial firms regulated by the RBI would be required to have an internal process to assess Suitability of products prior to advising clients with regard to them. It is recommended that all financial services providers be obligated to have in place adequate procedures that are approved and monitored by the board of directors. Compliance with the firm's internal process should be embedded in the compensation package of the sales staff. In the event of a customer complaint, the redress authority would consider whether the process was adhered to and if so, the same would be a defence or a mitigating factor for the conduct of the firm²⁸¹. The RBI would provide the following guidance with regard to the internal compliance requirements for firms regarding Suitability:

1. The Board should approve and oversee the procedures put in place for Suitability on an annual basis and attempt to detect and correct any deviations from procedure.
2. The firm would have to carry out a limited due diligence of the customer and put in place a process to assess the appropriateness of any product offered to a customer

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based on the results of the diligence. With respect to credit, for instance, the firm could be obliged to check the borrower's information from credit bureaus to determine the current level of indebtedness, make reasonable attempts to determine the current and projected income of the borrower, financial capacity, objectives and risk tolerance of the borrower, to determine the repayment capacity of the borrower. The lender should seek appropriate documentation to evaluate income and the ability of the borrower to repay given the increasing interest rates of the loan.

3. The requirement to conduct a due diligence should include the requirement to obtain relevant information about the customer's personal circumstances and give advice or recommendations based on due consideration of the relevant personal circumstances. If the financial firm finds that the information is inaccurate or incomplete, the customer must be warned.
4. Any product may be offered to customers upon establishing its Suitability, except "globally unsuitable" products discussed in (13).
5. In the event a consumer chooses to purchase a product considered unsuitable to the customer, the financial services provider should consider providing written advice to the customer and seeking acknowledgement from the customer. This should however, not be misused by the financial services provider.
6. The firm's internal rules relating to compensation packages of staff should not create incentives or otherwise promote inappropriate behaviour. In addition, requirements relating to Suitability and appropriateness should be embedded into compensation packages. Accordingly, the compensation packages and incentive structures should not be based solely on numerical targets but should include qualitative aspects such as offering appropriate products and services to customers and complying with requirements of the internal policy relating to Suitability etc.
7. The firms should have internal processes to track compliance with Suitability and an internal process to detect and correct any deviations from the policy, including potential disciplinary action and sanctions for the staff for any deviations. This could include a customer audit committee which reports to the board that is responsible for determining compliance with the Suitability process and other customer protection initiatives of the financial services provider.
8. The firm must have internal grievance redressal mechanisms for non-compliance with process and this should be required to be communicated to customers as well. The customers, should however be made aware that it is the process that is guaranteed and not the outcome. An internal grievance redressal process would not, however, preclude a customer from proceeding against the firm in any other forum.
9. The internal policy and procedure of the board should be communicated across the organisation and appropriate training programs should be put in place for the staff- both the client facing and the control staff. Such communication should articulate inter alia (a) the business benefits of having Suitability requirements, (b) the firm's commitment to a zero-tolerance approach to follow the process and (c) the consequences for the breach.
10. The firms should have a paper trail and record keeping procedures to demonstrate compliance with its internal procedures which should be available for inspection by the RBI.

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11. Additionally, if gross negligence, fraud or wilful misconduct can be established on the part of the financial services provider, the adherence to the process will not be sufficient and the firm would be liable to be penalised regardless of the process.
12. The regulations should additionally protect the firm from penal action in a situation where the customer may have deliberately misled or misrepresented to the firm, or if despite reasonable attempts the firm was unable to assess Suitability.
13. In addition, specific products may be deemed as “globally unsuitable” and would not be eligible to be offered to households or businesses below a certain income threshold or net worth or individuals above a certain age. Such products should be prescribed by the RBI and could be amended from time to time based on feedback from customers and financial services providers.
14. There is a specific set of de minimis products, the offer of which is to be subjected to a limited application of the Suitability requirements - basic bank accounts, the universal electronic bank account recommended in the Report and credit below Rs. 5000 subject to ascertaining the income and repayment capacity of the borrower. However, the Suitability process should definitely apply if an insurance, investment or derivative product is being offered to a customer, whether on a standalone basis or bundled along with credit.

In view of the Regulations outlined, a Board approved Suitability Policy of a financial services firm serving low income households such as IFMR Trust’s KGFS may look like this:

1. Reasonable steps must be taken to collect detailed information about the current financial status of its customers. This should include information on assets, liabilities, income and expenses, in additions to objectives and needs of the customer. The collection of this information must involve a physical visit to the customer’s residence. This information should be updated on an annual basis, or at the time of product recommendation or sale, whichever is earlier.
2. This information must be input into the customer management system and used to generate a financial ‘well-being’ report for each customer which recommends appropriate products for the customer. The customer must be informed of her household’s financial well-being and how specific financial products or services that she seeks could potentially improve or weaken her financial well-being.
3. It must be ensured that the product or service that is recommended or sold completely matches the stated requirement of the household.
4. It must be ensured that the customer completely understands the key features of the specific product that is recommended, and how the product interacts with the existing financial portfolio of the household. Upon ensuring this, the ‘informed consent’ of the customer to enter into the specific financial transaction must be sought in a written form.
5. It must be ensured that a product that does not match with the stated requirements or could deteriorate the financial situation of the household, even if demanded by the customer, is not recommended to the customer. It must be clearly communicated to the customer that buying an unsuitable financial product could place her household in financial distress. In the event that the customer wants to disregard this and purchase the product or service, a signed document stating that the customer understands the consequences of purchasing the unsuitable product must be obtained.

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6. The customer must have ease of recourse to the internal grievance redressal mechanism of the provider with a toll-free number prominently displayed in all branches of the provider. In addition, the existence of this mechanism and the modalities to access it (phone, SMS, e-mail, written complaints) should be clearly articulated to the customer in the first meeting as well as any subsequent meeting when there is a product recommendation or sale. The customer must also be informed of the exact timeline within which she should be able to expect an outcome for grievances registered. The internal redressal mechanism should look to resolve the complaint of the customer in an unbiased and speedy manner.
7. The customer should be informed of her right to approach the external redressal mechanism with details of how to access such mechanism, in the event that she is unsatisfied with the response of the internal mechanism or if the issue remains unsolved within a reasonable span of time.
8. A Customer Audit committee will conduct an annual audit to assess compliance with Suitability provisions, and efficiency of internal grievance redressal mechanism. This committee will report directly to the Board.
9. Employees will not be incentivised based on quantitative targets or other such targets that could potentially lead them to adopt practices that are in conflict with the provisions mentioned above. Instead, the employees will be incentivised to adhere to provision of suitable products or advice to customers. Employee adherence to the process of ensuring Suitability will be established through the annual customer audit.

Chapter 6.3 Enforcement

In addition to the ex-ante approaches to customer protection, regulators have stipulated ex-post redressal mechanisms for customer complaints. India follows a sectoral approach to grievance redressal and each regulator has set up its own grievance redressal architecture. For example, the RBI has set up the following hierarchy of ex-post redress for aggrieved customers of credit:

1. In-house grievance redressal mechanisms set up by banks
2. Office of the Ombudsman, created by RBI under the Banking Ombudsman Scheme²⁸²
3. Consumer Courts under the Consumer Protection Act, 1986
4. Courts of law

For customers of securities, SEBI has an online complaint redressal mechanism called SEBI Complaints Redress System (SCORES). If the issue remains unresolved or resolved unsatisfactorily in the customer's view, she can approach the SEBI Tribunal, which has exclusive jurisdiction in matters falling under the scope of the SEBI Act to the exclusion of courts of law and by extension, consumer courts. The Securities Appellate Tribunal (SAT) forms the forum for first appeal from decisions of the SEBI Tribunal and the second appeal lies directly to the Supreme Court but only on 'questions of law'.

For customers of insurance, IRDA has mandated the setting up of grievance redressal cells within each of the life and non-life companies under the IRDA (Protection of Policyholders' Regulations), 2002. The IRDA Grievance Cell or Director of Public Grievances (in the case of public sector insurance companies) remains the second port of call, coming into play in practice only after the customer has sought redress through the in-house grievance cells. The latter, the Director of Public Grievances entertains complaints against the public sector insurance companies (including LIC, GIC, United India, National, New India, Oriental) and is based within the Cabinet Secretariat of the Government of India. The Insurance Ombudsman, first created by Government of India notification in 1998 can be approached in case the customer remains unsatisfied. Customers of insurance products can also appeal to the consumer courts and the civil courts if the complaint persists.

In the case of NPS, the Central Grievance Management System (CGMS) run by NSDL is the first port of call for customers. Customers can register complaints with the CGMS through a toll-free number, on the internet and through physical forms available at the PoP. If the CGMS does not respond to the complaint in 30 days or if the customer is dissatisfied with the resolution, she can apply to the Grievance Redressal Cell (GRC) of PFRDA.

Table 6.3.1 below summarises the grievance redressal mechanism across financial sector regulators in India. In general, across the financial sector, all financial institutions are expected to have an internal grievance redressal mechanism that is the first port of call for aggrieved customers. Then there are the external redressal mechanisms such as the ombudsmen in the case of banking and insurance, and the Securities Appellate Tribunal (SAT) in the case of capital markets. If the customer remains unhappy with the verdict reached through the external redressal process, she is free to take the case to the Consumer Courts set up under the Consumer Protection Act of 1986.

RBI	SEBI	IRDA	PFRDA
In-house grievance redress	SEBI Complaints Redress System (SCORES)	In-house grievance redress	Central Grievance Management System, NSDL
RBI Banking Ombudsman	SEBI Tribunal Securities Appellate Tribunal (SAT)	IRDA Grievance Cell Director of Public Grievances (for public sector insurance companies) The Insurance Ombudsman	Grievance Redressal Cell (GRC) of PFRDA.
Consumer Courts	Supreme Court	Consumer Courts	Consumer Courts
Court of Law		Court of Law	Court of Law

The Consumer Court has a three-tier structure- District Forums, the State Consumer Disputes Redressal Commissions and the National Consumer Disputes Redressal Commission have been set up at the district, state and national level respectively. A written complaint, can be filed before the District Consumer Forum for pecuniary value of up to Rupees twenty lakh, State Commission for value up to Rupees one crore and the National Commission for value above Rupees one crore, in respect of defects in goods and or deficiency in service. The Consumer Courts are an alternative to that already available to the aggrieved customers by way of civil suit. In the case of a complaint/appeal/petition submitted under the Act, a customer is not required to pay any court fees but only a nominal fee.

Consumers have also often tried to invoke other regulators to get relief, such as the Competition Commission of India (CCI). For instance, in a home-loan case, it was alleged that banks were imposing restrictions on pre-payment of home loan by imposing penalty on prepayment, which amounted to cartelisation and abuse of dominant position. While in this case, the CCI held that the levy of prepayment charges was not a uniform practice, that there was no evidence of action in concert or agreement between banks and that no effect could be seen on competition as a result of this practice, it is important to note that the CCI actually heard the case.

Strategies for Monitoring Suitability:

Drawing on international best practices, it is recommended that regulators monitor the compliance of financial services providers in implementing Suitability employing various methods, including:

1. On site verification, which can be a very useful approach to assess process compliance with Suitability norms set out by service providers. This includes process employed at point of sale through “mystery shopping”²⁸³.
2. Continuous, ex-post monitoring through information reporting requirements from service providers such as on incentive and commission structures, financials, customer complaints and grievance records to assess service provider performance.

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3. Proactively try to detect violations in the prescribed code of conduct and conduct of business standards established for such entities through tools such as mystery shopping, surprise audits, review of compensation packages, staff interviews and interviews with consumers etc. The Malaysian and Irish Central Banks regularly monitor compliance with consumer protection regulation through the conduct of mystery shopping. Existing outreach programs could be used to conduct staff interviews and interviews with consumers.
4. Investigations of financial services providers in case of regulator suspicions of malpractice.

Financial Redress Agency

Previous committees such as the Damodaran Committee (2011) have argued for strengthening of the Banking Ombudsman Scheme through measures like creating internal ombudsmen in banks, creating public awareness of the scheme, and increasing the number of offices in the country. However, it could be argued that sector specific redressal platforms like the BOS are not sustainable alternatives since they suffer from the pitfalls of a sectoral approach to grievance redressal discussed in the preceding section. As customers face an integrated portfolio of services especially from financial services firms that operate in the shadow of regulatory oversight, a sector-specific ombudsman like the BOS will be unable to act as an effective grievance redressal mechanism.

Keeping with the non-sectoral approach to customer protection, it is recommended that a unified Financial Redress Agency (FRA) be created as a unified agency for customer grievance redress across all financial products and services by the Ministry of Finance. This Agency will be consumer facing and will in turn coordinate with the respective regulator for customer redress. The Rajan Committee (2009) recognised the need for creating a one-stop source of redress for customers in the form of an Office of the Financial Ombudsman (OFO)²⁸⁴. The Report envisages that the OFO will perform the following functions:

1. Monitor the selling of different products, the degree of transparency about their pricing, and their Suitability for targeted customers.
2. Act as a neutral forum (and possibly act as an arbitrator) for out-of-court negotiated settlement of debt.
3. Enhance financial literacy and financial counselling, issues that span regulators

The FSLRC Report also recommends the creation of a new statutory body to redress complaints of retail customers through a process of mediation and adjudication. The report envisages that this agency (the FRA) will function as a unified grievance redress system for the entire financial system and will be independent of all regulators. This mandates a shift away from the present sector-specific redressal agencies in the form of the Banking Ombudsman and the Insurance Ombudsman, although customers will retain the right to approach the consumer court for redress. The report opines that the powers of the consumer court should be ultimately transferred to the FRA for financial customers once it acquires the requisite scale and expertise. The report suggests that the FRA be managed by a board of directors.

Further, as mentioned in Chapter 4.6, a State Finance Regulatory Commission (SFRC) could be created into which all the existing State Government-level regulators could be merged and functions like the regulation of NGO-MFIs and local Money Services Business could be added on. In some states, the SFRC could be created by upgrading existing Institutional Finance Cells. There is also value in bringing regulatory function close to the enforcement

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function under the Economic Offences Wing (EOW), so as to ensure that they are working closely together. The RBI must be closely involved over a longer time frame in training the commissioners and licensing and accrediting the Commission itself. The local regional directors of the RBI could, for example, be ex-officio Chairs of the Commission's Board of Governors while the Commissioner could be a senior State level appointee drawn from the local Banking community. The District Magistrates would also play an important role in their respective districts.

Until such time as the FRA is created, existing efforts to strengthen inter-regulatory coordination must continue as well as between financial sector regulators and CCI.

Continuous Surveillance and Monitoring - Citizen-led Surveillance

Given the size of the unregulated financial services industry in the country and the limited capacity of regulators, it is inevitable that certain fraudulent financial firms will dupe customers of their savings or mis-sell products. In most such instances, the regulator becomes cognizant of the crime much after the damage has been done. In order to prevent such instances of fraud, a citizen-led approach to surveillance and monitoring would be useful to consider.

There are several examples of the enforcement and surveillance machinery collaborating with citizens to prevent crime. For instance, the Economic Offences Wing of the Tamil Nadu Police Department with the support of Friends of Police (FoP) and members of the public has formed a "FoP Scambusters" unit to monitor the hundreds of non-banking financial institutions in the state. Members of the unit will monitor the activities of NBFCs and the methods adopted by such operators and report suspicious activity via email, phone and social media²⁸⁵. The Friends of Police (FoP), modelled on the Los Angeles Community Policing (LACP) forum, is a Tamil Nadu based grassroots initiative that encourages members of the public to communally participate in the detection and reporting of crime. Any member of the public may voluntarily become a "friend" of police on the condition that she is a citizen and a resident in the same district, is not involved in any civil or criminal court case, be literate enough to write, and be between the ages of 18 and 70²⁸⁶. Members of the FoP Scambusters inform the EOW of unregistered, suspicious or fraudulent institutions that seek to defraud potential customers. Taking a lead from this, the RBI should create a system by which any customer can effortlessly check whether a financial firm is registered with or regulated by RBI. Customers should be able to access this service by phone, through text-messages or on the internet. Once the FRA comes into being, this system should be subsumed under the FRA and be available for firms registered under all regulators.

Chapter 6.4
Recommendations Regarding Customer Protection

- 6.1 The RBI should issue regulations on Suitability, applicable specifically for individuals and small businesses, to all regulated entities within its purview, i.e., banks, NBFCs and payment institutions (under Sections 35 A of the BR Act, Section 45 JA of the RBI Act and Section 38 (2) of the Payments and Settlement System Act, 2007); so that the violation of such regulations would result in penal action for the institution as contemplated under the aforesaid statutes through a variety of measures, including fines, cease-and-desist orders, and modification and cancellation of licences. These regulations should be applicable specifically for individuals and small businesses defined under the term “retail customer” by FSLRC. FSLRC defines a retail customer as “an individual or an eligible enterprise, if the value of the financial product or service does not exceed the limit specified by the regulator in relation to that product or service.” Further, an eligible enterprise is defined as “an enterprise that has less than a specified level of net asset value or has less than a specified level of turnover.” All financial firms regulated by the RBI would be required to have an internal process to assess Suitability of products prior to advising clients with regard to them. The RBI would provide the following guidance with regard to the internal compliance requirements for firms regarding Suitability:
- a. The Board should approve and oversee the procedures put in place for Suitability on an annual basis and attempt to detect and correct any deviations from procedure.
 - b. The firm would have to carry out a limited due diligence of the customer and put in place a process to assess the appropriateness of any product offered to a customer based on the results of the diligence. With respect to credit, for instance, the firm could be obliged to check the borrower’s information from credit bureaus to determine the current level of indebtedness, make reasonable attempts to determine the current and projected income of the borrower, financial capacity, objectives and risk tolerance of the borrower, to determine the repayment capacity of the borrower. The lender should seek appropriate documentation to evaluate income and the ability of the borrower to repay given the increasing interest rates of the loan.
 - c. The requirement to conduct a due diligence should include the requirement to obtain relevant information about the customer’s personal circumstances and give advice or recommendations based on due consideration of the relevant personal circumstances. If the financial firm finds that the information is inaccurate or incomplete, the customer must be warned.
 - d. Any product may be offered to customers upon establishing its Suitability, except “globally unsuitable” products discussed in (m).
 - e. In the event a customer chooses to purchase a product considered unsuitable to the customer, the financial services provider should consider providing written advice to the customer and seeking acknowledgement from the customer. This should however, not be misused by the financial services provider.
 - f. The firm’s internal rules relating to compensation packages of staff should not create incentives or otherwise promote inappropriate behaviour. In addition, requirements relating to Suitability and appropriateness should be embedded

Recommendations Regarding Customer Protection

into compensation packages. Accordingly, the compensation packages and incentive structures should not be based solely on numerical targets but should include qualitative aspects such as offering appropriate products and services to customers and complying with requirements of the internal policy relating to Suitability etc.

- g. The firms should have internal processes to track compliance with Suitability and an internal process to detect and correct any deviations from the policy, including potential disciplinary action and sanctions for the staff for any deviations. This could include a customer audit committee which reports to the board that is responsible for determining compliance with the Suitability process and other customer protection initiatives of the financial services provider.
- h. The firm must have internal grievance redressal mechanisms for non-compliance with process and this should be required to be communicated to customers as well. The customers, should however be made aware that it is the process that is guaranteed and not the outcome. An internal grievance redressal process would not, however, preclude a customer from proceeding against the firm in any other forum.
- i. The internal policy and procedure of the board should be communicated across the organisation and appropriate training programs should be put in place for the staff- both the client facing and the control staff. Such communication should articulate inter alia (a) the business benefits of having Suitability requirements, (b) the firm's commitment to a zero-tolerance approach to follow the process, and (c) the consequences for the breach.
- j. The firms should have a paper trail and record keeping procedures to demonstrate compliance with its internal procedures which should be available for inspection by the RBI.
- k. Additionally, if gross negligence, fraud or wilful misconduct can be established on the part of the financial services provider, the adherence to the process will not be sufficient and the firm would be liable to be penalised regardless of the process.
- l. The regulations should additionally protect the firm from penal action in a situation where the customer may have deliberately misled or misrepresented to the firm, or if despite reasonable attempts the firm was unable to assess Suitability.
- m. In addition, specific products may be deemed as "globally unsuitable" and would not be eligible to be offered to households or businesses below a certain income threshold or net worth or individuals above a certain age. Such products should be prescribed by the RBI and could be amended from time to time based on feedback from customers and financial services providers.
- n. There is a specific set of de minimis products, the offer of which is to be subjected to a limited application of the Suitability requirements - basic bank accounts, the universal electronic bank account recommended in the Report and credit below Rs. 5000 subject to ascertaining the income and repayment capacity of the borrower. However, the Suitability process should definitely apply if an insurance, investment or derivative product is being offered to a customer, whether on a standalone basis or bundled along with credit.

Recommendations Regarding Customer Protection

- 6.2 The Committee recommends that a unified Financial Redress Agency (FRA) be created by the Ministry of Finance as a unified agency for customer grievance redress across all financial products and services which will in turn coordinate with the respective regulator. The FRA should have a presence in every district in the country and customers should be able to register complaints over the phone, using text messages, internet, and with the financial services provider directly, who should then be required to forward the complaint to the redressal agency. The customers should have their complaints resolved within 30 days of registration of the complaint with the FRA.
- 6.3 The RBI should create a system using which any customer can effortlessly check whether a financial firm is registered with or regulated by RBI. Customers should be able to access this service by phone, through text-messages or on the internet. Once the FRA comes into being, this system should be subsumed under the FRA and be available for firms registered under all regulators.

Section 7
Measurement and Monitoring of Comprehensive Access to Financial Services

Chapter 7.1 Introduction and Strategic Direction

This section provides a framework and recommends strategies for the comprehensive measurement of financial inclusion and deepening, in order to track progress towards achieving the desired outcomes by the vision statements outlined in Chapter 2.1. A systematic measurement and monitoring framework provides crucial feedback loops to fine-tune strategies and refine policy action continuously as progress is made towards enhanced access to finance and financial depth.

To get a comprehensive view as mentioned in Chapter 2.2, existing supply-side data that is available is very limited. More granular data needs to be captured from every access point of the supply side. In addition, this data needs to be complemented from the demand side through representative consumer surveys to measure usage and affordability.

The following table summarises the monitoring strategies to be adopted to measure the progress towards achieving the goals outlined in Chapter 2.1.

#	Vision	Goal	Desired Outcome	Current Status	Measurement Strategy
1	A Universal Electronic Bank Account	Each Indian resident, above the age of 18	100% by January 1, 2016	All India 36% with Urban India 45%; and Rural India 32%	Granular reporting of unique savings bank account data by all banks at each transaction point.
2	Ubiquitous Access to Payment Services and Deposit Products at Reasonable Charges	Full services access point within a fifteen minute walking distance from every household in India	Density of 1 per sq.km with population of 400 people, across the country by January 1, 2016	Density ranges from 89% in Urban Districts and 3% in Rural Districts, calculated at a district level	Spatial analysis using geo-location data of payment network collected at each transaction point.
		Reasonable Charges	Reasonable charges	Charges range from 0% to 5% for different classes of customers	Data on charges of payment access points from representative survey of consumers.
		At least one product with positive real returns	By January 1, 2016	None; the best available rate is -1.95%	Data on rates of interest of bank accounts.
3	Sufficient Access to Affordable Formal Credit	Credit to GDP Ratio in every District of India to cross 10% Credit to GDP Ratio in every District of India to cross 50%	100% of districts by January 1, 2016 100% of districts by January 1, 2020	94% of the Urban Districts and 30% of the Rural Districts 18% of the Urban Districts and 2% of the Rural Districts	District level aggregated credit data from granular supply side reporting (geo-location data) by formal credit providers collected at each transaction point. GDDP data collected by the respective State Planning Commissions to be aggregated by the Planning Commission of India.

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		<p>Credit to GDP Ratio for every “significant” sector of the economy to cross 10%</p> <p>Credit to GDP Ratio for every “significant” sector of the economy to cross 50%</p>	<p>100% of “significant” sectors by January 1, 2016</p> <p>100% of “significant” sectors by January 1, 2020</p>	<p>All sectors (agriculture, industry and services) appear to have crossed this limit however there are important sub-sectors that have not, such as Marginal, Small, Medium and Large Farmers and Services MSMEs.</p> <p>Only Industry as a broad sector has crossed this limit.</p>	<p>BSR of RBI and Planning Commission data.</p>
		<p>Convenient Access</p>	<p>Density of 1 per 10,000 people, across the country, by January 1, 2016</p>	<p>99% in Urban Districts and 92% in Rural Districts, calculated at a district level. Excluding PACS, rural access drops to 59%.</p>	<p>Spatial analysis using geo-location data of formal credit providers collected at each transaction point.</p>
		<p>Affordable Rates</p>	<p>Ordinal by risk level in the long-run after adjusting for “reasonable” transactions charges</p>	<p>Very high levels of violations of ordinality within the formal system and in the economy as whole</p>	<p>Data on cost by source of borrowing from a representative survey of consumers.</p>
4	<p>Universal Access to a Range of Deposit and Investment Products at Reasonable Charges</p>	<p>Deposit & Investments to GDP Ratio in every District of India to cross 15%</p> <p>Deposit & Investments to GDP Ratio in every District of India to cross 65%</p>	<p>100% of districts by January 1, 2016</p> <p>100% of districts by January 1, 2020</p>	<p>99% of the Urban Districts and 36% of the Rural Districts</p> <p>35% of the Urban Districts and 4% of the Rural Districts</p>	<p>District level aggregated savings & investment data from granular supply side reporting (geo-location data) by providers of formal savings & investment products collected at each transaction point.</p> <p>GDDP data collected by the respective State Planning Commissions to be aggregated by the Planning Commission of India.</p>

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		Reasonable Charges	Reasonable charges	Charges range from 0% to 11.9% for different amounts and for different products.	Data on fees & charges relating to investment products from representative survey of consumers.
5	Universal Access to a Range of Insurance and Risk Management Products at Reasonable Charges	Total Term Life Sum Assured to GDP Ratio in every District of India to cross 30% Total Term Life Sum Assured to GDP Ratio in every District of India to cross 80%	100% of districts by January 1, 2016 100% of districts by January 1, 2020	No data No data	District level aggregated data from granular supply side reporting (geo-location data) by formal insurance providers collected at each transaction point. GDDP data collected by the respective State Planning Commissions to be aggregated by the Planning Commission of India.
		Reasonable Charges	Reasonable charges	Charges range from 2% to 15% on different products	Data on premiums and charges (not including premiums) from representative survey of consumers.
6	Right to Suitability	All financial institutions to have a Board approved Suitability Policy.	100% of financial institutions by January 1, 2015	This is not required or present in any institution today.	Data on grievance redressal from external grievance redressal mechanism such as the FRA or from the Banking Ombudsman, SEBI, and IRDA.
		Presence of district level redressal offices for all customers availing any financial service	100% of districts by January 1, 2016	There are 15 offices of the Banking Ombudsman covering the entire country today	Geo-location of all physical locations of all district level offices.

Chapter 7.2 Ubiquitous Electronic Payments Network and Universal Access to Savings

Vision 1: Universal Bank Account: By January 1, 2016 each Indian resident, above the age of eighteen years, would have an individual, full-service, safe, and secure electronic bank account.

A major drawback of the number of savings bank accounts reported by the RBI Basic Statistical Returns tables is that it does not factor uniqueness²⁸⁷. In order to gain a more accurate picture of universal bank account holdings, a measure of unique full service bank accounts needs to be constructed and reported at the end of each quarter. In view of the complexities associated with measuring unique accounts, there is a need to track unique accounts within banks. As a caveat, these metrics do not factor multiple account holdings across different banks. However, they represent an effective “upper bound” measure of unique bank account holdings. A nationally representative demand-side survey, as proposed in Chapter 7.7, would provide an estimate of the adjustment factor for cross-bank multiple accounts so that unique bank account holdings may be estimated.

In order to obtain this data, the underlying transaction point data from individual banking institutions would need to be gathered using a geo-location collection and mapping strategy as described in Chapter 7.6 and be aggregated to report the district level penetration data for unique bank accounts.

Vision 2: Ubiquitous Access to Payment Services and Deposit Products at Reasonable Charges: By January 1, 2016, the number and distribution of electronic payment access points would be such that every single resident would be within a fifteen minute walking distance from such a point anywhere in the country. Each such point would allow residents to deposit and withdraw cash to and from their bank accounts and transfer balances from one bank account to another, in a secure environment, for both very small and very large amounts, and pay “reasonable” charges for all of these services. At least one of the deposit products accessible to every resident through the payment access points would offer a positive real rate of return over the consumer price index.

1. Granular distribution: Presently available statistics of the payment access point network (which includes the bank branches, BC outlets, ATMs, and POS terminals) show significant spatial variations at the state and region levels. However, for a much more granular measurement of progress towards the vision on ubiquity of payment architecture, it would be important to track physical presence of payment points in every sq. km. with a population of at least 400 people in each district in terms of the following metrics²⁸⁸:
 - a. Number of 1 sq. km. patches with a population greater than 400 people
 - b. Geo-spatial location of each payment point
 - c. Coverage ratio: Number of contiguous 1 sq. km. patches having a population of at least 400 with at least one payments point, as a ratio of the total number of contiguous 1 sq. km. patches with population of at least 400 in the district

The underlying data should be collected using a geo-location collection and mapping strategy as described in Chapter 7.6.

2. Reasonableness of fees: In order to assess the reasonableness of fees associated with payment services, a representative consumer survey would need to be undertaken every year that would provide an estimate of the usage and the fees associated with

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usage of payment points. The representative consumer survey, as outlined in Chapter 7.7 will collect information on the following parameters:

- a. Transaction frequency in a typical month by types of services offered (deposit, withdrawal, payments, and remittances)
 - b. Cost of usage of payment access points for deposit, withdrawal, payments, and remittances
3. Instances of denial: Physical presence of payment access points is a necessary condition for ubiquitous access, but it is also important to track whether citizens are experiencing denial of services at these points. Data on instances of denial of payment service by the provider and reasons for denial of services need to be collected using a representative consumer survey described in Chapter 7.7. Based on the survey output, the Committee recommends reporting the following data for each financial year:
- a. Total number of denials
 - b. Reasons for denial (related to technology, cash, service, fee, or interoperability)

In addition to the task of mandatory reporting of savings bank account data at the transaction points, reporting the following additional data can provide important insights in assessing the progress towards universal account holding (Vision 1).

1. Active accounts: Recognising the importance of usage in addition to the access to such accounts, the Committee recommends reporting and tracking “active” accounts as defined by a frequency of usage metric. Presently, the G20 Financial Inclusion Indicators as recommended by the Global Partnership for Financial Inclusion (GPII) defines high frequency accounts as those recording 3 or more debit transactions in a month²⁸⁹. This data is presently captured by the World Bank’s Global Findex database, which tracks the financial inclusion data of 188 countries²⁹⁰. A lower frequency of transactions can also signify activity and thus active accounts may be defined as those with at least 3 debit transactions per quarter. Tracking inactive bank accounts would also be useful.
2. Accounts of Low income households and small businesses: To capture the progress of universal account holding among low income households and small businesses, banking institutions would need to report the unique account data disaggregated for low balance accounts (Rs. 1,000 or less), Direct Benefit Transfer (DBT) recipients, and Current Accounts. All of these would be tracked for every district at a quarterly frequency.
3. Additional Coverage ratios: It would also be important to measure and report coverage ratios of these metrics by the individual institutions for each district at a quarterly frequency, where the definitions of the coverage ratios are provided in Table 7.2.1.

Metric	Ratio
Unique bank accounts	# of unique accounts/eligible population (aged 18 and above)
Unique & active bank accounts	# of unique & active accounts /# of unique bank accounts
Unique low balance accounts	# of unique accounts with an average balance of up to Rs. 1,000 /#of unique bank accounts

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Unique and active low balance accounts	# of unique & active accounts with an average balance of up to Rs. 1,000 /# of unique and active bank accounts
Unique DBT recipients	# of unique DBT accounts/# of unique bank accounts
Unique and active DBT recipients	# of unique & active DBT accounts/# of unique and active bank accounts
Unique current accounts	# of unique current accounts/# of businesses
Unique & active current accounts	# of unique & active current accounts/# of unique current accounts

Banking institutions should report these ratios at the branch level so that the district level aggregated data can be generated using the geo-location collection and mapping strategy as described in Chapter 7.6.

Chapter 7.3 Sufficient Access to Affordable, Formal Credit

Vision 3: Sufficient Access to Affordable Formal Credit: By January 1, 2016, each low-income household and small-business would have “convenient” access to formally regulated lenders that have the ability to assess and meet their credit needs, and offer them a full-range of “suitable” credit products, at an “affordable” price. By that date, each District and every “significant” sector (and sub-sector) of the economy would have a Credit to GDP ratio of at least 10 per cent on January 1, 2016. This ratio would increase every year by 10 per cent with the goal that it reaches 50 per cent by January 1, 2020.

1. Physical presence of formal lenders: To assess the progress of extending the network of formal lenders (Bank and NBFC branches) in every Gram Panchayat and urban centre with a population of 10,000, the Committee recommends the tracking of the physical presence of formal and active credit providers in every contiguous 25 sq. km. patch²⁹¹ for each district in every quarter. An “active” credit provider should have disbursed at least one loan per month. The following metrics need to be tracked:
 - a. Number of 25 sq. km. patches having a population of at least 10,000 people
 - b. Geo-spatial location of each credit access point
 - c. Coverage ratio: Number of contiguous 25 sq. km. patches having a population of at least 10,000, with at least one formal, physically present, and active credit provider as a ratio of the total number of contiguous 25 sq. km. patches with population of at least 10,000 in the district

The underlying data should be collected using a geo-location collection and mapping strategy as described in Chapter 7.6.

2. District-level Credit Depth: In order to assess the depth of credit, the following credit depth metrics for each district based on total credit outstanding statistics (from the Basic Statistical Returns data of the RBI) and the respective GDDP data (to be obtained from the data reported by State Planning Commissions) and should be reported in the form of the following metrics:
 - a. Quantum of credit outstanding in district
 - b. District GDP
 - c. District level Credit Depth defined as the ratio of quantum of credit outstanding in district to district GDP
3. Sectoral Credit Depth: In order to assess the depth of credit outstanding to the various sectors/sub-sectors of the economy, the Committee recommends the following sectoral metrics be tracked and reported:
 - a. Quantum of credit outstanding for each sector or sub-sector of the economy that contributes more than 1 per cent to national GDP
 - b. Sector GDP for each sector or sub-sector of the economy that contributes more than 1 per cent to national GDP
 - c. Sectoral Credit Depth defined as the ratio of credit outstanding to each sector or sub-sector relative to its respective sectoral GDP

The statistics published by the Planning Commission of India will be the source of the sectoral GDP data. The underlying credit data should be collected using a geo-location collection and mapping strategy as described in Chapter 7.6. It is noteworthy that the sectoral disaggregation as presently reported by the RBI does not match with the

sectoral disaggregation as followed by the Planning Commission. Hence, to resolve the issue of non-comparability, it is desirable that RBI should adopt the Planning Commission's sectoral break up for reporting sectoral credit data.

4. Cost of credit: In addition to ensuring convenient and sufficient access to formal credit, it is also important to ensure that the formal credit is available at a rate which is affordable to low income households and small businesses. The metrics recommended for assessing the cost of formal credit are as follows:
 - a. Average nominal interest rates charged by formal lenders (banks, NBFCs) to households for following categories: consumption smoothing or emergency (unsecured and secured), education, housing, and crop loans
 - b. Average nominal interest rates charged by formal lenders (banks, NBFCs) to small businesses for the following loans: short term, long term, and working capital loans

A nationally representative consumer survey should be undertaken to collect the underlying data, as described in Chapter 7.7.

The following additional data should also be reported so as to gain deeper insights on the penetration of formal credit into low income households and small businesses.

1. Distribution of credit accounts: In order to assess the distribution of credit accounts as a measure of access to credit, it should be required that the following metrics aggregated at the district level be tracked for every quarter:
 - a. Total number of outstanding credit accounts by size (up to Rs. 50,000, Rs. 50,000 to Rs. 1,00,000, Rs. 1,00,000 to Rs. 2,00,000 and above Rs. 2,00,000)
2. Types of products offered: For tracking whether formal lenders are offering credit products to cater to various needs of the customers, the following metrics aggregated need to be tracked at the district level for every quarter:
 - a. Total number of formal and physically present lenders (banks, NBFCs) offering loans to households for following categories: consumption smoothing or emergency (unsecured and secured), education, housing, and crop loans
 - b. Total number of formal and physically present lenders (banks, NBFCs) offering loans to small businesses for the following categories: short term, long term, and working capital loans

The underlying data should be collected using a geo-location collection and mapping strategy as described in Chapter 7.6.

3. Performance of credit: In order to assess the performance of credit, the following metrics should be tracked and reported across bank branches and NBFC outlets in each district and each sector (and sub-sector):
 - a. Number of non-performing assets
 - b. Quantum of gross non-performing assets
 - c. Ratio of gross non-performing assets to gross advances
 - d. Quantum of net non-performing assets
 - e. Ratio of net non-performing assets to net advances

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The underlying data should be collected using a geo-location collection and mapping strategy as described in Chapter 7.6.

Chapter 7.4 Universal Access to Investment and Risk Management Products

Vision 4: Universal Access to a Range of Deposit and Investment Products at Reasonable Charges: By January 1, 2016, each low-income household and small-business would have “convenient” access to providers that have the ability to offer them “suitable” investment and deposit products, and pay “reasonable” charges for their services. By that date, each District would have a Total Deposits and Investments to GDP ratio of at least 15 per cent. This ratio would increase every year by 12.5 per cent with the goal that it reaches 65 per cent by January 1, 2020.

1. Investment Depth: In order to assess investment depth, the provider specific total deposit and investment data needs to be aggregated at the district level and collated against the GDDP data to produce the following metrics:
 - a. Quantum of total deposits and financial investments in district
 - b. District GDP
 - c. District level Investment Depth defined as the ratio of quantum of total deposits and financial investments in district to district GDP

Deposit and investment data be collected using a geo-location collection and mapping strategy as described in Chapter 7.6 and the GDDP data be collected from the State Planning Commissions.

2. Costs of Investment products: In order to assess whether the formal financial services providers are offering investment products at a “reasonable cost”, it is essential to collect data on various costs that consumers incur while investing in mutual funds, pension funds, endowment products offered by insurance providers, equity, and bonds. These metrics related to the cost of investment products should be reported using a representative consumer survey as described in Chapter 7.7.

Vision 5: Universal Access to a Range of Insurance and Risk Management Products at Reasonable Charges: By January 1, 2016, each low-income household and small business would have “convenient” access to providers that have the ability to offer them “suitable” insurance and risk management products which, at a minimum allow them to manage risks related to: (a) commodity price movements; (b) longevity, disability, and death of human beings; (c) death of livestock; (d) rainfall; and (e) damage to property, and pay “reasonable” charges for their services. By that date, each District would have a Total Term Life Insurance Sum Assured to GDP ratio of at least 30 per cent. This ratio would increase every year by 12.5 per cent with the goal that it reaches 80 per cent by January 1, 2020.

1. Term Life Insurance depth: In order to assess the sufficiency of term life insurance access, the following metrics should be aggregated at the district level from each access point of each service provider:
 - a. Quantum of term life sum assured in district
 - b. District GDP
 - c. Ratio of term life sum assured in district to district GDP

The underlying insurance sum assured data should be collected using a geo-location collection and mapping strategy as described in Chapter 7.6, while the GDDP data should be collected from the State Planning Commissions.

Measurement and Monitoring: Investment and Risk Management

2. Insurance costs: In order to assess costs of accessing insurance products, the following data needs to be collected in the representative customer survey:
 - a. Term Life insurance premium paid
 - b. Other costs incurred in addition to the premium

The following additional data should also be reported so as to gain deeper insights on the penetration of deposit and investment products:

1. Types of deposit and investment products offered: For tracking whether the formal financial services providers are offering deposit and investment products to cater to various short, medium and long term goals of the customers (Vision 4), there is a need for quarterly tracking of the following metrics aggregated at the district level:
 - a. Total number of formal and physically present financial services providers (Banks, BCs, and NBFCs) offering one or more the of following product categories: Mutual Funds, Pension funds, Insurance with endowment plans, Equity, Bonds, and Derivatives

This data should be collected using a geo-location collection and mapping strategy as described in Chapter 7.6.

2. Types of products offered: For assessing whether the formal financial services providers are offering insurance products sufficient to cater to various risk management needs of the customers and businesses (Vision 5), there is a need for quarterly tracking of the following metrics aggregated at the district level:
 - a. Total number of formal and physically present financial services providers offering the following insurance products to manage risks relating to: commodity price movements; longevity, disability, and death; death of livestock; rainfall; and damage to property

This data should be collected using a geo-location collection and mapping strategy as described in Chapter 7.6.

Chapter 7.5 Customer Protection

Vision 6: Right to Suitability: Each low-income household and small-business would have a legally protected right to be offered only “suitable” financial services. While the customer will be required to give “informed consent” she will have the right to seek legal redress if she feels that due process to establish Suitability was not followed or that there was gross negligence.

1. Existence of Board approved Suitability Policy: In order to track the existence of Board approved Suitability Policy at every financial institution, there is a need to track the number of financial institutions with a Board approved Suitability Policy.
2. Presence of district level redressal offices: In order to track the presence of district-level redressal offices for all customers availing any financial service, there is a need to track the number of districts with at least 1 grievance redressal office for banking services, credit products, investment products, and insurance products

In order to gain a more comprehensive perspective of customer protection, there is a need to measure and monitor the following grievance redressal metrics from the Banking Ombudsman, SEBI, and IRDA. Based on the approach of Australia’s Financial Ombudsman Service (FOS), Table 7.5.1, while not exhaustive, illustrates the kind of information that needs to be tracked and reported by the respective regulator²⁹².

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Table 7.5.1: Customer Grievance Redressal										
Type of issue cited by customer	Type of resolution			If external, ruling of the grievance redressal authority				Penalty imposed by grievance redressal authority		
	Resolved by agreement (internal)	Resolved by the grievance redressal authority (external)	Under processing	Failure to disclose critical feature of the product	Action arising from conflict of interest	Failure to establish Suitability process	Failure to follow Suitability process	Amount of financial penalty (Rs.)	Revocation of licence	Restriction of services
I was charged an excessive amount for the financial product/service										
I experienced financial distress because my expectations did not materialise										
I experienced financial distress because I was misinformed about the product										
I did not need the product/service but was tricked into buying it										
Product exclusion criteria was not properly explained to me										

Chapter 7.6 Supply Side Strategy

All formal providers of financial services to households and small businesses should report the following data on a quarterly basis about every access point i.e. branches, outlets, BCs, ATMs, and POS terminals, as applicable.

Table 7.6.1	
Data Requirement	
Location	<ol style="list-style-type: none"> 1. Geo-coordinates (latitude and longitude in degrees, minutes, and seconds) 2. District
A Universal Electronic Bank Account	<ol style="list-style-type: none"> 3. Number of accounts (#) 4. Number of unique accounts (#) 5. Number of active (with at least 3 debit transactions in a quarter) unique accounts (#) 6. Number of active accounts with average balance of up to Rs. 1,000 (#) 7. Number of active DBT recipients (#) 8. Number of active current accounts (#) 9. Number of unique inactive accounts (#)
Ubiquitous Access to Payment Services and Deposit Products at Reasonable Charges	<ol style="list-style-type: none"> 10. Services offered (Y/N): Deposits; Withdrawals; Transfers; and Remittances 11. Number of transactions (#): Deposits; Withdrawals; Transfers; Remittances; and Total 12. Quantum of deposits (Rs.): Savings account; Current account; Term deposits; and Total
Sufficient Access to Affordable Formal Credit	<ol style="list-style-type: none"> 13. Services offered (Y/N): <ol style="list-style-type: none"> a. Household: Crop; Consumption smoothing; Housing; and Education b. Small business: Short-term; Long-term; and Working Capital 14. Number of accounts (#) <ol style="list-style-type: none"> a. Loans to household by category: Crop; Consumption smoothing; Housing; Education b. Loans to household by size: Up to Rs. 50,000; Above Rs. 50,000 up to Rs. 1,00,000; Above Rs. 1,00,000 up to Rs. 2,00,000; Above Rs. 2,00,000 c. Loans to small business: Short-term; Long-term; and Working Capital d. Total 15. Quantum of credit outstanding (Rs.) <ol style="list-style-type: none"> a. Sector/sub-sector deployed (categories according to the Planning Commission) 16. Quantum of non-performing assets (Rs.) <ol style="list-style-type: none"> a. Total net b. Total gross 17. Ratio of non-performing assets (%) <ol style="list-style-type: none"> a. Gross NPAs as a percentage of gross advances b. Net NPAs as a percentage of net advances
Universal Access to a Range of Deposit and Investment Products at Reasonable Charges	<ol style="list-style-type: none"> 18. Services offered (Y/N): Mutual funds; Pension funds; Insurance with endowment plans; Equity; Bonds; and Derivatives 19. Quantum of investments (Rs.): Mutual funds; Pension funds; Insurance with endowment plans; Equity; Bonds; Derivatives

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Universal Access to a Range of Insurance and Risk Management Products at Reasonable Charges	20. Insurance and risk management services offered - products to manage risk related to (Y/N): Commodity price movements; Longevity, disability, and death; Death of livestock; Rainfall; Damage to property 21. Number of Term Life insurance policies outstanding (#) 22. Quantum of Term Life sum assured (Rs.)
Right to Suitability	23. Existence of Board approved Suitability Policy (Y/N) 24. Presence of grievance redressal offices at the district level (to be reported by the respective regulator) for: Banking services; Credit products; Investment products; and Insurance products

Data verification: In addition, this data should be verified periodically by the RBI using standardised quality control and follow up visits conducted by trained enumeration field teams within randomly selected sub samples.

Coordination among various regulators for collecting data: The task of reporting additional granular level of supply side data require systematic coordination among various regulators such as the RBI, SEBI, IRDA, PFRDA etc. The RBI should take the initiative to ensure that the reporting requirements of various entities under these regulators are smoothly met and the relevant data be shared seamlessly.

Geo-spatial mapping: The geo-location data for every financial services access point should be additionally presented in the form of an interactive national map²⁹³. The presence of every financial services access point will allow the regulator to gain a spatially granular sense of the number of payment points and formal lenders in every sq.km. of the country. Furthermore, this data can be overlaid with a population density layer which can be obtained readily using sources such as AsiaPop²⁹⁴ or created using demographic data from the latest Census, thus enabling the creation of a picture of the density of access points relative to population. The district-level depth of credit, investment, and insurance should also be presented using the mapping framework.

Chapter 7.7 Demand Side Strategy

There is a need for the collection of data through nationally representative surveys of consumers to gain a more accurate picture of progress towards achieving the desired outcomes outlined by the vision statements. While this strategy seeks to measure access, usage, and affordability of financial services, the measurement and assessment of financial outcomes of households is beyond its scope.

The Committee recommends undertaking two types of consumer surveys:

1. Financial Access & Usage Survey: A nationally representative survey of consumers undertaken annually to collect data on access and usage of financial services
2. Cost & Return Survey: A nationally representative survey of consumers undertaken triennially to collect data on
 - a. Cost & sufficiency of formal credit; and
 - b. Cost of investment products & returns from investment products.

Financial Access & Usage Survey:

It is envisaged that the bulk of the monitoring data will be based on the granular data to be shared by the financial institutions. However, it is also useful to collect information on access and usage of formal financial services from the consumers to complement supply side statistics. Specifically, the Committee recommends that the following metrics need to be captured from the demand side at an annual frequency.

1. Universal bank accounts:
 - a. Percentage of customers with a unique bank account
 - b. Usage of bank accounts
 - c. Major barriers to usage
2. Access and usage of payments points:
 - a. Distance to the nearest payment access points
 - b. Use of various types of services at the payment access points and the respective charges & fees that consumers incur
 - c. Incidences of denials to access to the payment points
3. Access to formal lenders and usage of formal loan
 - a. Distance to the nearest formal lender
 - b. Types of credit products available
 - c. Usage of credit products
4. Access to formal savings and investment and usage of savings & investment product:
 - a. Types of savings and investment products available
 - b. Usage of savings & investment products
5. Access to formal insurance products and usage of insurance products:
 - a. Types of insurance products available
 - b. Usage of insurance products

Strategies for Undertaking Financial Access & Usage Survey: One strategy for collecting the nationally representative demand side data on access and usage of financial products at an annual frequency could be to incorporate additional modules in nationally representative surveys that are being undertaken for other purposes by institutions such as the National Sample Survey Organisation (NSSO) and the Centre for Monitoring Indian Economy (CMIE).

The NSSO adopts a robust sampling strategy to undertake representative sample surveys for collecting data on various socio economic indicators. However, NSSO does not generally undertake a sample survey every year, and thus, might not be an ideal source for monitoring annual progress. CMIE, on the other hand, undertakes a survey of over 150,000 households every quarter covering 312 cities and 98 rural regions in India collecting data on household income, household expenses, pattern of expenditure, household savings and investments, the pattern of investments, borrowings and the sources and uses of the borrowings. Given that this survey (known as Consumer Pyramids²⁹⁵) has a fairly extensive coverage, and undertaken every quarter, it could become a potential source for implementing the annual financial access surveys as recommended by the Committee.

Cost & Return Survey:

Affordability of formal financial services plays a critical role in ensuring that low income households and small businesses can adopt formal financial products that are made available to them by financial inclusion initiatives. Assessing the price that customers pay to avail various formal financial products should thus become an integral part of the monitoring framework. However, the task of assessing the cost of various financial products from the consumers requires undertaking in-depth surveys designed to understand affordability of formal finance including the sticker price, transaction costs and other fees and charges.

At the same time, it is also important to track whether low income households and small businesses have access to formal investment products that offer them real returns. Thus, it is also essential to collect data on the real (inflation adjusted) return on investment that low income households and businesses gain from formal investment using demand side data.

Towards these objectives, the Committee recommends undertaking an in-depth demand side survey which will assess the cost of financial products as incurred by low income households and small businesses and estimate the returns offered by the available formal investment products. It is suggested that the methodology adopted for collecting the data on costs of formal financial services and returns offered by investment products should be academic in rigour to produce data of highest quality. Specifically, the Committee recommends that the following metrics need to be captured from the demand side at a triennial frequency:

1. Affordability of formal finance:
 - a. Households' borrowing from various formal sources
 - b. Interest rates charged by banks, NBFCs, and PACSs to households for the following formal credit products: consumption smoothing/ emergency loan (secured and unsecured); Education loan; Housing loan; Crop loan
 - c. Interest rates charged by banks, NBFCs, and PACSs to small businesses for the following credit products: Short term loan; Long term loan; Working capital loan
 - d. Transaction costs and other charges:

Measurement and Monitoring: Demand Side Strategy

- i. Incurred by households for the following credit products: consumption smoothing/ emergency loan (secured and unsecured); Education loan; Housing loan; Crop loan
 - ii. Incurred by small businesses for the following credit products: Short term loan; Long term loan; Working capital loan
 - e. Sufficiency of formal credit:
 - i. Borrowing from formal sources as a percentage of total borrowing per household
 - ii. Borrowing from formal sources as a percentage of total borrowing per small business unit
2. Cost of investment products:
 - a. Types of investment products availed
 - b. Charges including the processing and transaction related charges for the following products: Mutual Funds; Endowment products offered by insurance companies; Equity; Bonds; Derivatives
3. Returns from investment products:
 - a. Nominal return from investment products: Mutual Funds; Endowment products offered by insurance companies; Equity; Bonds; Derivatives

Strategies for Undertaking Cost & Return Survey: Given that for assessing various costs associated with formal financial products and returns from investment products one needs to undertake rigorous primary data collection following a very well executed survey design, this must be undertaken as a standalone nationally representative consumer survey. Given the complexities involved in designing the survey and analysing the survey outputs, the Committee recommends that this survey be delegated to institutions which have appropriate capacity and expertise in conducting such nationally representative surveys with the required academic rigour. Institutions such as the National Council of Applied Economic Research (NCAER) and the Centre for Microfinance, IFMR Research, which have expertise in undertaking rigorous primary survey, can be considered for the task of undertaking the cost and return survey.

The sampling plan for such a survey and the coverage required need to be determined based on the targeted level of representation and nature of the data required. If a district level representation is preferred over a State level representation, a large sample is required which calls for significantly more funding²⁹⁶. Also, as the cost and returns are less likely to change frequently, the Committee recommends that the survey should be undertaken at a triennial frequency.

Chapter 7.8
Recommendations Regarding Measurement and Monitoring of
Comprehensive Access to Financial Services

In conclusion, this section makes the following recommendations:

- 7.1 RBI should mandate all formal providers of financial services to households and small businesses to report data on a quarterly basis at the level of each one of their access points such as branches, outlets, BCs, ATMs, and POS terminals, as applicable. This includes data on geo-spatial location, access, services offered, quantum of transactions, depth of penetration, and application of Suitability process. This data should be verified periodically by the RBI using standardised quality control and follow up visits conducted by trained enumeration field teams within randomly selected sub samples.
- 7.2 In order to measure access, usage, and affordability of financial services, RBI should mandate two surveys of consumers to gain a more accurate picture of progress towards achieving the desired outcomes outlined by the vision statements. The Financial Access & Usage Survey should be a nationally representative survey of consumers undertaken annually to collect data on access and usage of financial services and can be incorporated as additional modules in nationally representative surveys that are being undertaken for other purposes by institutions such as the National Sample Survey Organisation (NSSO) and the Centre for Monitoring Indian Economy (CMIE). The Cost & Return Survey should be a nationally representative survey of consumers undertaken triennially to collect data on costs of credit, insurance and investment products, as well as returns on deposits and investment products. For this survey, RBI should commission institutions which have appropriate capacity and expertise in conducting such nationally representative surveys with the required academic rigour.

District-Sector Matrix for APSL

Annexure A
District-Sector Matrix for APSL

CRISIL Inclusix Rank	District	State/UT	PSL Sector Multiple	Direct Agriculture	Weaker Sections	Others
			Adjusted Regional Multiple	1.25	1.10	1.00
ADJUSTED SECTOR DISTRICT MATRIX						
1	Pathanamthitta	Kerala	1.0000	1.2545	1.1013	1.0000
2	Karaikal	Puducherry	1.0124	1.2701	1.1149	1.0124
3	Thiruvananthapuram	Kerala	1.0138	1.2718	1.1164	1.0138
4	Ernakulam	Kerala	1.0213	1.2813	1.1247	1.0213
5	Kottayam	Kerala	1.0257	1.2867	1.1295	1.0257
6	Thrissur	Kerala	1.0292	1.2911	1.1334	1.0292
7	Kodagu	Karnataka	1.0316	1.2941	1.1360	1.0316
8	Coimbatore	Tamil Nadu	1.0346	1.2979	1.1393	1.0346
9	Chennai	Tamil Nadu	1.0383	1.3026	1.1435	1.0383
10	Bengaluru Urban	Karnataka	1.0394	1.3040	1.1447	1.0394
11	Mumbai	Maharashtra	1.0402	1.3050	1.1456	1.0402
12	Hyderabad	Andhra Pradesh	1.0435	1.3091	1.1491	1.0435
13	Mahe	Puducherry	1.0448	1.3107	1.1506	1.0448
14	Puducherry	Puducherry	1.0467	1.3131	1.1527	1.0467
15	Alapuzha	Kerala	1.0473	1.3138	1.1533	1.0473
16	Mumbai Suburban	Maharashtra	1.0473	1.3138	1.1533	1.0473
17	Kasaragod	Kerala	1.0483	1.3152	1.1545	1.0483
18	Chandigarh	Chandigarh	1.0489	1.3158	1.1551	1.0489
19	Udipi	Karnataka	1.0535	1.3216	1.1601	1.0535
20	Wayanad	Kerala	1.0559	1.3246	1.1628	1.0559
21	Khurdha	Odisha	1.0570	1.3260	1.1640	1.0570
22	Kannur	Kerala	1.0572	1.3263	1.1643	1.0572
23	Sivaganga	Tamil Nadu	1.0578	1.3270	1.1649	1.0578
24	North Goa	Goa	1.0599	1.3297	1.1673	1.0599
25	Krishna	Andhra Pradesh	1.0610	1.3311	1.1685	1.0610
26	Dharwad	Karnataka	1.0624	1.3328	1.1699	1.0624
27	Chikmagalur	Karnataka	1.0629	1.3334	1.1705	1.0629
28	Kozhikode	Kerala	1.0653	1.3365	1.1732	1.0653
29	Nilgiris	Tamil Nadu	1.0662	1.3375	1.1741	1.0662
30	Dakshin Kannad	Karnataka	1.0678	1.3395	1.1759	1.0678
31	Solan	Himachal Pradesh	1.0691	1.3412	1.1774	1.0691
32	Tiruchirapalli	Tamil Nadu	1.0694	1.3416	1.1777	1.0694
33	South Goa	Goa	1.0718	1.3446	1.1803	1.0718
34	Kanyakumari	Tamil Nadu	1.0721	1.3450	1.1806	1.0721
35	Shimla	Himachal Pradesh	1.0724	1.3453	1.1809	1.0724
36	Kinnaur	Himachal Pradesh	1.0726	1.3456	1.1812	1.0726
37	Madurai	Tamil Nadu	1.0743	1.3477	1.1830	1.0743
38	Erode	Tamil Nadu	1.0753	1.3490	1.1842	1.0753
39	Hamirpur	Himachal Pradesh	1.0759	1.3497	1.1848	1.0759
40	Lahul & Spiti	Himachal Pradesh	1.0759	1.3497	1.1848	1.0759
41	Shimoga	Karnataka	1.0767	1.3507	1.1857	1.0767
42	Palakkad	Kerala	1.0770	1.3511	1.1860	1.0770
43	Kolkata	West Bengal	1.0783	1.3527	1.1875	1.0783
44	Patiala	Punjab	1.0786	1.3531	1.1878	1.0786
45	Hassan	Karnataka	1.0797	1.3544	1.1890	1.0797

District-Sector Matrix for APSL

46	Nellore	Andhra Pradesh	1.0799	1.3548	1.1893	1.0799
47	Toothukudi	Tamil Nadu	1.0802	1.3551	1.1896	1.0802
48	Karur	Tamil Nadu	1.0807	1.3558	1.1902	1.0807
49	Guntur	Andhra Pradesh	1.0807	1.3558	1.1902	1.0807
50	Kamrup Metropolitan	Assam	1.0815	1.3568	1.1911	1.0815
51	Cuddapah	Andhra Pradesh	1.0815	1.3568	1.1911	1.0815
52	West Godavari	Andhra Pradesh	1.0840	1.3599	1.1937	1.0840
53	Idukki	Kerala	1.0845	1.3605	1.1943	1.0845
54	Gurgaon	Haryana	1.0851	1.3612	1.1949	1.0851
55	Tirunelvali	Tamil Nadu	1.0859	1.3622	1.1958	1.0859
56	Dehra Dun	Uttarakhand	1.0861	1.3626	1.1961	1.0861
57	Delhi	Delhi	1.0864	1.3629	1.1964	1.0864
58	Perambalur	Tamil Nadu	1.0878	1.3646	1.1979	1.0878
59	Kollam	Kerala	1.0880	1.3649	1.1982	1.0880
60	Chittoor	Andhra Pradesh	1.0883	1.3653	1.1985	1.0883
61	Prakasam	Andhra Pradesh	1.0886	1.3656	1.1988	1.0886
62	East Godavari	Andhra Pradesh	1.0891	1.3663	1.1994	1.0891
63	Nizamabad	Andhra Pradesh	1.0899	1.3673	1.2003	1.0899
64	Rohtak	Haryana	1.0902	1.3677	1.2006	1.0902
65	Panchkula	Haryana	1.0905	1.3680	1.2009	1.0905
66	Mysore	Karnataka	1.0905	1.3680	1.2009	1.0905
67	Jalandhar	Punjab	1.0907	1.3683	1.2012	1.0907
68	Gautam Buddha Nagar	Uttar Pradesh	1.0913	1.3690	1.2018	1.0913
69	Vishakhapatnam	Andhra Pradesh	1.0913	1.3690	1.2018	1.0913
70	Ludhiana	Punjab	1.0918	1.3697	1.2024	1.0918
71	Ambala	Haryana	1.0934	1.3717	1.2041	1.0934
72	Uttara Kannada	Karnataka	1.0945	1.3731	1.2053	1.0945
73	Thanjavur	Tamil Nadu	1.0948	1.3734	1.2056	1.0948
74	Kulu	Himachal Pradesh	1.0953	1.3741	1.2062	1.0953
75	Theni	Tamil Nadu	1.0959	1.3748	1.2068	1.0959
76	Bhopal	Madhya Pradesh	1.0967	1.3758	1.2077	1.0967
77	Rangareddy	Andhra Pradesh	1.0972	1.3765	1.2083	1.0972
78	Kapurthala	Punjab	1.0972	1.3765	1.2083	1.0972
79	Shahid Bhagat Singh Nagar	Punjab	1.0986	1.3782	1.2098	1.0986
80	Kancheepuram	Tamil Nadu	1.0988	1.3785	1.2101	1.0988
81	Virudhunagar	Tamil Nadu	1.0994	1.3792	1.2107	1.0994
82	Anantapur	Andhra Pradesh	1.0996	1.3795	1.2110	1.0996
83	Rupnagar	Punjab	1.0996	1.3795	1.2110	1.0996
84	Warangal	Andhra Pradesh	1.0996	1.3795	1.2110	1.0996
85	Hoshiarpur	Punjab	1.1010	1.3812	1.2125	1.1010
86	Dindigul	Tamil Nadu	1.1010	1.3812	1.2125	1.1010
87	Lakshadweep	Lakshadweep	1.1013	1.3815	1.2128	1.1013
88	Bilaspur	Himachal Pradesh	1.1013	1.3815	1.2128	1.1013
89	Fatehgarh Sahib	Punjab	1.1015	1.3819	1.2131	1.1015
90	Garhwal	Uttarakhand	1.1021	1.3826	1.2137	1.1021
91	Una	Himachal Pradesh	1.1026	1.3832	1.2142	1.1026
92	Sahibzada Ajit Singh Nagar	Punjab	1.1026	1.3832	1.2142	1.1026
93	Papum Pare	Arunachal Pradesh	1.1034	1.3842	1.2151	1.1034
94	Thiruvavur	Tamil Nadu	1.1048	1.3859	1.2166	1.1048
95	Khammam	Andhra Pradesh	1.1048	1.3859	1.2166	1.1048
96	Ramanathapuram	Tamil Nadu	1.1058	1.3873	1.2178	1.1058

District-Sector Matrix for APSL

97	Nagapattinam	Tamil Nadu	1.1061	1.3876	1.2181	1.1061
98	Medak	Andhra Pradesh	1.1064	1.3880	1.2184	1.1064
99	Pithoragarh	Uttarakhand	1.1067	1.3883	1.2187	1.1067
100	Namakkal	Tamil Nadu	1.1069	1.3887	1.2190	1.1069
101	Pudukkottai	Tamil Nadu	1.1085	1.3907	1.2208	1.1085
102	Kangra	Himachal Pradesh	1.1085	1.3907	1.2208	1.1085
103	Bathinda	Punjab	1.1088	1.3910	1.2211	1.1088
104	Amritsar	Punjab	1.1088	1.3910	1.2211	1.1088
105	South Andaman	Andaman & Nicobar Islands	1.1091	1.3914	1.2214	1.1091
106	Gadag	Karnataka	1.1094	1.3917	1.2217	1.1094
107	Cuddalore	Tamil Nadu	1.1096	1.3920	1.2220	1.1096
108	Kurukshetra	Haryana	1.1102	1.3927	1.2226	1.1102
109	Vizianagaram	Andhra Pradesh	1.1102	1.3927	1.2226	1.1102
110	Lucknow	Uttar Pradesh	1.1107	1.3934	1.2232	1.1107
111	Jammu	Jammu & Kashmir	1.1110	1.3937	1.2235	1.1110
112	Rewari	Haryana	1.1110	1.3937	1.2235	1.1110
113	Malappuram	Kerala	1.1112	1.3941	1.2238	1.1112
114	Barnala	Punjab	1.1121	1.3951	1.2247	1.1121
115	Porbandar	Gujarat	1.1134	1.3968	1.2261	1.1134
116	Nalgonda	Andhra Pradesh	1.1139	1.3975	1.2267	1.1139
117	East Sikkim	Sikkim	1.1139	1.3975	1.2267	1.1139
118	Karimnagar	Andhra Pradesh	1.1142	1.3978	1.2270	1.1142
119	Tiruppur	Tamil Nadu	1.1145	1.3981	1.2273	1.1145
120	Kanpur Dehat	Uttar Pradesh	1.1148	1.3985	1.2276	1.1148
121	Almora	Uttarakhand	1.1150	1.3988	1.2279	1.1150
122	Kurnool	Andhra Pradesh	1.1150	1.3988	1.2279	1.1150
123	Srikakulam	Andhra Pradesh	1.1158	1.3998	1.2288	1.1158
124	Yamunanagar	Haryana	1.1164	1.4005	1.2294	1.1164
125	Adilabad	Andhra Pradesh	1.1180	1.4025	1.2312	1.1180
126	Krishnagiri	Tamil Nadu	1.1183	1.4029	1.2315	1.1183
127	Moga	Punjab	1.1183	1.4029	1.2315	1.1183
128	Chitradurga	Karnataka	1.1183	1.4029	1.2315	1.1183
129	Bengaluru Rural	Karnataka	1.1191	1.4039	1.2324	1.1191
130	Gurdaspur	Punjab	1.1199	1.4049	1.2333	1.1199
131	Mandi	Himachal Pradesh	1.1199	1.4049	1.2333	1.1199
132	Sangrur	Punjab	1.1204	1.4056	1.2339	1.1204
133	Jamnagar	Gujarat	1.1207	1.4059	1.2342	1.1207
134	Gulbarga	Karnataka	1.1218	1.4073	1.2354	1.1218
135	Vadodara	Gujarat	1.1218	1.4073	1.2354	1.1218
136	Ramanagara	Karnataka	1.1218	1.4073	1.2354	1.1218
137	Indore	Madhya Pradesh	1.1220	1.4076	1.2357	1.1220
138	Srinagar	Jammu & Kashmir	1.1223	1.4080	1.2360	1.1223
139	Salem	Tamil Nadu	1.1229	1.4086	1.2365	1.1229
140	Cuttack	Odisha	1.1237	1.4097	1.2374	1.1237
141	Faridkot	Punjab	1.1239	1.4100	1.2377	1.1239
142	Davangere	Karnataka	1.1253	1.4117	1.2392	1.1253
143	Hisar	Haryana	1.1256	1.4120	1.2395	1.1256
144	Vellore	Tamil Nadu	1.1258	1.4124	1.2398	1.1258
145	Ariyalur	Tamil Nadu	1.1261	1.4127	1.2401	1.1261
146	Mahbubnagar	Andhra Pradesh	1.1261	1.4127	1.2401	1.1261
147	Mandya	Karnataka	1.1264	1.4130	1.2404	1.1264
148	Meerut	Uttar Pradesh	1.1264	1.4130	1.2404	1.1264

District-Sector Matrix for APSL

149	Karnal	Haryana	1.1264	1.4130	1.2404	1.1264
150	Kaithal	Haryana	1.1266	1.4134	1.2407	1.1266
151	Navsari	Gujarat	1.1272	1.4141	1.2413	1.1272
152	Sirmaur	Himachal Pradesh	1.1274	1.4144	1.2416	1.1274
153	East Khasi Hills	Meghalaya	1.1277	1.4147	1.2419	1.1277
154	Sindhudurg	Maharashtra	1.1280	1.4151	1.2422	1.1280
155	Yanam	Puducherry	1.1291	1.4164	1.2434	1.1291
156	Thiruvallur	Tamil Nadu	1.1291	1.4164	1.2434	1.1291
157	Nainital	Uttarakhand	1.1293	1.4168	1.2437	1.1293
158	Raichur	Karnataka	1.1299	1.4174	1.2443	1.1299
159	Bellary	Karnataka	1.1299	1.4174	1.2443	1.1299
160	Sirsa	Haryana	1.1301	1.4178	1.2446	1.1301
161	Rudraprayag	Uttarakhand	1.1304	1.4181	1.2449	1.1304
162	Haveri	Karnataka	1.1307	1.4185	1.2452	1.1307
163	Ganganagar	Rajasthan	1.1312	1.4191	1.2458	1.1312
164	Tumkur	Karnataka	1.1323	1.4205	1.2470	1.1323
165	Udham Singh Nagar	Uttarakhand	1.1326	1.4208	1.2472	1.1326
166	Ahmedabad	Gujarat	1.1326	1.4208	1.2472	1.1326
167	Belgaum	Karnataka	1.1331	1.4215	1.2478	1.1331
168	Jhajjar	Haryana	1.1337	1.4222	1.2484	1.1337
169	Pune	Maharashtra	1.1339	1.4225	1.2487	1.1339
170	Sambalpur	Odisha	1.1339	1.4225	1.2487	1.1339
171	Wardha	Maharashtra	1.1339	1.4225	1.2487	1.1339
172	Jhansi	Uttar Pradesh	1.1339	1.4225	1.2487	1.1339
173	Angul	Odisha	1.1342	1.4229	1.2490	1.1342
174	Chamoli	Uttarakhand	1.1342	1.4229	1.2490	1.1342
175	Dharmapuri	Tamil Nadu	1.1345	1.4232	1.2493	1.1345
176	Panipat	Haryana	1.1358	1.4249	1.2508	1.1358
177	Kachchh	Gujarat	1.1361	1.4252	1.2511	1.1361
178	Bagalkote	Karnataka	1.1364	1.4256	1.2514	1.1364
179	Jaipur	Rajasthan	1.1364	1.4256	1.2514	1.1364
180	Leh Ladakh	Jammu & Kashmir	1.1366	1.4259	1.2517	1.1366
181	Mahendragarh	Haryana	1.1369	1.4263	1.2520	1.1369
182	Tiruvannamalai	Tamil Nadu	1.1374	1.4269	1.2526	1.1374
183	Ferozpur	Punjab	1.1374	1.4269	1.2526	1.1374
184	Villupuram	Tamil Nadu	1.1380	1.4276	1.2532	1.1380
185	Koppal	Karnataka	1.1382	1.4279	1.2535	1.1382
186	Chamba	Himachal Pradesh	1.1385	1.4283	1.2538	1.1385
187	Mathura	Uttar Pradesh	1.1385	1.4283	1.2538	1.1385
188	Bageshwar	Uttarakhand	1.1388	1.4286	1.2541	1.1388
189	Sonipat	Haryana	1.1388	1.4286	1.2541	1.1388
190	Fatehabad	Haryana	1.1391	1.4290	1.2544	1.1391
191	East Singhbhum	Jharkhand	1.1396	1.4296	1.2550	1.1396
192	Mansa	Punjab	1.1396	1.4296	1.2550	1.1396
193	Chikkaballapura	Karnataka	1.1399	1.4300	1.2553	1.1399
194	Faridabad	Haryana	1.1401	1.4303	1.2556	1.1401
195	Nagpur	Maharashtra	1.1404	1.4307	1.2559	1.1404
196	Muktsar	Punjab	1.1404	1.4307	1.2559	1.1404
197	Jagatsinghpur	Odisha	1.1404	1.4307	1.2559	1.1404
198	Tehri Garhwal	Uttarakhand	1.1409	1.4313	1.2565	1.1409
199	Bhiwani	Haryana	1.1409	1.4313	1.2565	1.1409
200	Rajkot	Gujarat	1.1409	1.4313	1.2565	1.1409
201	Amreli	Gujarat	1.1409	1.4313	1.2565	1.1409

District-Sector Matrix for APSL

202	Anand	Gujarat	1.1412	1.4317	1.2568	1.1412
203	Ranchi	Jharkhand	1.1412	1.4317	1.2568	1.1412
204	Aizawl	Mizoram	1.1412	1.4317	1.2568	1.1412
205	Hamirpur	Uttar Pradesh	1.1418	1.4323	1.2574	1.1418
206	Haridwar	Uttarakhand	1.1418	1.4323	1.2574	1.1418
207	Kolar	Karnataka	1.1420	1.4327	1.2577	1.1420
208	West Tripura	Tripura	1.1428	1.4337	1.2585	1.1428
209	Jharsuguda	Odisha	1.1439	1.4351	1.2597	1.1439
210	Jabalpur	Madhya Pradesh	1.1439	1.4351	1.2597	1.1439
211	Mamit	Mizoram	1.1439	1.4351	1.2597	1.1439
212	Tarn Taran	Punjab	1.1442	1.4354	1.2600	1.1442
213	Samba	Jammu & Kashmir	1.1442	1.4354	1.2600	1.1442
214	Bijapur	Karnataka	1.1445	1.4357	1.2603	1.1445
215	Darjiling	West Bengal	1.1445	1.4357	1.2603	1.1445
216	Puri	Odisha	1.1445	1.4357	1.2603	1.1445
217	Daman	Daman & Diu Diu	1.1445	1.4357	1.2603	1.1445
218	Bharuch	Gujarat	1.1458	1.4374	1.2618	1.1458
219	Jalaun	Uttar Pradesh	1.1458	1.4374	1.2618	1.1458
220	Champawat	Uttarakhand	1.1461	1.4378	1.2621	1.1461
221	Ratnagiri	Maharashtra	1.1461	1.4378	1.2621	1.1461
222	Dibrugarh	Assam	1.1463	1.4381	1.2624	1.1463
223	Agra	Uttar Pradesh	1.1466	1.4384	1.2627	1.1466
224	Hoshangabad	Madhya Pradesh	1.1472	1.4391	1.2633	1.1472
225	Mayurbhanj	Odisha	1.1472	1.4391	1.2633	1.1472
226	Uttar Kashi	Uttarakhand	1.1477	1.4398	1.2639	1.1477
227	Kota	Rajasthan	1.1490	1.4415	1.2654	1.1490
228	Kendujhargarh	Odisha	1.1496	1.4422	1.2660	1.1496
229	Jorhat	Assam	1.1496	1.4422	1.2660	1.1496
230	Dhenkanal	Odisha	1.1496	1.4422	1.2660	1.1496
231	Junagadh	Gujarat	1.1496	1.4422	1.2660	1.1496
232	East Siang	Arunachal Pradesh	1.1499	1.4425	1.2663	1.1499
233	Imphal West	Manipur	1.1501	1.4428	1.2666	1.1501
234	Baleshwar	Odisha	1.1501	1.4428	1.2666	1.1501
235	Jind	Haryana	1.1504	1.4432	1.2669	1.1504
236	Mahesana	Gujarat	1.1504	1.4432	1.2669	1.1504
237	North Sikkim	Sikkim	1.1504	1.4432	1.2669	1.1504
238	West Siang	Arunachal Pradesh	1.1507	1.4435	1.2672	1.1507
239	Gandhinagar	Gujarat	1.1509	1.4439	1.2675	1.1509
240	Bidar	Karnataka	1.1512	1.4442	1.2678	1.1512
241	Serchhip	Mizoram	1.1515	1.4445	1.2681	1.1515
242	Ganjam	Odisha	1.1515	1.4445	1.2681	1.1515
243	Jyotiba Phule Nagar	Uttar Pradesh	1.1520	1.4452	1.2687	1.1520
244	Dimapur	Nagaland	1.1520	1.4452	1.2687	1.1520
245	Banda	Uttar Pradesh	1.1520	1.4452	1.2687	1.1520
246	Kohima	Nagaland	1.1528	1.4462	1.2696	1.1528
247	Chamrajnagar	Karnataka	1.1531	1.4466	1.2698	1.1531
248	Bara Banki	Uttar Pradesh	1.1531	1.4466	1.2698	1.1531
249	Kanpur Nagar	Uttar Pradesh	1.1534	1.4469	1.2701	1.1534
250	Patna	Bihar	1.1539	1.4476	1.2707	1.1539
251	Ajmer	Rajasthan	1.1539	1.4476	1.2707	1.1539
252	Varanasi	Uttar Pradesh	1.1550	1.4489	1.2719	1.1550
253	Ujjain	Madhya Pradesh	1.1550	1.4489	1.2719	1.1550
254	Valsad	Gujarat	1.1553	1.4493	1.2722	1.1553

District-Sector Matrix for APSL

255	Nayagarh	Odisha	1.1555	1.4496	1.2725	1.1555
256	Hanumangarh	Rajasthan	1.1555	1.4496	1.2725	1.1555
257	Saharanpur	Uttar Pradesh	1.1571	1.4517	1.2743	1.1571
258	Kathua	Jammu & Kashmir	1.1574	1.4520	1.2746	1.1574
259	West Kameng	Arunachal Pradesh	1.1577	1.4523	1.2749	1.1577
260	Kolasib	Mizoram	1.1577	1.4523	1.2749	1.1577
261	South Tripura	Tripura	1.1582	1.4530	1.2755	1.1582
262	Parbhani	Maharashtra	1.1585	1.4533	1.2758	1.1585
263	Gwalior	Madhya Pradesh	1.1585	1.4533	1.2758	1.1585
264	Hathras	Uttar Pradesh	1.1593	1.4544	1.2767	1.1593
265	Dadra & Nagar Haveli	Dadra & Nagar Haveli	1.1596	1.4547	1.2770	1.1596
266	Moradabad	Uttar Pradesh	1.1598	1.4550	1.2773	1.1598
267	Koriya	Chhattisgarh	1.1598	1.4550	1.2773	1.1598
268	Bundi	Rajasthan	1.1601	1.4554	1.2776	1.1601
269	Lalitpur	Uttar Pradesh	1.1601	1.4554	1.2776	1.1601
270	Palwal	Haryana	1.1601	1.4554	1.2776	1.1601
271	Sagar	Madhya Pradesh	1.1604	1.4557	1.2779	1.1604
272	Sundargarh	Odisha	1.1604	1.4557	1.2779	1.1604
273	Mahoba	Uttar Pradesh	1.1607	1.4561	1.2782	1.1607
274	Surendranagar	Gujarat	1.1609	1.4564	1.2785	1.1609
275	Koraput	Odisha	1.1615	1.4571	1.2791	1.1615
276	Aligarh	Uttar Pradesh	1.1617	1.4574	1.2794	1.1617
277	Dibang Valley	Arunachal Pradesh	1.1617	1.4574	1.2794	1.1617
278	Rayagada	Odisha	1.1617	1.4574	1.2794	1.1617
279	Yadgir	Karnataka	1.1620	1.4578	1.2797	1.1620
280	Bargarh	Odisha	1.1620	1.4578	1.2797	1.1620
281	Jajpur	Odisha	1.1620	1.4578	1.2797	1.1620
282	Baramula	Jammu & Kashmir	1.1623	1.4581	1.2800	1.1623
283	Ghaziabad	Uttar Pradesh	1.1623	1.4581	1.2800	1.1623
284	North Cachar Hills	Assam	1.1625	1.4584	1.2803	1.1625
285	Kalahandi	Odisha	1.1625	1.4584	1.2803	1.1625
286	Sehore	Madhya Pradesh	1.1631	1.4591	1.2808	1.1631
287	Daman	Daman & Diu Daman	1.1631	1.4591	1.2808	1.1631
288	Bikaner	Rajasthan	1.1631	1.4591	1.2808	1.1631
289	Rampur	Uttar Pradesh	1.1636	1.4598	1.2814	1.1636
290	Akola	Maharashtra	1.1636	1.4598	1.2814	1.1636
291	Harda	Madhya Pradesh	1.1639	1.4601	1.2817	1.1639
292	Amravati	Maharashtra	1.1642	1.4605	1.2820	1.1642
293	Chitrakoot	Uttar Pradesh	1.1647	1.4611	1.2826	1.1647
294	Churu	Rajasthan	1.1647	1.4611	1.2826	1.1647
295	Kendrapara	Odisha	1.1650	1.4615	1.2829	1.1650
296	Chandrapur	Maharashtra	1.1650	1.4615	1.2829	1.1650
297	Kamrup	Assam	1.1652	1.4618	1.2832	1.1652
298	Dewas	Madhya Pradesh	1.1655	1.4622	1.2835	1.1655
299	Baran	Rajasthan	1.1658	1.4625	1.2838	1.1658
300	Muzaffarnagar	Uttar Pradesh	1.1658	1.4625	1.2838	1.1658
301	Raigarh	Maharashtra	1.1661	1.4628	1.2841	1.1661
302	Nalbari	Assam	1.1663	1.4632	1.2844	1.1663
303	Unnao	Uttar Pradesh	1.1666	1.4635	1.2847	1.1666
304	Jhunjhunu	Rajasthan	1.1669	1.4638	1.2850	1.1669
305	Jalna	Maharashtra	1.1669	1.4638	1.2850	1.1669
306	Shravasti	Uttar Pradesh	1.1669	1.4638	1.2850	1.1669
307	Aurangabad	Maharashtra	1.1671	1.4642	1.2853	1.1671

District-Sector Matrix for APSL

308	Azamgarh	Uttar Pradesh	1.1674	1.4645	1.2856	1.1674
309	Rai Bareli	Uttar Pradesh	1.1674	1.4645	1.2856	1.1674
310	Chittaurgarh	Rajasthan	1.1674	1.4645	1.2856	1.1674
311	Satna	Madhya Pradesh	1.1679	1.4652	1.2862	1.1679
312	Baghpat	Uttar Pradesh	1.1682	1.4655	1.2865	1.1682
313	Jaisalmer	Rajasthan	1.1682	1.4655	1.2865	1.1682
314	Alwar	Rajasthan	1.1682	1.4655	1.2865	1.1682
315	Sibsagar	Assam	1.1688	1.4662	1.2871	1.1688
316	Kargil	Jammu & Kashmir	1.1690	1.4666	1.2874	1.1690
317	Balangir	Odisha	1.1690	1.4666	1.2874	1.1690
318	Kandhamal	Odisha	1.1693	1.4669	1.2877	1.1693
319	Bhadrak	Odisha	1.1693	1.4669	1.2877	1.1693
320	Nicobar	Andaman & Nicobar Islands	1.1693	1.4669	1.2877	1.1693
321	North Tripura	Tripura	1.1693	1.4669	1.2877	1.1693
322	Bareilly	Uttar Pradesh	1.1696	1.4672	1.2880	1.1696
323	Sawai Madhopur	Rajasthan	1.1696	1.4672	1.2880	1.1696
324	Narsimhapur	Madhya Pradesh	1.1696	1.4672	1.2880	1.1696
325	Sabar Kantha	Gujarat	1.1701	1.4679	1.2886	1.1701
326	Golaghat	Assam	1.1701	1.4679	1.2886	1.1701
327	Bijnor	Uttar Pradesh	1.1701	1.4679	1.2886	1.1701
328	Navapara	Odisha	1.1704	1.4683	1.2889	1.1704
329	Dangs	Gujarat	1.1704	1.4683	1.2889	1.1704
330	Udhampur	Jammu & Kashmir	1.1704	1.4683	1.2889	1.1704
331	Jodhpur	Rajasthan	1.1704	1.4683	1.2889	1.1704
332	Kolhapur	Maharashtra	1.1704	1.4683	1.2889	1.1704
333	Bhandara	Maharashtra	1.1704	1.4683	1.2889	1.1704
334	Pali	Rajasthan	1.1704	1.4683	1.2889	1.1704
335	Kheda	Gujarat	1.1706	1.4686	1.2892	1.1706
336	Farrukhabad	Uttar Pradesh	1.1709	1.4689	1.2895	1.1709
337	Nanded	Maharashtra	1.1712	1.4693	1.2898	1.1712
338	Bardhaman	West Bengal	1.1712	1.4693	1.2898	1.1712
339	Kanauj	Uttar Pradesh	1.1715	1.4696	1.2901	1.1715
340	Sultanpur	Uttar Pradesh	1.1717	1.4699	1.2904	1.1717
341	Sonepur	Odisha	1.1717	1.4699	1.2904	1.1717
342	Dhanbad	Jharkhand	1.1720	1.4703	1.2907	1.1720
343	Surat	Gujarat	1.1720	1.4703	1.2907	1.1720
344	Ghazipur	Uttar Pradesh	1.1723	1.4706	1.2910	1.1723
345	Sikar	Rajasthan	1.1723	1.4706	1.2910	1.1723
346	Gorakhpur	Uttar Pradesh	1.1725	1.4710	1.2913	1.1725
347	Deogarh	Odisha	1.1731	1.4716	1.2919	1.1731
348	Ballia	Uttar Pradesh	1.1731	1.4716	1.2919	1.1731
349	Jaunpur	Uttar Pradesh	1.1733	1.4720	1.2921	1.1733
350	Bhavnagar	Gujarat	1.1733	1.4720	1.2921	1.1733
351	Hugli	West Bengal	1.1736	1.4723	1.2924	1.1736
352	Bulandshahr	Uttar Pradesh	1.1736	1.4723	1.2924	1.1736
353	Ramgarh	Jharkhand	1.1736	1.4723	1.2924	1.1736
354	Shahjahanpur	Uttar Pradesh	1.1736	1.4723	1.2924	1.1736
355	Lohardaga	Jharkhand	1.1742	1.4730	1.2930	1.1742
356	Dumka	Jharkhand	1.1744	1.4733	1.2933	1.1744
357	Damoh	Madhya Pradesh	1.1744	1.4733	1.2933	1.1744
358	Sitapur	Uttar Pradesh	1.1744	1.4733	1.2933	1.1744
359	South Sikkim	Sikkim	1.1744	1.4733	1.2933	1.1744

District-Sector Matrix for APSL

360	Buldana	Maharashtra	1.1747	1.4737	1.2936	1.1747
361	Etawah	Uttar Pradesh	1.1747	1.4737	1.2936	1.1747
362	Paschim Medinipur	West Bengal	1.1752	1.4743	1.2942	1.1752
363	Yavatmal	Maharashtra	1.1755	1.4747	1.2945	1.1755
364	Patan	Gujarat	1.1758	1.4750	1.2948	1.1758
365	Bokaro	Jharkhand	1.1758	1.4750	1.2948	1.1758
366	Bhilwara	Rajasthan	1.1758	1.4750	1.2948	1.1758
367	Sangli	Maharashtra	1.1760	1.4754	1.2951	1.1760
368	Rajnandgaon	Chhattisgarh	1.1760	1.4754	1.2951	1.1760
369	Mainpuri	Uttar Pradesh	1.1760	1.4754	1.2951	1.1760
370	Allahabad	Uttar Pradesh	1.1760	1.4754	1.2951	1.1760
371	Raigarh	Chhattisgarh	1.1763	1.4757	1.2954	1.1763
372	West Singhbhum	Jharkhand	1.1766	1.4760	1.2957	1.1766
373	Gajapati	Odisha	1.1769	1.4764	1.2960	1.1769
374	Saiha	Mizoram	1.1769	1.4764	1.2960	1.1769
375	Pilibhit	Uttar Pradesh	1.1769	1.4764	1.2960	1.1769
376	Mau	Uttar Pradesh	1.1769	1.4764	1.2960	1.1769
377	Deoghar	Jharkhand	1.1771	1.4767	1.2963	1.1771
378	Tawang	Arunachal Pradesh	1.1771	1.4767	1.2963	1.1771
379	Raisen	Madhya Pradesh	1.1774	1.4771	1.2966	1.1774
380	Thane	Maharashtra	1.1777	1.4774	1.2969	1.1777
381	Koch Bihar	West Bengal	1.1779	1.4777	1.2972	1.1779
382	Etah	Uttar Pradesh	1.1779	1.4777	1.2972	1.1779
383	Tonk	Rajasthan	1.1782	1.4781	1.2975	1.1782
384	Durg	Chhattisgarh	1.1782	1.4781	1.2975	1.1782
385	Faizabad	Uttar Pradesh	1.1785	1.4784	1.2978	1.1785
386	Chhindwara	Madhya Pradesh	1.1785	1.4784	1.2978	1.1785
387	Surguja	Chhattisgarh	1.1787	1.4788	1.2981	1.1787
388	Lakhimpur	Assam	1.1790	1.4791	1.2984	1.1790
389	Rajouri	Jammu & Kashmir	1.1790	1.4791	1.2984	1.1790
390	Munger	Bihar	1.1790	1.4791	1.2984	1.1790
391	Udaipur	Rajasthan	1.1790	1.4791	1.2984	1.1790
392	Khunti	Jharkhand	1.1790	1.4791	1.2984	1.1790
393	North 24 Parganas	West Bengal	1.1790	1.4791	1.2984	1.1790
394	Sonitpur	Assam	1.1793	1.4794	1.2987	1.1793
395	Dhalai	Tripura	1.1793	1.4794	1.2987	1.1793
396	Tinsukia	Assam	1.1793	1.4794	1.2987	1.1793
397	Boudh	Odisha	1.1793	1.4794	1.2987	1.1793
398	Narmada	Gujarat	1.1796	1.4798	1.2990	1.1796
399	Buxar	Bihar	1.1798	1.4801	1.2993	1.1798
400	Birbhum	West Bengal	1.1804	1.4808	1.2999	1.1804
401	Neemuch	Madhya Pradesh	1.1804	1.4808	1.2999	1.1804
402	Pratapgarh	Uttar Pradesh	1.1804	1.4808	1.2999	1.1804
403	Reasi	Jammu & Kashmir	1.1806	1.4811	1.3002	1.1806
404	Rajsamand	Rajasthan	1.1809	1.4815	1.3005	1.1809
405	Anuppur	Madhya Pradesh	1.1809	1.4815	1.3005	1.1809
406	Hardoi	Uttar Pradesh	1.1809	1.4815	1.3005	1.1809
407	Solapur	Maharashtra	1.1812	1.4818	1.3008	1.1812
408	Sirohi	Rajasthan	1.1812	1.4818	1.3008	1.1812
409	Kanker	Chhattisgarh	1.1814	1.4821	1.3011	1.1814
410	Betul	Madhya Pradesh	1.1814	1.4821	1.3011	1.1814
411	Raipur	Chhattisgarh	1.1817	1.4825	1.3014	1.1817

District-Sector Matrix for APSL

412	Jamtara	Jharkhand	1.1817	1.4825	1.3014	1.1817
413	Dhar	Madhya Pradesh	1.1817	1.4825	1.3014	1.1817
414	Bharatpur	Rajasthan	1.1817	1.4825	1.3014	1.1817
415	Ratlam	Madhya Pradesh	1.1820	1.4828	1.3017	1.1820
416	Lunglei	Mizoram	1.1820	1.4828	1.3017	1.1820
417	Datia	Madhya Pradesh	1.1823	1.4832	1.3020	1.1823
418	Mokokchung	Nagaland	1.1828	1.4838	1.3026	1.1828
419	Basti	Uttar Pradesh	1.1828	1.4838	1.3026	1.1828
420	Gonda	Uttar Pradesh	1.1828	1.4838	1.3026	1.1828
421	Nalanda	Bihar	1.1828	1.4838	1.3026	1.1828
422	Ambedkar Nagar	Uttar Pradesh	1.1828	1.4838	1.3026	1.1828
423	Deoria	Uttar Pradesh	1.1831	1.4842	1.3029	1.1831
424	Ganderbal	Jammu & Kashmir	1.1831	1.4842	1.3029	1.1831
425	Hazaribag	Jharkhand	1.1831	1.4842	1.3029	1.1831
426	Gumla	Jharkhand	1.1831	1.4842	1.3029	1.1831
427	Seraikela-Kharsawan	Jharkhand	1.1836	1.4848	1.3034	1.1836
428	Jhalawar	Rajasthan	1.1836	1.4848	1.3034	1.1836
429	Fatehpur	Uttar Pradesh	1.1839	1.4852	1.3037	1.1839
430	Udalguri	Assam	1.1839	1.4852	1.3037	1.1839
431	Satara	Maharashtra	1.1839	1.4852	1.3037	1.1839
432	Shajapur	Madhya Pradesh	1.1841	1.4855	1.3040	1.1841
433	Auraiya	Uttar Pradesh	1.1850	1.4865	1.3049	1.1850
434	Dausa	Rajasthan	1.1850	1.4865	1.3049	1.1850
435	Bhojpur	Bihar	1.1852	1.4869	1.3052	1.1852
436	Washim	Maharashtra	1.1852	1.4869	1.3052	1.1852
437	Gondiya	Maharashtra	1.1852	1.4869	1.3052	1.1852
438	Firozabad	Uttar Pradesh	1.1852	1.4869	1.3052	1.1852
439	Muzaffarpur	Bihar	1.1852	1.4869	1.3052	1.1852
440	Rajgarh	Madhya Pradesh	1.1858	1.4876	1.3058	1.1858
441	Chandauli	Uttar Pradesh	1.1858	1.4876	1.3058	1.1858
442	Howrah	West Bengal	1.1858	1.4876	1.3058	1.1858
443	Rewa	Madhya Pradesh	1.1860	1.4879	1.3061	1.1860
444	Karbi Anglong	Assam	1.1860	1.4879	1.3061	1.1860
445	Palamu	Jharkhand	1.1863	1.4882	1.3064	1.1863
446	Katni	Madhya Pradesh	1.1863	1.4882	1.3064	1.1863
447	Bhagalpur	Bihar	1.1866	1.4886	1.3067	1.1866
448	Kaimur	Bihar	1.1866	1.4886	1.3067	1.1866
449	Bankura	West Bengal	1.1866	1.4886	1.3067	1.1866
450	East	Madhya Pradesh	1.1871	1.4893	1.3073	1.1871
451	Dungarpur	Rajasthan	1.1871	1.4893	1.3073	1.1871
452	Bid	Maharashtra	1.1874	1.4896	1.3076	1.1874
453	Nashik	Maharashtra	1.1877	1.4899	1.3079	1.1877
454	Cachar	Assam	1.1879	1.4903	1.3082	1.1879
455	Shahdol	Madhya Pradesh	1.1885	1.4909	1.3088	1.1885
456	Banswara	Rajasthan	1.1887	1.4913	1.3091	1.1887
457	Kodaram	Jharkhand	1.1890	1.4916	1.3094	1.1890
458	Ri Bhoi	Meghalaya	1.1890	1.4916	1.3094	1.1890
459	Aurangabad	Bihar	1.1893	1.4920	1.3097	1.1893
460	Sonbhadra	Uttar Pradesh	1.1893	1.4920	1.3097	1.1893
461	Gopalganj	Bihar	1.1893	1.4920	1.3097	1.1893
462	Siwan	Bihar	1.1895	1.4923	1.3100	1.1895
463	Anantnag	Jammu & Kashmir	1.1895	1.4923	1.3100	1.1895
464	Pulwama	Jammu & Kashmir	1.1898	1.4926	1.3103	1.1898

District-Sector Matrix for APSL

465	Godda	Jharkhand	1.1901	1.4930	1.3106	1.1901
466	Budaun	Uttar Pradesh	1.1901	1.4930	1.3106	1.1901
467	Hingoli	Maharashtra	1.1904	1.4933	1.3109	1.1904
468	Kulgam	Jammu & Kashmir	1.1906	1.4937	1.3112	1.1906
469	Champhai	Mizoram	1.1906	1.4937	1.3112	1.1906
470	Nadia	West Bengal	1.1906	1.4937	1.3112	1.1906
471	Kanshiram Nagar	Uttar Pradesh	1.1909	1.4940	1.3115	1.1909
472	Mirzapur	Uttar Pradesh	1.1909	1.4940	1.3115	1.1909
473	Bongaigaon	Assam	1.1909	1.4940	1.3115	1.1909
474	Sant Ravidas Nagar	Uttar Pradesh	1.1914	1.4947	1.3121	1.1914
475	Sahibganj	Jharkhand	1.1914	1.4947	1.3121	1.1914
476	Gaya	Bihar	1.1914	1.4947	1.3121	1.1914
477	Arwal	Bihar	1.1914	1.4947	1.3121	1.1914
478	Vidisha	Madhya Pradesh	1.1917	1.4950	1.3124	1.1917
479	Malkangiri	Odisha	1.1917	1.4950	1.3124	1.1917
480	Guna	Madhya Pradesh	1.1917	1.4950	1.3124	1.1917
481	Ahmednagar	Maharashtra	1.1920	1.4953	1.3127	1.1920
482	North And Middle Andaman	Andaman & Nicobar Islands	1.1920	1.4953	1.3127	1.1920
483	Sheikhpura	Bihar	1.1922	1.4957	1.3130	1.1922
484	Maharajganj	Uttar Pradesh	1.1922	1.4957	1.3130	1.1922
485	Balrampur	Uttar Pradesh	1.1922	1.4957	1.3130	1.1922
486	Dhamtari	Chhattisgarh	1.1925	1.4960	1.3133	1.1925
487	Burhanpur	Madhya Pradesh	1.1925	1.4960	1.3133	1.1925
488	Mahasamund	Chhattisgarh	1.1925	1.4960	1.3133	1.1925
489	Jalor	Rajasthan	1.1928	1.4964	1.3136	1.1928
490	Simdega	Jharkhand	1.1931	1.4967	1.3139	1.1931
491	Korba	Chhattisgarh	1.1931	1.4967	1.3139	1.1931
492	Jalpaiguri	West Bengal	1.1931	1.4967	1.3139	1.1931
493	Kheri	Uttar Pradesh	1.1931	1.4967	1.3139	1.1931
494	Doda	Jammu & Kashmir	1.1933	1.4970	1.3142	1.1933
495	Latur	Maharashtra	1.1933	1.4970	1.3142	1.1933
496	Chhatarpur	Madhya Pradesh	1.1933	1.4970	1.3142	1.1933
497	Mandla	Madhya Pradesh	1.1933	1.4970	1.3142	1.1933
498	Sant Kabir Nagar	Uttar Pradesh	1.1936	1.4974	1.3144	1.1936
499	Rohtas	Bihar	1.1939	1.4977	1.3147	1.1939
500	Nabarangapur	Odisha	1.1939	1.4977	1.3147	1.1939
501	Kushi	Uttar Pradesh	1.1941	1.4981	1.3150	1.1941
502	Begusarai	Bihar	1.1941	1.4981	1.3150	1.1941
503	Darrang	Assam	1.1941	1.4981	1.3150	1.1941
504	Panna	Madhya Pradesh	1.1944	1.4984	1.3153	1.1944
505	Osmanabad	Maharashtra	1.1947	1.4987	1.3156	1.1947
506	Jashpur	Chhattisgarh	1.1947	1.4987	1.3156	1.1947
507	Jehanabad	Bihar	1.1947	1.4987	1.3156	1.1947
508	Vaishali	Bihar	1.1949	1.4991	1.3159	1.1949
509	Pratapgarh	Rajasthan	1.1949	1.4991	1.3159	1.1949
510	West Khasi Hills	Meghalaya	1.1952	1.4994	1.3162	1.1952
511	Seoni	Madhya Pradesh	1.1952	1.4994	1.3162	1.1952
512	Lakhisarai	Bihar	1.1955	1.4998	1.3165	1.1955
513	West Nimar	Madhya Pradesh	1.1955	1.4998	1.3165	1.1955
514	Poonch	Jammu & Kashmir	1.1955	1.4998	1.3165	1.1955
515	Shopian	Jammu & Kashmir	1.1955	1.4998	1.3165	1.1955
516	Bastar	Chhattisgarh	1.1958	1.5001	1.3168	1.1958

District-Sector Matrix for APSL

517	Dakshin Dinajpur	West Bengal	1.1960	1.5004	1.3171	1.1960
518	Mandsaur	Madhya Pradesh	1.1963	1.5008	1.3174	1.1963
519	Ramban	Jammu & Kashmir	1.1963	1.5008	1.3174	1.1963
520	Siddharthanagar	Uttar Pradesh	1.1963	1.5008	1.3174	1.1963
521	Bilaspur	Chhattisgarh	1.1966	1.5011	1.3177	1.1966
522	Upper Siang	Arunachal Pradesh	1.1966	1.5011	1.3177	1.1966
523	Purba Medinipur	West Bengal	1.1966	1.5011	1.3177	1.1966
524	Tapi	Gujarat	1.1966	1.5011	1.3177	1.1966
525	Umaria	Madhya Pradesh	1.1971	1.5018	1.3183	1.1971
526	Gadchiroli	Maharashtra	1.1974	1.5021	1.3186	1.1974
527	East Garo Hills	Meghalaya	1.1974	1.5021	1.3186	1.1974
528	Ashoknagar	Madhya Pradesh	1.1974	1.5021	1.3186	1.1974
529	Pakaur	Jharkhand	1.1976	1.5025	1.3189	1.1976
530	Lower Subansiri	Arunachal Pradesh	1.1976	1.5025	1.3189	1.1976
531	Kawardha	Chhattisgarh	1.1979	1.5028	1.3192	1.1979
532	Kishtwar	Jammu & Kashmir	1.1979	1.5028	1.3192	1.1979
533	Panch Mahal	Gujarat	1.1987	1.5038	1.3201	1.1987
534	Kaushambi	Uttar Pradesh	1.1987	1.5038	1.3201	1.1987
535	Barpeta	Assam	1.1990	1.5042	1.3204	1.1990
536	Bahraich	Uttar Pradesh	1.1993	1.5045	1.3207	1.1993
537	Murshidabad	West Bengal	1.1993	1.5045	1.3207	1.1993
538	Samastipur	Bihar	1.1993	1.5045	1.3207	1.1993
539	Chirang	Assam	1.1993	1.5045	1.3207	1.1993
540	Jalgaon	Maharashtra	1.1995	1.5048	1.3210	1.1995
541	Banas Kantha	Gujarat	1.1998	1.5052	1.3213	1.1998
542	Karimnagar	Assam	1.1998	1.5052	1.3213	1.1998
543	Saran	Bihar	1.1998	1.5052	1.3213	1.1998
544	Morigaon	Assam	1.2001	1.5055	1.3216	1.2001
545	Maldah	West Bengal	1.2001	1.5055	1.3216	1.2001
546	Hailakandi	Assam	1.2003	1.5058	1.3219	1.2003
547	Nagaon	Assam	1.2006	1.5062	1.3222	1.2006
548	Nagaur	Rajasthan	1.2006	1.5062	1.3222	1.2006
549	Kupwara	Jammu & Kashmir	1.2009	1.5065	1.3225	1.2009
550	Jamui	Bihar	1.2012	1.5069	1.3228	1.2012
551	Giridih	Jharkhand	1.2012	1.5069	1.3228	1.2012
552	Dahod	Gujarat	1.2012	1.5069	1.3228	1.2012
553	Dantewada	Chhattisgarh	1.2014	1.5072	1.3231	1.2014
554	Balaghat	Madhya Pradesh	1.2017	1.5075	1.3234	1.2017
555	Jaintia Hills	Meghalaya	1.2020	1.5079	1.3237	1.2020
556	Kokrajhar	Assam	1.2022	1.5082	1.3240	1.2022
557	Badgam	Jammu & Kashmir	1.2025	1.5086	1.3243	1.2025
558	Saharsa	Bihar	1.2028	1.5089	1.3246	1.2028
559	Tikamgarh	Madhya Pradesh	1.2028	1.5089	1.3246	1.2028
560	West Garo Hills	Meghalaya	1.2030	1.5092	1.3249	1.2030
561	Sidhi	Madhya Pradesh	1.2033	1.5096	1.3252	1.2033
562	Latehar	Jharkhand	1.2033	1.5096	1.3252	1.2033
563	Dhule	Maharashtra	1.2033	1.5096	1.3252	1.2033
564	South 24 Parganas	West Bengal	1.2039	1.5103	1.3257	1.2039
565	Bandipore	Jammu & Kashmir	1.2039	1.5103	1.3257	1.2039
566	Chatra	Jharkhand	1.2041	1.5106	1.3260	1.2041
567	Darbhanga	Bihar	1.2049	1.5116	1.3269	1.2049
568	Singrauli	Madhya Pradesh	1.2049	1.5116	1.3269	1.2049
569	Puruliya	West Bengal	1.2052	1.5119	1.3272	1.2052

District-Sector Matrix for APSL

570	West Sikkim	Sikkim	1.2052	1.5119	1.3272	1.2052
571	Shivpuri	Madhya Pradesh	1.2052	1.5119	1.3272	1.2052
572	Janjgir-champa	Chhattisgarh	1.2052	1.5119	1.3272	1.2052
573	Supaul	Bihar	1.2052	1.5119	1.3272	1.2052
574	Garhwa	Jharkhand	1.2052	1.5119	1.3272	1.2052
575	Barmer	Rajasthan	1.2055	1.5123	1.3275	1.2055
576	Karauli	Rajasthan	1.2055	1.5123	1.3275	1.2055
577	Kishanganj	Bihar	1.2063	1.5133	1.3284	1.2063
578	Nawada	Bihar	1.2066	1.5136	1.3287	1.2066
579	Khagaria	Bihar	1.2066	1.5136	1.3287	1.2066
580	Dhemaji	Assam	1.2068	1.5140	1.3290	1.2068
581	Upper Subansiri	Arunachal Pradesh	1.2068	1.5140	1.3290	1.2068
582	Purnia	Bihar	1.2068	1.5140	1.3290	1.2068
583	Dindori	Madhya Pradesh	1.2074	1.5147	1.3296	1.2074
584	Goalpara	Assam	1.2074	1.5147	1.3296	1.2074
585	Dholpur	Rajasthan	1.2082	1.5157	1.3305	1.2082
586	Purbi Champaran	Bihar	1.2084	1.5160	1.3308	1.2084
587	Madhubani	Bihar	1.2087	1.5163	1.3311	1.2087
588	Lohit	Arunachal Pradesh	1.2093	1.5170	1.3317	1.2093
589	Barwani	Madhya Pradesh	1.2093	1.5170	1.3317	1.2093
590	Madhepura	Bihar	1.2095	1.5174	1.3320	1.2095
591	Sitamarhi	Bihar	1.2101	1.5180	1.3326	1.2101
592	Uttar Dinajpur	West Bengal	1.2101	1.5180	1.3326	1.2101
593	Tirap	Arunachal Pradesh	1.2103	1.5184	1.3329	1.2103
594	Mewat	Haryana	1.2106	1.5187	1.3332	1.2106
595	Banka	Bihar	1.2106	1.5187	1.3332	1.2106
596	Katihar	Bihar	1.2106	1.5187	1.3332	1.2106
597	Morena	Madhya Pradesh	1.2106	1.5187	1.3332	1.2106
598	Lower Dibang	Arunachal Pradesh	1.2109	1.5191	1.3335	1.2109
599	Jhabua	Madhya Pradesh	1.2111	1.5194	1.3338	1.2111
600	Paschimi Champaran	Bihar	1.2114	1.5197	1.3341	1.2114
601	Anjaw	Arunachal Pradesh	1.2117	1.5201	1.3344	1.2117
602	Wokha	Nagaland	1.2130	1.5218	1.3359	1.2130
603	Narainpur	Chhattisgarh	1.2133	1.5221	1.3362	1.2133
604	Bijapur	Chhattisgarh	1.2136	1.5224	1.3365	1.2136
605	Sheohar	Bihar	1.2138	1.5228	1.3367	1.2138
606	Zunheboto	Nagaland	1.2147	1.5238	1.3376	1.2147
607	Sheopur	Madhya Pradesh	1.2149	1.5241	1.3379	1.2149
608	Bhind	Madhya Pradesh	1.2152	1.5245	1.3382	1.2152
609	Araria	Bihar	1.2152	1.5245	1.3382	1.2152
610	Nandurbar	Maharashtra	1.2160	1.5255	1.3391	1.2160
611	Baksa	Assam	1.2163	1.5258	1.3394	1.2163
612	Phek	Nagaland	1.2163	1.5258	1.3394	1.2163
613	Senapati	Manipur	1.2184	1.5285	1.3418	1.2184
614	Dhubri	Assam	1.2190	1.5292	1.3424	1.2190
615	Chandel	Manipur	1.2203	1.5309	1.3439	1.2203
616	Chunglang	Arunachal Pradesh	1.2211	1.5319	1.3448	1.2211
617	Churachandpur	Manipur	1.2219	1.5329	1.3457	1.2219
618	Lawngtlai	Mizoram	1.2230	1.5343	1.3469	1.2230
619	Alirajpur	Madhya Pradesh	1.2257	1.5377	1.3498	1.2257
620	Tuensang	Nagaland	1.2257	1.5377	1.3498	1.2257

District-Sector Matrix for APSL

621	East Kameng	Arunachal Pradesh	1.2265	1.5387	1.3507	1.2265
622	Peren	Nagaland	1.2273	1.5397	1.3516	1.2273
623	Longleng	Nagaland	1.2282	1.5407	1.3525	1.2282
624	Bishnupur	Manipur	1.2295	1.5424	1.3540	1.2295
625	Thoubal	Manipur	1.2352	1.5495	1.3602	1.2352
626	Ukhrul	Manipur	1.2371	1.5519	1.3623	1.2371
627	Imphal East	Manipur	1.2373	1.5523	1.3626	1.2373
628	Tamenglong	Manipur	1.2381	1.5533	1.3635	1.2381
629	South Garo Hills	Meghalaya	1.2390	1.5543	1.3644	1.2390
630	Mon	Nagaland	1.2398	1.5553	1.3653	1.2398
631	Kiphire	Nagaland	1.2417	1.5577	1.3674	1.2417
632	Kurung Kumey	Arunachal Pradesh	1.2449	1.5617	1.3709	1.2449

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END NOTES

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- ¹ Source: Fourth All-India Census of Micro, Small and Medium Enterprises, 2006-07, Ministry of Micro, Small & Medium Enterprises, Government of India, see: <http://fisme.org.in/document/FinalReport010711.pdf>
- ² Source: Keynote address by Dr. D Subbarao, August 2013, see: http://rbi.org.in/Scripts/BS_SpeechesView.aspx?Id=827
- ³ Source: Gupta (2011), see: http://www.rbi.org.in/scripts/bs_viewcontent.aspx?Id=2598
- ⁴ Source: The Indian Telecom Services Performance Indicators April-June 2013, TRAI, December 2013, see: <http://www.trai.gov.in/WriteReadData/PIRReport/Documents/Indicator%20Reports%20-%20Jun-02122013.pdf>
- ⁵ Rajan (2009), Page 21.
- ⁶ Rajan (2009), Page 6.
- ⁷ Ability to transfer and receive money from other accounts without any transaction limits.
- ⁸ Safety of account balances from the failure of the financial institution.
- ⁹ Security of the account from identity theft.
- ¹⁰ Burgess & Pande (2005).
- ¹¹ Honohan (2004).
- ¹² Beck, Demirguc-Kunt, and Levine (2007).
- ¹³ Rajan & Zingales (1996).
- ¹⁴ Source: World Development Indicators, World Bank, see: <http://data.worldbank.org/indicator/FS.AST.DOMS.GD.ZS/countries/IN-CN-XM-XP-XD?display=graph>
- ¹⁵ McKinsey and Company (2012).
- ¹⁶ Estimation methodology: Assuming that a third of India's GDP is attributable to rural GDP (or Rs. 31.5 lakh crore), each of the 265,000 Gram Panchayats on average have a GDP of Rs. 12 crore.
- ¹⁷ Source: IFMR Trust, Data indicates that the total Life Insurance potential for a branch servicing 2170 households is in the range of Rs. 75 crore, which works out to an average sum assured requirement of Rs. 3.5 lakh per household.
- ¹⁸ Based on a rural population of 83.3 crore spread over 265,000 Gram Panchayats.
- ¹⁹ All maps have been prepared on Quantum GIS Project 1.8.0. The shape file used plots 594 districts for India. While Census 2011 has 640 districts, RBI district-level data are available for 644 districts, and State level Planning Commission data (GDDP) are available for 556 districts, causing some of the newer districts to be excluded due to non-availability of data. In districts for which urban or rural population is given as zero as per Census 2011 (such as for Kolkata, Mumbai, Chennai, Hyderabad, Yanam, Mahe, Kinnaur, Lahaul & Spiti, and Nicobars), the minimum value for the metric being estimated has been applied as deemed appropriate in the estimation methodologies followed for each map. Due to adjustments made for the lack of complete data and other such anomalies, minor artefacts could be envisaged in the maps generated.
- ²⁰ Estimation methodology: Since data for unique number of individuals having at least one bank account is not available currently, this was estimated using the assumption that an individual belonging to an urban area holding a bank account would be holding on an average 4 bank accounts, and an individual belonging to a rural area holding a bank account would be holding on an average 1.5 bank accounts (Chattopadhyay (2011) indicates that Kolkata has 301 bank accounts per 100 adult persons, and from Census data it is known that 68% of urban households in India avail banking services). Using these assumptions, the overall India number was estimated to be 36% (of eligible population having at least 1 bank account, eligible population being individuals aged 18 years and above based on Census 2011). Data on number of savings bank accounts in Scheduled Commercial Banks per district was obtained from RBI for 2012.
- ²¹ Demirguc-Kunt & Klapper (2012).
- ²² Wright et al (2013) found that 25% of CSPs surveyed were not in a position to process transactions as they had no equipment, inadequate cash to meet customer withdrawal requests or had stopped offering BC services altogether.

²³ No.43: Payment System Indicators, Payment and Settlement Systems, RBI Bulletin, June 2013, see: http://www.rbi.org.in/scripts/BS_ViewBulletin.aspx?Id=14653

²⁴ Estimation Methodology: For rural, the sum of State-level rural branches of Scheduled Commercial Banks, all offices of StCBs and DCCBs, rural ATMs (assumed to be 10% of all State level ATMs, as is the case for whole of India), and rural BC Outlets, rural POS terminals have been summed up and allocated to each district within the state based on the proportion of rural de-duped bank accounts for the district (as estimated in Figure 2.1). For urban, the same has been calculated for State-level urban branches of Scheduled Commercial Banks, UCB branches, urban ATMs, urban BC Outlets and urban POS terminals. For urban and rural BC Outlets numbers have been compiled by MicroSave for the Committee based on information updated on the Ministry of Finance website (excludes Uttar Pradesh). While data for POS terminals is not available at a district level, the total for India has been attributed to districts on similar lines to ATMs. Data for Scheduled Commercial Banks, StCBs and DCCBs (branches) were obtained as on end March 2013 and 2012 from Statistical Tables Relating to Banks in India, 2012-13, and for UCBs for March 2013, from Report on Trend and Progress of Banking in India 2012-13. Data for ATMs and POS terminals are obtained for 2012-13 from RBI's ATM and Card statistics, June 2013, and Payment System Indicators, June 2013 respectively.

²⁵ Ablett et al (2007).

²⁶ Source: India Post, see: http://www.indiapost.gov.in/Money_Remittance_Services.aspx

²⁷ Source: Airtel Money, see: <http://www.airtel.in/money/limit-and-charges>

²⁸ Source: Data for Savings Deposit Rate and Term Deposit Rate >1 year is obtained from RBI Weekly Statistical Supplement, November 29, 2013, see:

http://rbidocs.rbi.org.in/rdocs/Wss/PDFs/05T_FWS061213.pdf; Data for Inflationary Expectation obtained from Ministry of Statistics and Programme Implementation, 12 December 2013 (Provisional annual inflation rate based on all India general CPI for November 2013 is 11.24%); Data for Fixed Deposit rates is obtained from State Bank of India, November 2013 (see: <https://www.sbi.co.in/user.htm?action=viewsection&id=0,16,384,385>)

²⁹ Estimation Methodology: For urban, credit access points are sum of urban Scheduled Commercial Bank branches and UCBs. For rural, it is the sum of rural Scheduled Commercial Bank branches, StCBs, DCCBs and 'viable' PACS. The State-level rural and urban credit access points have been allocated to each district based on the proportion of de-duped bank accounts in rural and urban areas for each district, as calculated for Figure 2.1. Data for 'viable' PACS is obtained from NAFSCOB for 2012 while the remaining is obtained as done for Figure 2.2.

³⁰ Estimation methodology: While latest figures of GDDPs are not available, the GSDP for 2013 (available as datasets at www.data.gov.in) for each of the states were apportioned to their respective districts based on specific weights. The weights were determined by arriving at an average of the contribution of each District GDDP to the State's GDDP for 3 consecutive years for which GDDP data was available. For those states which did not yet have 2012-13 GSDP, the 2011-12 GSDP was extrapolated based on Compound Annual Growth Rates of last 2 years for which data is available. The GSDP was apportioned to rural and urban GSDP based on broad assumptions guided by the methodology in Estimation of Rural and Urban Income, 2004-05, Ministry of Statistics and Programme Implementation (see: http://www.mospi.nic.in/mospi_new/upload/web_NAS_2011/pdf%20files/Estimate%20of%20Rural%20and%20Urban%20Income-Rev%5B1%5D.pdf), by using 2 state-level inputs, namely, rural to total workforce for each State, and rural bank deposits to total bank deposits in the State. The district level GDDPs were apportioned to rural and urban GDDP based on this. The District-level credit of Scheduled Commercial Banks is from Statement No. 16, Quarterly Statistics on Deposits and Credit of Scheduled Commercial Banks: March 2013, RBI (Data for other institutions is unavailable at the district level). The proportion of rural and urban credit at State level (available at Statement No. 9, Quarterly Statistics on Deposits and Credit of Scheduled Commercial Banks: March 2013, RBI) is applied across all districts within the State. For Gujarat, Tripura, Nagaland, Goa, Daman and Diu, Puducherry and NCT of Delhi, GDDPs for any year could not be found and therefore, the rural and urban GSDPs for each district were calculated using rural and urban per capita income for the State and weighting it for each district with the rural and urban populations.

³¹ Estimation methodology: The total contribution of MSMEs to the GDP is estimated to be 17% (Source: SMEs' role in India's Manufacturing Sector, IBEF, see: <http://www.ibef.org/download/SMEs-Role-in-Indian-Manufacturing.pdf>). Further, Demircuc-Kunt et al (2003) estimate that SMEs contribute 15.5% of GDP in low income countries and 39% in middle income countries), which is sub-divided into industry and services based on the respective sector's overall share in GDP. The sectors in Services include Trade, Hotels and Restaurants, Transport, Banking and Insurance, Real Estate, ownership of dwelling and business services. (Source: Statistical Tables Relating to Banks in India, 2012-13; Planning Commission).

³² Source: Data on credit to sectors of the economy is obtained from Table 1.9, Basic Statistical Returns of Scheduled Commercial Banks in India - Volume 41, March 2012; Data on GDP is obtained from Planning Commission.

³³ Source: Submission to the Committee by IFMR Trust states that rate of interest charged by informal sources for credit range from 24% to 150% in Dasapur of Ganjam District in Orissa. Based on this submission, we assume that an individual without access to a bank or an NBFC will borrow at 65%.

³⁴ Source: Data on NPAs and interest rates for a personal loan borrower is obtained from the ICICI Bank Annual Report 2012-13 (see Gross NPA Ratio for Personal Loans of ICICI Bank) and www.deal4loans.com respectively; Data on NPAs and interest rates for an SHG borrower is obtained from Nair & Tankha (2013) and EDA Rural Systems and Andhra Pradesh Mahila Abhivruddhi Society (AMPAS) (2006) respectively; Data on NPAs for a JLG borrower is obtained from MFIN Micrometer (March 2013) (PAR 180 for non-AP MFIs, FY 2012-13) and the interest rate is assumed to be 26%; The NPAs for a money lender borrower are assumed to be the same as the JLG rate and the interest rate is assumed to be 65% (refer End Note 33) ;Data on NPAs and interest rate for a home loan borrower is obtained from ICRA and MPS Performance Report, 2012 (An approximation without controlling for effect of LTV, seasoning, ticket size and nature of borrower, calculated on a set of MBS pools from multiple HFCs and some banks) and State Bank of India, December 2013 (SBI's Floating rate home loan, as on Dec 1, 2013) respectively.

³⁵ Adjusted for a uniform loan-to-value ratio.

³⁶ Return on 91 day T-Bills, as on December 16, 2013 is 8.77%.

³⁷ The observed default rate.

³⁸ Return on 365 day T-Bills, as on December 16, 2013 is 8.85%.

³⁹ Estimation methodology: While latest figures of GDDPs are not available, the GSDP for 2013 (available as datasets at www.data.gov.in) for each of the states were apportioned to their respective districts based on specific weights. The weights were determined by arriving at an average of the contribution of each District GDDP to the State's GDDP for 3 consecutive years for which GDDP data was available. For those states which did not yet have 2012-13 GSDP, the 2011-12 GSDP was extrapolated based on CAGRs of last 2 years for which data is available. The GSDP was apportioned to rural and urban GSDP based on broad assumptions guided by the methodology in Estimation of Rural and Urban Income, 2004-05, Ministry of Statistics and Programme Implementation (see: http://www.mospi.nic.in/mospi_new/upload/web_NAS_2011/pdf%20files/Estimatin%20of%20Rural%20and%20Urban%20Income-Rev%5B1%5D.pdf), by using 2 state-level inputs, namely, rural to total workforce for each State, and rural bank deposits to total bank deposits in the State. The district level GDDPs were apportioned to rural and urban GDDP based on this. The District-level deposits of Scheduled Commercial Banks is from Statement No. 16, Quarterly Statistics on Deposits and Credit of Scheduled Commercial Banks: March 2013, RBI (Data for other institutions is unavailable at the district level). The proportion of rural and urban deposits at State level (available at Statement No. 9, Quarterly Statistics on Deposits and Credit of Scheduled Commercial Banks: March 2013, RBI) is applied across all districts within the State. For Gujarat, Tripura, Nagaland, Goa, Daman and Diu, Puducherry and NCT of Delhi, GDDPs for any year could not be found and therefore, the rural and urban GSDPs for each district were calculated using rural and urban per capita income for the State and weighting it for each district with the rural and urban populations.

⁴⁰ Source: Data on schemes offered at India Post is obtained from India Post Annual Report, 2012-13 (Outstanding balance under all National Savings Schemes and Saving Certificates in India Post); Data on Employees Provident Fund is obtained from EPFO Annual Report 2011-12 (Investment Corpus as on 31st

March 2012); Data on NPS is obtained from the RBI Financial Stability Report, June 2013; Data on Mutual Funds is obtained from www.amfiindia.com; Data on Public Provident Funds is not available; NPS includes NPS-Main for the private sector as well as government, and NPS-Lite.

⁴¹ Source: Axis Bank BSBDA offered at a KGFS branch charges Rs.100 as annual account maintenance fees. This has been used to compute the charges on a savings account; Data on Fixed Deposit is obtained from State Bank of India; Data on Money Market Mutual Fund is obtained from UTI Money Market Fund. Further, to compute charges on a Money Market Mutual Fund, we assume that a new investor pays Rs.150 to the distributor, and up to 2.5% of investment as annual recurring expenses to the AMC; Data on Index Mutual Fund is obtained from www.quantumamc.com. Further, to compute the charges on an Index mutual fund, we assume that a new investor pays Rs.150 to the distributor, and up to 2.5% of investment as annual recurring expenses to the AMC; Data on Pension Fund is obtained from the NPS-Lite Offer Document, PFRDA (Account opening charge of Rs.35, Annual maintenance charge of Rs.50, and 0.0009% p.a as PFM charges); Data on Endowment Policy is obtained from the Life Insurance Corporation of India (An indicative example taken is LIC's Endowment Plus Unit Linked Plan see http://www.licindia.in/endowment%20plus_features.htm). Further, to compute charges on an Endowment Policy, we assume the following: allocation charge of 7.5% of the premium for 1st year, 5% for 2nd to 5th year, 3% thereafter; policy administration charges of Rs.30 per month for 1st policy year, increasing by 3% p.a throughout the policy term; fund management charge of 0.5% to 0.8% based on nature of fund.

⁴² Source: Handbook on Indian Insurance Statistics, 2011-12, IRDA.

⁴³ Source: Data on Annual Term Life Insurance Policy is obtained from IFMR Rural Finance; Data on Single premium Life Insurance Policy is obtained from IRDA Non-Linked Insurance Products, 2013; Data on General Insurance is obtained from IRDA Corporate Agent Regulations 2002, and IRDA Insurance Broker Regulations 2002.

⁴⁴ Source: Address and Area of Operation of Banking Ombudsman, RBI, see:

http://www.rbi.org.in/Scripts/bs_viewcontent.aspx?Id=164

⁴⁵ Rajan (2009), Page 13.

⁴⁶ See Acharya et al (2011) for a detailed discussion on the role of GSEs in the US credit crisis.

⁴⁷ The concept of Mutuals such as cooperatives and self-help groups are a notable exception to this principle though it is a subject of intense debate if such Mutuals are indeed able to offer their constituents a degree of protection that is comparable to that offered by more traditional structured financial institutions such as Commercial Banks which need to adhere to much stricter capital adequacy rules.

⁴⁸ The Doctrine of Indoor Management lays down that persons dealing with a company having satisfied themselves that the proposed transaction is not in its nature inconsistent with the memorandum and articles, are not bound to inquire the regularity of any internal proceeding, see:

<http://www.legalserviceindia.com/article/l203-Indoor-Management.html>

⁴⁹ Report of the suicide of an agent of an illegal finance company that could not meet its obligations, see: <http://www.indianexpress.com/news/chit-fund-agent-commits-suicide/1121648/>

⁵⁰ See Merton et al (1995) for a detailed discussion on the merits of the functional approach.

⁵¹ Rajan (2009), Page 9 refers to it as the "Grand Bargain" that needs to be unwound.

⁵² Handbook of Statistics of the Indian Economy, 2012-13.

⁵³ State Bank of India is by far India's largest Bank and has a network of 13,000 branches.

⁵⁴ Sahasranaman & George (2013) found that the direct origination by Scheduled Commercial Banks through bank branches produces very high costs in comparison to intermediation by localised lenders.

⁵⁵ The evidence appears to find that concentrated banking systems are more stable and less prone to crises because the argument is that they can be more tightly supervised and regulated - Australia and Canada which have such systems also happen to be two countries which almost entirely escaped the impact of the recent crisis. India has a similar banking system with the top five banks accounting for more than 90% of the assets of the banking system. It has the added feature that government owned banks account for more than 85% of the banking systems' assets.

⁵⁶ Sa-dhan & Citi Foundation (2012) found that the most serious challenge faced by the BC system is its commercial viability.

⁵⁷ Mishkin (2013).

⁵⁸ Federal Deposit Insurance Corporation (2012) found that in the period from 1984 to 2011 the share of US banking assets held by community banks declined from 38% to 14%. Over this period, the number of banks with assets less than USD 25 million declined by 96%. Meanwhile, the largest banks—those with assets greater than \$10 billion—grew eleven fold in size over this period, raising their share of industry assets from 27 per cent in 1984 to 80 per cent in 2011.

⁵⁹ Brownbridge (1998) points out that imprudent management of local financial institutions in Africa which led to their failures were indicative of serious deficiencies in bank regulation and supervision. When many of the banks were set up in the 1980s or early 1990s, banking legislation was outdated and Central Bank supervision departments were seriously understaffed.

⁶⁰ Fitch (2007) found that residential mortgages originated in the USA between 2006 and 2007 with high FICO scores under-performed substantially and that the credit scoring model was susceptible to fraud, not picking up on obviously suspicious items on credit reports. For instance, the FICO scores were not taking into account fraud or other alerts on credit reports, as also inconsistent social security numbers and dates of birth information. In another study analysing subprime mortgages between 1997 and 2006, Rajan et al (2010), find that as the level of securitisation increased, lenders originated loans that rated high on characteristics reported to investors, even if unreported variables implied a lower credit quality. They also find that over time lenders set interest rates based only on variables reported to investors, ignoring other credit relevant information, which resulted in interest rates becoming increasingly more unreliable predictors of default over time.

⁶¹ Peterson (2004) argued that large banks are more likely to have multiple layers of management and thus the oversight of loans in this context implies that they rely more on hard information. Berger et al (2005) find that larger banks are more likely to lend to more distance customers and communicate with the borrower more impersonally.

⁶² Investment Banks emerge from this structure and large money-centre banks in the USA such as J.P. Morgan and Morgan Stanley are good examples of such institutions. The large life insurance companies are the closest parallel to such a structure.

⁶³ Prizm currently owns and operates over 10,000 ATMs.

⁶⁴ “Why does Kenya lead the World in Mobile Money”, The Economist, May 2013, see:

<http://www.economist.com/blogs/economist-explains/2013/05/economist-explains-18>

⁶⁵ Kashyap et al (2002) argue that “since banks often lend via commitments, their lending and deposit-taking may be two manifestations of one primitive function: the provision of liquidity on demand. There will be synergies between the two activities to the extent that both require banks to hold large balances of liquid assets. If deposit withdrawals and commitment takedowns are imperfectly correlated, the two activities can share the costs of the liquid-asset stockpile”.

⁶⁶ RBI (2012) provides a detailed discussion, see:

<http://rbi.org.in/scripts/PublicationVisionDocuments.aspx?ID=664>

⁶⁷ Source: National Electronic Clearing Service, Procedural Guidelines, Reserve Bank of India, October 2008, see: <http://rbi docs.rbi.org.in/r docs/Content/PDFs/87706.pdf>

⁶⁸ Source: RBI FAQs on NEFT, November 12, 2012, see:

<http://www.rbi.org.in/scripts/FAQView.aspx?Id=60>

⁶⁹ Source: RBI FAQs on RTGS, August 30, 2013, see: <http://www.rbi.org.in/scripts/FAQView.aspx?Id=65>

⁷⁰ Source: NPCI FAQs on IMPS, see: <http://www.npci.org.in/impsFaqCust.aspx>

⁷¹ Source: White Label ATMs in India - Guidelines, June 20, 2012, see:

http://rbi docs.rbi.org.in/r docs/notification/PDFs/CWLA200612_F.pdf

⁷² Source: RBI Bankwise ATM/POS/Card statistics, August 2013, see:

<http://www.rbi.org.in/scripts/ATMView.aspx?atmid=30>

⁷³ Source: Issuance and Operation of Pre-paid Payment Instruments in India (Reserve Bank) Directions, 2009, see: <http://rbi docs.rbi.org.in/r docs/notification/PDFs/RFGF280409.pdf>

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- ⁷⁴ Source: RBI Master Circular - Mobile Banking Transactions in India - Operative Guidelines for Banks, July 1, 2013, see: <http://rbidocs.rbi.org.in/rdocs/notification/PDFs/116MCMB030713.pdf>
- ⁷⁵ Source: RBI Guidelines for engaging of Business Correspondents (BCs), September 28, 2010, see: <http://rbidocs.rbi.org.in/rdocs/notification/PDFs/CPC28092010.pdf>
- ⁷⁶ Source: UIDAI website, see: <https://portal.uidai.gov.in/uidwebportal/dashboard.do>
- ⁷⁷ Cama (2002).
- ⁷⁸ *Ibid.*, Page 9.
- ⁷⁹ *Ibid.*, Page 10.
- ⁸⁰ *Ibid.*, Page 11 - 13.
- ⁸¹ Source: World Development Indicators, World Bank, see: <http://data.worldbank.org/indicator/SI.POV.2DAY>
- ⁸² RBI (2012).
- ⁸³ Radcliffe & Voorhies (2012).
- ⁸⁴ McKinsey & Company (2010).
- ⁸⁵ Damodaran (2011).
- ⁸⁶ Source: Submission by Bank of Baroda to the Committee.
- ⁸⁷ Source: RBI Circular on BSBDA, August, 2012), see: <http://rbi.org.in/scripts/NotificationUser.aspx?id=7519&Mode=0>
- ⁸⁸ RBI (2010), see: http://www.rbi.org.in/Scripts/bs_viewcontent.aspx?id=2344
- ⁸⁹ “...relative shrinkage in balance sheet [of the RBI] may also have implications regarding loss of *seigniorage* revenue for the central bank. This is because currency notes and coins are the interest-free liability of the central bank towards public (i.e., public have in effect lent to the central bank such amount free of interest) which are then used by the central bank to purchase interest bearing assets. Thus, interest earned on these assets constitutes its seigniorage revenue. Therefore, if the central bank's operating costs are high which are more likely in an environment where central bank is required to intervene more, it may even incur losses on account of seigniorage revenue foregone. This may also have adverse implications for governments with chronic budget deficits as it would be deprived of the transfer of surplus to its treasury from the profitable central bank”, Cama (2002)
- ⁹⁰ Source: RBI Annual Report 2012-13, see: http://rbidocs.rbi.org.in/rdocs/AnnualReport/PDFs/P2_11RBA220813.pdf
- ⁹¹ Bank of International Settlements Committee on Payment and Settlement Systems (2004), Page 6, March 2004.
- ⁹² Financial Action Task Force (2013), Paragraph 67, page 28.
- ⁹³ *Ibid.*, Paragraph 39, page 18.
- ⁹⁴ Source: RBI KYC Guidelines Master Circular, July, 2013, Section 2.5, see: http://www.rbi.org.in/scripts/BS_ViewMasCirculardetails.aspx?id=8179#f9
- ⁹⁵ RBI guidelines on e-KYC, see: http://www.rbi.org.in/scripts/bs_circularindexdisplay.aspx/BS_CircularIndexDisplay.aspx?id=8397
- ⁹⁶ RBI Master Circular on Branch Authorisation, July, 2013, see: http://www.rbi.org.in/scripts/BS_ViewMasCirculardetails.aspx?id=8136
- ⁹⁷ RBI Master Circular on Branch Licensing - RRBs, July, 2013, Sections 4 and 8, see: http://www.rbi.org.in/scripts/BS_ViewMasCirculardetails.aspx?id=8184#8
- ⁹⁸ CGAP - Branchless Banking Agents in Brazil: Building viable networks 2010, see: <http://www.slideshare.net/CGAP/branchless-banking-agents-in-brazil-building-viable-networks-2010>
- ⁹⁹ RBI Trend and Progress in Banking in India 2012-13, Table IV.33, page 84, see: http://rbidocs.rbi.org.in/rdocs/Publications/PDFs/ORTP21112013_F.pdf
- ¹⁰⁰ In its interaction with the regional/zonal heads of PSU banks and RRBs in Uttarakhand, the Committee found that there is a saturation point for BCs' income after the initial opening of deposit accounts. The transactions based model does not generate sufficient revenue on account of various factors such as low population density, hilly terrain, and lack of awareness of banking products and government schemes.
- ¹⁰¹ Wright et al (2013).
- ¹⁰² Bill & Melinda Gates Foundation (2013).

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- ¹⁰³ International Telecommunication Union (2013).
- ¹⁰⁴ Submission by Dr. Aruna Sharma, Additional Chief Secretary, Rural Development, Government of Madhya Pradesh to the Committee.
- ¹⁰⁵ Workshop with BC Organisations, Committee on Comprehensive Financial Services for Small Businesses and Low Income Households, New Delhi, 8th November 2013.
- ¹⁰⁶ Financial Inclusion by Extension of Banking Services - Use of Business Correspondents (BCs), March 2012, RBI, see: <http://www.rbi.org.in/scripts/NotificationUser.aspx?id=7038&Mode=0>
- ¹⁰⁷ Submission from NABARD to the Committee.
- ¹⁰⁸ As on 31 March 2013, 64 Regional Rural Banks (RRBs) function in 635 districts with loans outstanding of Rs.1.37 lakh crore and deposits of Rs.2.11 lakh crore. Rural Cooperative Credit Institutions comprise 31 StCBs and 370 DCCBs that function through 92,432 PACS at the village level (of which 66813 are categorised as Viable). The credit outstanding for StCBs and DCCBs stood at Rs.77,644 crore and Rs. 1.57 lakh crore respectively, and they had deposits of Rs.86,430 crore and Rs.1.88 lakh crore as on March 31 2012. There are also 1606 UCBs across 330 districts with advances and deposits of Rs.1.8 lakh crore and Rs. 2.77 lakh crore respectively, as on March 31, 2013. Source: Data from NABARD, NAFSCOB, RBI.
- ¹⁰⁹ Submission from NABARD to the Committee.
- ¹¹⁰ Source: Certificates of Authorisation issued by the Reserve Bank of India under the Payment and Settlement Systems Act, 2007, see: <http://www.rbi.org.in/scripts/PublicationsView.aspx?id=12043>
- ¹¹¹ From discussions at the Workshop with BC Organisations, Committee on Comprehensive Financial Services for Small Businesses and Low Income Households, New Delhi, 8th November 2013.
- ¹¹² Source: Vermont status on banking and insurance, see: <http://www.leg.state.vt.us/statutes/fullchapter.cfm?Title=08&Chapter=079>
- ¹¹³ Source: Certificates of Authorisation issued by the Reserve Bank of India under the Payment and Settlement Systems Act, 2007, see: <http://www.rbi.org.in/scripts/PublicationsView.aspx?id=12043>
- ¹¹⁴ Bank of International Settlements Committee on Payment and Retail Systems (2012), pg. 82.
- ¹¹⁵ *Ibid.*
- ¹¹⁶ Source: Issuance and Operation of Pre-paid Payment Instruments in India (Reserve Bank) Directions, 2009, see: <http://rbidocs.rbi.org.in/rdocs/notification/PDFs/RFGF280409.pdf>
- ¹¹⁷ Tarazi and Breloff (2010).
- ¹¹⁸ “New Legal and Regulatory Framework for Payment Arrangements and Payment Agents, see: <http://www.pinheironeto.com.br/publicacao/4072>
- ¹¹⁹ Bank of International Settlements Committee on Payment and Retail Systems (2012), pg. 84.
- ¹²⁰ Based on the Committee’s interaction with Mrs. Chanda Kochhar, MD & CEO.
- ¹²¹ There are examples of BRAC Bank in Bangladesh setting up a subsidiary Bkash, which is focussed on remittance services through mobile banking.
- ¹²² Submission from Oxigen to the Committee.
- ¹²³ The FSLRC has proposed a separate regulatory framework for SIFIs. This is likely to have implications for all Government-owned Banks and the larger Private Sector Banks.
- ¹²⁴ Citigroup (2013).
- ¹²⁵ Source: Financial Stability Report, Issue Number 7, Table 2.4, Page 32, Reserve Bank of India, June 2013.
- ¹²⁶ Source: Page 2, Financial Stability Report, Issue Number 7, Reserve Bank of India, June 2013.
- ¹²⁷ Source: Handbook of Statistics of the Indian Economy, 2012-13.
- ¹²⁸ Pradhan (2013).
- ¹²⁹ Radhakrishna (2007).
- ¹³⁰ Thorat (2011).
- ¹³¹ Used on a second-loss basis, Rs. 3,073 crore could have covered over Rs. 30,000 crore of SHG portfolio.
- ¹³² Puhazhendhi (2013).
- ¹³³ Submission from Jana Foundation to the Committee.
- ¹³⁴ Submission from Bank of Baroda to the Committee.

¹³⁵ Source: Submission from CRISIL to the Committee.

¹³⁶ Adjusted GNPA equals GNPA in non-priority sector including 30% of restructured standard assets (excluding state power utilities)/advances outstanding in the non-priority sectors.

¹³⁷ Based on submission from Bank of Baroda to the Committee and on the findings of the Committee on Financial Inclusion, 2008, headed by C.Rangarajan (Annexure IV, page 129). The submission by Bank of Baroda concludes that rural Bank branches become cost-competitive at loans above Rs.100,000.

¹³⁸ Submission from Axis Bank to the Committee.

¹³⁹ Berger et al (2004), Page 11.

¹⁴⁰ Based on submissions from Bank of Baroda and CAFRAL to the Committee.

¹⁴¹ The Banker, June 2013 issue, Pages 16 - 21.

¹⁴² Agarwal & Hauswald (2010).

¹⁴³ Provisioning for NPAs is lower in India compared to many countries including France, US, Russia, China, Thailand, Brazil, and Mexico. This coupled with higher gross NPA levels, means that the Indian banking system's net NPA levels as a percentage of capital are weaker than that in most developing economies.

¹⁴⁴ Source: MFIN's Micrometer data for all non-Andhra Pradesh MFIs FY 2011-12 and 2012-13. The operation of AP based MFIs were severely curtailed following the AP State Government action in 2010.

¹⁴⁵ Submission from CAFRAL to the Committee.

¹⁴⁶ Of the 57 billion Euros in subsidy offered to farmers in 2010, there was no interest subsidy or loan waiver component and about 70% was handed out as direct cash subsidy.

¹⁴⁷ USA paid out direct subsidies of about \$10 billion in 2010. It was careful to ensure that these subsidies were decoupled from actual production related activities so as to ensure that there is minimum distortion in market prices and production decisions of the farmers, see: <http://www.ers.usda.gov/topics/farm-economy/farm-commodity-policy/government-payments-the-farm-sector.aspx#.UnPAEnBmim4>

¹⁴⁸ Pendley et al (2007) find that residential mortgages originated in 2006 and 2007 with high FICO scores under-performed substantially and that the credit scoring model was susceptible to fraud, not picking up on obviously suspicious items on credit reports. Rhyne (2001) finds that complete dependence on scoring for credit risk assessment can lead to adverse outcomes such as in the case of a finance company in Bolivia which went bankrupt after introducing a credit appraisal system for microcredit borrowers that was based only on a credit scoring model that did not take subjective risk factors into account.

¹⁴⁹ Wade & Magleby-Lambert (2008).

¹⁵⁰ Submission from CAFRAL to the Committee.

¹⁵¹ Source: Master Circular on Para-banking Activities, July 2013, see:

http://www.rbi.org.in/scripts/BS_ViewMasCirculardetails.aspx?id=8196#2

¹⁵² Guidelines on Managing Risks and Code of Conduct in Outsourcing of Financial Services by banks, November 2006, see: <http://www.rbi.org.in/commonman/English/Scripts/Notification.aspx?Id=40>

¹⁵³ Mester (1997) provides a good overview of the benefits of credit scoring.

¹⁵⁴ Demyanyk (2008) found that during the crisis credit scores did not predict either the true risk of default of a subprime mortgage loan or the crisis as a whole.

¹⁵⁵ Peterson & Rajan (2002).

¹⁵⁶ "Citigroup to Expand Credit-Card Business in India", Wall Street Journal, May 25, 2012, see: <http://online.wsj.com/news/articles/SB10001424052702304707604577426011248201708>

¹⁵⁷ "Credit bureau of MFIs brings details of small borrowers to the fore", Business Standard, October 15, 2013, see:

http://www.business-standard.com/article/finance/credit-bureau-of-mfis-brings-details-of-small-borrowers-to-the-fore-113101500111_1.html

¹⁵⁸ Source: Chapter 19, Draft Indian Financial Code, Report of the FSLRC

¹⁵⁹ RBI Master Circular on Priority Sector Lending: Targets and Classification, July 2013, see:

<http://rbidocs.rbi.org.in/rdocs/notification/PDFs/107010713PSLFL.pdf>

¹⁶⁰ Mukherjee (2013).

¹⁶¹ Mishkin (2013).

¹⁶² In Maharashtra there are another set of cooperative financial institutions which are called "Pata Sansthas" or "Pata Pheris". There are entirely unregulated, very small, completely self-funded, but highly effective and well managed. There are about 40,000 of them in Maharashtra, have deposits of over Rs 70,000 crore and give loans to small businesses in rural and urban areas. Almost all of the 50,000 autorickshaws plying in Mumbai have been financed by them.

¹⁶³ Source: Handbook of Statistics on the Indian Economy, RBI, 2012-13.

¹⁶⁴ Gilbert et al (2013).

¹⁶⁵ Source: "The Importance of Effective Corporate Governance", by Kevin Moore, Federal Reserve Bank of Kansas City, Community Banking Connections, Fourth Quarter 2012., see:

<http://www.communitybankingconnections.org/articles/2012/Q4/Importance-of-Effective-Corporate-Governance.cfm>

¹⁶⁶ Based on the submission from ACCION to the Committee.

¹⁶⁷ Source: RBI has directed all UCBs to complete CBS implementation by December 31, 2013. NABARD has also initiated a CBS project for all cooperatives.

¹⁶⁸ Clarke (2010).

¹⁶⁹ Rajan (2009), Page 8.

¹⁷⁰ The Pennsylvania Department of Banking and Securities for example regulates more than 225 state-chartered banks, savings associations, trusts and credit unions; licenses and registers about 14,000 non-bank lenders, including mortgage brokers and lenders, auto sales finance companies, debt management companies, check cashers, pawnbrokers and money transmitters; enforces compliance with state and federal laws for non-bank lenders so that consumer and business borrowers will have confidence in the fairness of their transactions; and licenses and registers more than 190,000 securities companies and professionals doing business with Pennsylvania residents, including agents, broker-dealers, investment advisors and notice filers, and investment advisor representatives.

¹⁷¹ Based on discussions with Professor Robert DeYoung of the University of Kansas School Of Business and the lead author of the 2004 Chicago-Fed study on "The Past, Present, and Probable Future for Community Banks".

¹⁷² Source: Report on Trend and Progress of Banking in India 2012-13, RBI.

¹⁷³ Acharya (2013).

¹⁷⁴ Submission from CRISIL to the Committee.

¹⁷⁵ European Commission (2012).

¹⁷⁶ Kumar et al (1997), Page 63.

¹⁷⁷ Rajan (2009), Page 13.

¹⁷⁸ Acharya and Oncu (2013).

¹⁷⁹ Vide their circular SEBI/CFD/DIL/DIP/12/2004/8/4 dated 8th April 2004.

¹⁸⁰ Source: Highlights 2012-13, NABARD, see: www.nabard.org

¹⁸¹ Member Lending Institutions under CGTMSE are all scheduled commercial banks, specific RRBs, NSIC, NEDFi and SIDBI, see: http://www.cgtsi.org.in/Eligibility_criteria.aspx

¹⁸² Sane & Thomas (2013).

¹⁸³ The reported overdues of 10 large MFIs in the State amounted to Rs.3174 crore by the end of March 2011. This would have adversely affected the 2.7 crore borrowers in Andhra Pradesh who relied on microfinance institutions operating in the State. Studies find that the crisis resulted in a drop in average household expenditure in Andhra Pradesh by 19% (Sane and Thomas (2013)). The crisis also contaminated the SHG portfolio of banks in the State, where at the end of July 2011, about 17% of linked groups had defaulted on their repayments, constituting a portfolio at risk of 16.7% (Puhazhendhi (2013)). A study by MicroSave that looked at the effect on AP clients from the cessation of MFI activity found that more than 70% of respondents had to borrow from other sources and more than 10% reported distress sale of assets.

¹⁸⁴ Submission from MFIN to the Committee.

¹⁸⁵ Only loans given to households falling within specific income levels can qualify - For rural households, the annual income must not exceed Rs.60,000, and for urban households, the income must

not exceed Rs.120,000. This criterion completely disregards the limitations of traditional lending mechanisms in overcoming challenges that the borrower segment has, namely, the difficulty in estimating their incomes, the lack of reliable credit history records, and the difficulty in collateralising their assets.

¹⁸⁶ Loan amount cannot exceed Rs. 35,000 in the first cycle and Rs. 50,000 in subsequent cycles, and the total indebtedness of the borrower must not exceed Rs. 50,000. Tenure of the loan cannot be less than 24 months for loans in excess of Rs.15,000.

¹⁸⁷ A borrower cannot be a member of more than one SHG/JLG. No more than two MFIs can lend to a borrower. This essentially places a restriction on choice of the borrower, who if having availed a JLG loan, will now be forced to build a savings history for 6 months before he or she can decide to carry out the activity for which she needs financing support. The decision on whether a borrower has the capacity to repay the loan she is seeking or not, is best left to the borrower who is taking the loan, and the institution that is willing to underwrite such a loan with the help of available credit bureau information.

¹⁸⁸ Loans given for income generation should constitute at least 70% of the total loans of the MFI and the remaining 30% can be for other purposes such as housing repairs, education, medical and other emergencies. The distinction between income-generation and consumption is a superficial one and questions the credibility of the borrower in her ability to make rational choices for her household. Improving one's living conditions, investing in education or health, or even purchasing a two-wheeler can have welfare-enhancing prospects for the household and the decision on how to prioritise on expenditures is best left to the borrower household.

¹⁸⁹ Rajan (2009), Proposal 6.

¹⁹⁰ Statement by Dr. Raghuram Rajan on taking office on September 4, 2013.

¹⁹¹ A number of countries like Japan, South Korea, Columbia, Costa Rica, Brazil and China have used directed lending to achieve a variety of goals. For instance, studies like Calomiris et al (1994) and Horiuchi & Sui (1992) note the influence of directed lending in the growth of Japanese industries. Similarly, Amsden (1989) argues that subsidy components of directed lending were used in South Korea as a disciplining mechanism to enforce strict performance standards on firms.

¹⁹² Source: Master Circular on Priority Sector Lending, July 2013. RBI, see:

<http://rbidocs.rbi.org.in/rdocs/notification/PDFs/107010713PSLFL.pdf>

¹⁹³ *Ibid.*

¹⁹⁴ Estimation Methodology: Data from the IFMR Trust shows that there are 1713 small and marginal farmer households (owning land for cultivation up to 5 acres) in the village of Karambayam, Tamil Nadu. The total acreage amounts to 2926 acres. Assuming that all farmers in the village cultivate paddy on their lands for 2 crop seasons in a year, and given that the scale of finance for paddy for one crop season is about Rs.10000/acre (which is a conservative reflection of the costs of cultivation) in the region, and assuming that 100% of the cultivation cost is financed with credit, there is a demand for Rs.1.95 crore by small and marginal farmers at a Gram Panchayat level (since the Karambayam area covers a population that is spread across approximately 3 Panchayats). If this were applied to all of the 2.46 lakh Panchayats in India, the total credit demand by small and marginal farmers can reasonably be estimated at Rs.4.8 lakh crore. Further, an analysis of the per acre cost of cultivation for some of the principal crops in 5 major producing states for each crop, indicate that it ranges from about Rs.8000 for arhar, Rs.13000 for paddy, to Rs.29000 for sugarcane (www.data.gov.in).

¹⁹⁵ Submission from Jana Foundation to the Committee.

¹⁹⁶ Source: RBI Handbook of Statistics on Indian Economy 2012-13.

¹⁹⁷ Source: All India Debt and Investment Survey (2002) and Sarangi (2010).

¹⁹⁸ Sarangi (2010).

¹⁹⁹ RBI Master Circular on Interest Rates on Advances, July 2013, see:

<http://rbidocs.rbi.org.in/rdocs/notification/PDFs/73MCIRA01072013F.pdf>

²⁰⁰ Speaking at the Fourth Annual Credit Information Conference in Chennai, organised in December 2013, R K Dubey, chairman and managing director of Canara Bank said, "The way our credit on retail is working, we are hopeful that the gross NPA rate to be below three per cent". He said that all the 4,500

branches of Canara Bank are using the data of CIBIL while taking a decision on the loan applications and this has helped the Bank to avoid lending to customers with higher risk. Source: http://www.business-standard.com/article/finance/canara-bank-reduced-retail-gross-npa-using-cibil-information-says-dubey-113120400940_1.html.

²⁰¹ Source: RBI Reports on Trends and Progress of Banking in India, 2011-12.

²⁰² Adjusted GNPA equals GNPA in non-priority sector including 30% of restructured standard assets (excluding state power utilities)/advances outstanding in the non-priority sectors.

²⁰³ Thorat (2011) found that there has “.. been a distinct shift in the preference of commercial banks towards indirect finance (IF) vis-à-vis direct finance (DF) to agriculture. Of the total credit outstanding to agriculture, the share of indirect finance was 16% in 2000 which increased to 28% in 2006 and stood at 24% in 2010.” The report also finds that credit deepening in the indirect finance category has been much more pronounced than the direct finance category.

²⁰⁴ *Ibid.*

²⁰⁵ CRISIL Inclusix is a comprehensive index launched by CRISIL for measuring the progress of financial inclusion in the country, down to the district-level. CRISIL Inclusix, whose methodology is similar to other global indices, such as UNDP's Human Development Index, measures financial inclusion on the three critical parameters of basic banking services - branch penetration, deposit penetration, and credit penetration. The index uses parameters that focus only on the 'number of people' whose lives have been touched by various financial services, rather than on the 'amounts' deposited or loaned. The As of now, the CRISIL Inclusix index covers 632 districts over a three-year timeframe (2009-2011).

²⁰⁶ Estimation Methodology: GDDP numbers have been calculated as explained in End Note 30. In this absence of district level GDP data, as is the case for all districts of Gujarat and some other districts in the country, district level weights are calculated by using state level GDP numbers and adjusting them using the CRISIL Inclusix to estimate district GDP. In the case of some Union Territories, when there is no GDP data available, those districts have been left empty.

²⁰⁷ Most credit bureaus including Credit Information Bureau (India) Limited (CIBIL) work on the principle of reciprocity, which means that only members who had submitted all their credit data could access credit information reports.

²⁰⁸ Source: Annual Report 2011-12, Warehousing Development and Regulatory Authority.

²⁰⁹ Holden (1997).

²¹⁰ Field & Toreno (1994).

²¹¹ India Urban Space Foundation (2011).

²¹² Clarke et al (2012).

²¹³ Collier et al (2009).

²¹⁴ Source: IMD Pune, see: <http://www.imdpune.gov.in>

²¹⁵ Source: IMD, see: http://www.imd.gov.in/doc/obs_surface.htm

²¹⁶ Collier et al (2009).

²¹⁷ Clarke et al (2012).

²¹⁸ Cole et al (2009).

²¹⁹ Source: Draft Report/Guidelines for setting up Automatic Weather Stations (AWSs) and Automatic Rain Gauge (ARGs) & their accreditation, standardisation, validation and quality management of weather data for Implementation of Weather Based Crop Insurance Scheme (WBCIS)

²²⁰ Liberti & Mian (2010) and Fleisig (2006).

²²¹ Alvarez de la Campa (2011).

²²² Safavian et al. (2006).

²²³ Love et al (2013).

²²⁴ Rajan (2009), Page 164.

²²⁵ Source: Entry of NBFCs into Insurance Business, February 2004, see:

http://www.rbi.org.in/scripts/BS_NBFCNotificationView.aspx?Id=1481

²²⁶ Source: IRDA AML/CFT Guidelines 2013, see:

http://www.irda.gov.in/ADMINCMS/cms/Circulars_Layout.aspx?page=PageNo1879&flag=1

²²⁷ Source: SEBI's circular on Uniform KYC for the Securities Markets, October 2011, see:

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- http://www.sebi.gov.in/cms/sebi_data/attachdocs/1317809779732.pdf
- ²²⁸ Source: Circular No: PFRDA/2013/18/PDEX/11 dated October 24, 2013, Circular on Acceptance of e-KYC as valid process for KYC verification, SEBI's Circular No. CIR/MIRSD/ 09 /2013.
- ²²⁹ Source: IRDA Licensing of Corporate Agent Regulations 2002, see:
http://www.irda.gov.in/ADMINCMS/cms/frmGeneral_Layout.aspx?page=PageNo67&flag=1&mid=Insurance%20Laws%20etc.%20%3E%3E%20Regulations
- ²³⁰ Maximum of 40% of premium for first year and 5% for renewal for life insurance; and 15% of premium for general insurance, Source: IRDA Licensing of Corporate Agents Regulations 2002.
- ²³¹ Source: IRDA Insurance Brokers Regulations 2002, see:
http://www.irda.gov.in/ADMINCMS/cms/frmGeneral_Layout.aspx?page=PageNo117&flag=1&mid=Insurance%20%3E%3E%20General%20%3E%3E%20Regulations
- ²³² Banks are permitted to be brokers as per the Licensing of banks and brokers regulation 2013, see:
http://www.irda.gov.in/ADMINCMS/cms/frmGeneral_Layout.aspx?page=PageNo2038&flag=1&mid=Insurance%20Laws%20etc.%20%3E%3E%20Regulations
- ²³³ Maximum of 30% of premium for first year and 5% for renewal for life insurance; and 10-12.5% of premium for general insurance.
- ²³⁴ Source: Draft Guidelines on Entry of Banks into Insurance Broking business, 2013, see:
http://www.rbi.org.in/scripts/BS_PressReleaseDisplay.aspx?prid=30091
- ²³⁵ Source: Referral Arrangement with Banks circular 2003, see:
<http://www.irdaindia.org/referralargmnt.htm>
- ²³⁶ Source: RBI Master Circular - Para-banking Activities, 2013, see:
http://www.rbi.org.in/scripts/BS_ViewMasCirculardetails.aspx?id=8196
- ²³⁷ Source: SEBI Circular for Mutual Funds, Cir/ IMD/ DF/13/ 2011, see:
http://www.sebi.gov.in/cms/sebi_data/attachdocs/1314009686727.pdf
- ²³⁸ Source: SEBI Investment Advisors Regulations, 2013, see:
http://www.sebi.gov.in/cms/sebi_data/attachdocs/1358779330956.pdf
- ²³⁹ Source: RBI - Entry of State Cooperative Banks (SCBs) / District Central Cooperative Banks (DCCBS) into insurance business, 2005, see:
<http://www.rbi.org.in/scripts/NotificationUser.aspx?id=2244&Mode=0>
- ²⁴⁰ Source: Renewal of AMFI Registration Number (ARN)/ Employee Unique Identification Number (EUIN), see: http://portal.amfiindia.com/showhtml.aspx?page=renew_arn
- ²⁴¹ Source: RBI Circular on Financial Inclusion by Extension of Banking Services - Use of Business Correspondents, 2010, see: <http://rbidocs.rbi.org.in/rdocs/notification/PDFs/CPC28092010.pdf>
- ²⁴² Kapoor & Shivshankar (2012).
- ²⁴³ "Syndicate Bank, Tata AIG launch micro-insurance scheme", 27 January 2011, The Hindu Business Line, see:
<http://www.thehindubusinessline.in/2011/01/28/stories/2011012851560700.htm>
- ²⁴⁴ All Ayushman Bima Yojana, Allahabad Bank, see:
<https://www.allahabadbank.in/english/Ayushman.aspx>
- ²⁴⁵ Broker implies that the principal business must be insurance broking for the customer. Banks are permitted to be brokers as per the Licensing of banks and brokers regulation 2013, see:
http://www.irda.gov.in/ADMINCMS/cms/frmGeneral_Layout.aspx?page=PageNo2038&flag=1&mid=Insurance%20Laws%20etc.%20%3E%3E%20Regulations
- ²⁴⁶ Maximum of 40% of premium for first year and 5% for renewal for life insurance; and 15% of premium for general insurance.
- ²⁴⁷ IRDA Circular on Referral Arrangement, IRDA /Cir/003/2003, January 2003, see:
<http://www.irdaindia.org/referralargmnt.htm>; IRDA Notification, July 2010, see:
http://www.irdaindia.org/notification/sharing_database_gaz.PDF
- ²⁴⁸ Distribution of Mutual Fund products by NBFCs: DNBS (PD) CC No. 84 / 03.10.27 / 2006-07.
- ²⁴⁹ Halan et al (2013).

- ²⁵⁰ “Saradha raised deposits from 1.7 mn people, probe finds”, June 20, 2013, Live Mint, see: <http://www.livemint.com/Specials/TQWJ1auPZMCYnZqC4tK7VN/Saradha-raised-deposits-from-17-million-people-probe-finds.html>
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- ²⁵² Housing Loans by Commercial Banks - LTV Ratio, Risk Weight and Provisioning, December 2010, see: <http://www.rbi.org.in/scripts/NotificationUser.aspx?Id=6161&Mode=0>
- ²⁵³ Tata Institute of Social Sciences (2005) found that that the major reason for the suicides in the region is the heavy indebtedness that the cultivators.
- ²⁵⁴ Package of Relief Measures to the Vidarbha Region in Maharashtra, July 2006, see: <http://rbiidocs.rbi.org.in/rdocs/notification/PDFs/71485.pdf>
- ²⁵⁵ Mid-Term Review of the Annual Policy for the year 2007- 08 - Recovery Agents engaged by banks, see: http://www.rbi.org.in/Scripts/bs_viewcontent.aspx?Id=1237
- ²⁵⁶ “Direct selling agents keep customers an unhappy lot”, December 2008, Financial Express, see: <http://www.financialexpress.com/news/Direct-selling-agents-keep-customers-an-unhappy-lot/402618>
- ²⁵⁷ Halan et al (2013).
- ²⁵⁸ Source: Guidelines on Fair Practices Code for NBFCs - Grievance Redressal Mechanism, see: <http://rbi.org.in/Scripts/NotificationUser.aspx?Mode=0&Id=7866>
- ²⁵⁹ Source: Master Circular- Loans and Advances - Statutory and Other Restrictions, July 2013, see: http://www.rbi.org.in/scripts/BS_ViewMasCirculardetails.aspx?id=8135#25
- ²⁶⁰ Source: Guidelines on Fair Practices Code for NBFCs, March 2012, see: <http://rbi.org.in/scripts/NotificationUser.aspx?Id=7089&Mode=0>
- ²⁶¹ Spindler (2011).
- ²⁶² Ben-Shahar & Schneider (2010).
- ²⁶³ Cain et al (2011).
- ²⁶⁴ Kinsey & McAlister (1981); Mandell (1973).
- ²⁶⁵ Anagol & Hugh Hoikwang Kim (2012).
- ²⁶⁶ Financial Literacy and Credit Counselling Centres (FLCCs)- Model Scheme, February 2013, see: <http://www.rbi.org.in/scripts/NotificationUser.aspx?Id=4822&Mode=0>
- ²⁶⁷ Source: Data obtained from RBI
- ²⁶⁸ Financial Literacy Centres (FLCs) - Guidelines, June 2012, see: http://www.rbi.org.in/scripts/BS_CircularIndexDisplay.aspx?Id=7259
- ²⁶⁹ Source: Data obtained from RBI.
- ²⁷⁰ Fernandes, et al (2013).
- ²⁷¹ A scoping study of financial literacy training programmes in India, conducted by Umapathy et al (2012) finds that although there is an improvement in beneficiaries’ numeracy levels, the percentage of people with knowledge of formal financial products and conceptual understanding of savings and borrowing is still very low. Other studies have analysed the impact of specific, focussed financial education interventions. For instance, Cole et al (2011) find that offering a 2-hour financial education program has no effect on the general population and only a modest increase for those with low initial levels of education. Similarly a study by Field et al (2010) also based in India, find that a 2-day training session has no impact on the probability of saving by women working in the informal sector.
- ²⁷² Source: Chapter III, Policy Environment, Report of Trends and Progress of Banking in India 2012-13; see: <http://rbiidocs.rbi.org.in/rdocs/Publications/PDFs/03RTP211113C.pdf>
- ²⁷³ Page xviii, Executive Summary, FSLRC Report Volume I. Report of the FSLRC.
- ²⁷⁴ For the complete set of requirements under the Responsible Lending Conduct guidelines, see: [http://www.asic.gov.au/asic/pdf/lib.nsf/LookupByFileName/rg209-published-2-September-2013.pdf/\\$file/rg209-published-2-September-2013.pdf](http://www.asic.gov.au/asic/pdf/lib.nsf/LookupByFileName/rg209-published-2-September-2013.pdf/$file/rg209-published-2-September-2013.pdf)
- ²⁷⁵ The term ‘Substantial Hardship’ is not defined in the National Credit Act. Australia does not propose to give any definitive formulation of what substantial hardship means. It is expected that the law about the meaning of ‘substantial hardship’ will develop and become clearer as cases come before the courts

and judgments are handed down. However, the use of relevant benchmarks are suggested for this purpose:

Below a level where they do not have funds to meet their realistic living costs.

Below an amount based on a particular objective indicator (e.g. the Henderson Poverty Index plus a certain margin).

Below the maximum applicable level of government benefits for a person.

²⁷⁶ Personal advice is considered to be suitable if each of the following three elements is satisfied: the providing entity must make reasonable inquiries about the client's relevant personal circumstances; the providing entity must consider and investigate the subject matter of the advice as is reasonable in all the circumstances; and the advice must be 'appropriate' for the client.

²⁷⁷ Source: FOS, Australia. For the complete case study, see:

http://www.fos.org.au/centric/the_circular_5_home/responsible_lending_conduct_obligations_maladministration.jsp

²⁷⁸ The entire case can be read here:

<http://www.lawlink.nsw.gov.au/scjudgments/2006nswsc.nsf/6ccf7431c546464bca2570e6001a45d2/a8634decd74561e2ca25720a007da27d?OpenDocument>

²⁷⁹ Source: Issue 111, Ombudsman News, FOS, August-September 2013 UK, see: <http://www.financial-ombudsman.org.uk/publications/ombudsman-news/111/111-older-people.html#cs1>

²⁸⁰ Comprehensive Guidelines on Derivatives: Modifications, November 2011, see:

<http://www.rbi.org.in/scripts/NotificationUser.aspx?ld=6793&Mode=0>

²⁸¹ This is similar to the process adopted by the SEC and DOJ and the Ministry of Justice in the UK with regard to the corporate offence to prevent bribery- firms are required to have in place "adequate procedures" and if they can demonstrate that adequate procedures were in place, the same is a defence for the firm.

²⁸² The Banking Ombudsman Scheme is fully funded and managed by India's Central Bank - bank customers can lodge a complaint with any of the 15 offices of the Banking Ombudsman situated across the country, on 27 different grounds of "deficiency in banking services".

²⁸³ Mystery shopping is a supervisory tool used by regulators across the world, and is considered to be among the more intrusive approaches to supervision of market players. The Financial Services Authority (FSA) undertook a mystery shopping review of the quality of investment advice in the retail banking sector between March-September 2012, specifically to check whether firms were giving their customers suitable investment advice. The exercise spanned 231 mystery shops across 6 large firms in UK. The representatives of the exercise posed as customers looking to invest a lump sum and were seeking investment advice. While three-fourths of the mystery shop customers received good advice, the quality of advice was under question for the remaining one-fourth. All 6 firms exhibited some form of 'poor advice' - where customers were at a risk of suffering detriment as a result of being recommended products that were not suitable for their needs and circumstances. Poor advice reflects a breach of FSA's Conduct of Business (COBS) Rules and the FSA's Principles for Businesses, see: http://www.fsa.gov.uk/static/pubs/other/thematic_assessing_retail_banking.pdf

²⁸⁴ Rajan (2009), Page 142, Chapter 6.

²⁸⁵ "Special unit to keep tabs on financial institutions", Times of India, August 18, 2013:

http://articles.timesofindia.indiatimes.com/2013-08-18/chennai/41422444_1_special-unit-financial-institutions-several-people

²⁸⁶ Objective - Friends of Police, see: http://friendsofpolice.com/FOP_Concept_Objectives.htm

²⁸⁷ Source: RBI BSR Table No. 3.1, see: <http://www.rbi.org.in/scripts/PublicationsView.aspx?id=15076>

²⁸⁸ It is important to recognise that there may exist a great variation in the spread of a given population which makes population density more salient than the actual population for the purpose of measurement. Accordingly, for measuring the progress towards ubiquity of payment network, the suggested metric combines area and density (patches of 1 square KM with population density of 400 or more).

²⁸⁹ Source: G20 Financial Indicators, GPFI, see:

<http://www.gpfi.org/sites/default/files/G20%20Set%20of%20Financial%20Inclusion%20Indicators.pdf>

²⁹⁰ Demirguc-Kunt & Klapper (2012).

²⁹¹ The vision statement refers measuring density of formal credit providers per 10,000 people. However, given the possible variation in the spread of the reference population of 10,000, it is important to combine area and density. The referred benchmark (25 sq. KM with population of 10,000 or more), however, is kept less conservative than the average measure.

²⁹² Source: Australia FOS Annual Report, 2012-13, see:

http://www.fos.org.au/centric/home_page/publications/annual_review.jsp

²⁹³ One example of this approach is the FSP (Financial Services for the Poor) Maps produced by the Gates Foundation, see: <http://fspmaps.com/>

²⁹⁴ Source: AsiaPop, see:

<http://www.worldpop.org.uk/data/summary/?contselect=Asia&countselect=India&typeselect=Population>

²⁹⁵ Source: CMIE Consumer Pyramids, see: <http://www.consumer-pyramids.com/>

²⁹⁶ For making precise & robust estimates at the district level, a large sample size is required (e.g. the District Level Household and Facility Survey (DLHS-3) undertaken by the Ministry of Health and Family Welfare, Govt. of India sampled approximately 7,20,000 households for generating district level estimates on health outcomes), which necessitates employing great deal of financial and human resources. However, it is possible to derive reliable district level estimates from a sample similar to the size of NSSO (which produces robust state level estimates) based on Small Area Estimation (SAE) technique as mentioned in Chandra et al, 2010. The SAE technique uses auxiliary information available at the district level (from the Census and other sources) and utilises a model based approach to estimate the district level statistics from the state level representative sample such as the NSSO.