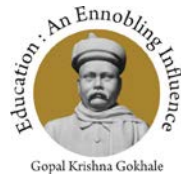


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CONSTRAINTS

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This thesis has not been submitted by me elsewhere for the award of any degree or diploma-part or full. The information gathered by me elsewhere for the thesis is original, true and factual. This material as has been obtain from other source has been duly acknowledged in the thesis. I hereby request, to consider the thesis for the award of the degree of 'Doctor of Philosophy'.

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Abstract

Poverty alleviation has been on the agenda of all the governments, and various methodologies and schemes have been devised to take care of this. Microfinance has been considered an important tool for this purpose, and the Grameen bank experience in Bangladesh has given an impetus to this. In India, the central government has devised various schemes for supporting the poor and to eradicate poverty. Microfinance has also grown, but the demand is outstripping the supply. Actions such as the Andhra Pradesh government ordinance and the consequences of it, has raised concerns about the sustainability of Microfinance as a means of poverty alleviation goal.

This builds a strong case of studying microfinance in India with special focus of supply side constraints. Given the constraints on the availability of funds for the microfinance industry, several innovative methods have been deployed to raise finances. This thesis is a combination of qualitative and quantitative analysis of innovations in microfinance in India, and their impact. The quantitative characterization of the MFIs has been done to understand the strengths and weakness in the delivery process and their effectiveness. The AP crisis, its genesis, the root causes and the implications have been analysed in detail, to understand the weaknesses of the MFI system as well as the regulatory framework. The continued existence of informal financing, despite various government schemes and the microfinance industry has been analysed. We conclude that microfinance provide meaningful support to the poverty alleviation and women empowerment initiatives, it needs support in terms of better and stable regulatory framework, and higher level of easier funding possibilities.

Acronym and Abbreviations

Acronym	Definition
ABS	Asset Backed Securities
ADEMI	Association for the Development of Micro-Enterprises
AFC	Agricultural Finance Corporation
AIACF	All India Association of Chit Funds
AIDIS	All India Debt and Investment Survey
AIRCSC	All India Rural Credit Survey Committee
AKMI	Association of Karnataka Microfinance Institutions
AML	Asmitha Microfin Limited
ANBC	Adjusted Net Bank Credit
BAAC	Bank for Agriculture and Agricultural Cooperatives
BBC	British Broadcasting Corporation
BIS	Bank for International Settlement
BPL	Below Poverty Line
BRAC	Bangladesh Rural Advancement Committee
BSFL	Bandhan Financial Services Limited
CAGR	Compounded Annual Growth Rate
CARE	Co-operative for Assistance and Relief Everywhere
CASA	Current and Saving Accounts
CBO	Collateralized Bond Obligation
CDO	Collateralized Debt Obligation

Acronym	Definition
CDR	Corporate Debt Restructuring
CGAP	Consultative Group for Assisting the Poor
CIS	Credit Information System
CLO	Collateralized Loan Obligation
CMO	Collateralized Mortgage Obligation
CRISIL	Credit Rating Information Services of India Limited
DCCB	District Central Cooperative Banks
DFID	Department for International Development
ECB	External Commercial Borrowings
EFSE	European Fund for South-east Europe
FINCA	Foundation for International Community Assistance
FMO	Netherlands Development Finance Company
FSP	Financial Service Provider
FSS	Financial sustainability
GLP	Gross loan portfolio
GOI	Government of India
HCI	Headcount index
HDRO	Human Development Report Office
IASC	Indian Association for Savings and Credit
ICRA	Indian Credit Ratings Agency
IFC	International Finance Corporation

Acronym	Definition
IFMR	Institute of Finance and Management Research
ILO	International Labour Organization
INR	Indian Rupee
IPO	initial public offering
IRDP	Integrated Rural Development Programme
JLG	Joint Liability Group
LDB	Land Development Banks
LLR	Loan Loss Ratio
MACS	Mutually Aided Co-operative Societies
MBT	mutually benefit trusts
MFB	Microfinance banks
MFI	Microfinance Institutions
MGNREGA	Mahatma Gandhi National Rural Employment Guarantee Act
MHP	Minimum Holding Period
MIS	Management Information System
MIV	Microfinance Investment Vehicles
MIX	Microfinance Information exchange
MMFL	Madura <i>Microfinance Ltd</i>
MOSEC	Multi-Originator Securitisation
MPI	Microfinance Penetration Index
MPPI	Microfinance Poverty Penetration Index

Acronym	Definition
MRR	Minimum Risk Retention
MSE	Micro & Small Enterprises
NABARD	National Bank for Agriculture and Rural Development
NBFC	Non-Banking Financial Companies
NCAER	National Council of Applied Economic Research
NCD	Non-Convertible Debentures
NDC	National Development Council
NGO	non-governmental organizations
NOF	Net Owned Fund
NPA	Non-Performing Assets
NREGA	National Rural Employment Guarantee Act
NRLM	National Rural Livelihood Mission
OER	Operating expense ratio
OID	Over-Indebtedness early warning Index
OSS	Operational Self Sufficiency
OTD	Originate to Distribute
PACS	Primary Agricultural Cooperative Credit Societies
PAR	Portfolio at Risk
PHBK	Programme Hubungan Bank Danksms
PIB	Press Information Bureau
PPP	1985 purchasing power parity

Acronym	Definition
PSL	Priority Sector Lending
PTC	Pass Through Certificates
RBI	Reserve Bank of India
ROA	Return on Assets
ROE	Return on Equity
ROSCAS	Rotating Savings and Credit Associations
RRB	Regional Rural Banks
SBLP	SHG- Bank Linkage Programme
SEBI	Securities and Exchange Board of India
SGSY	Swarnajayanti Gram Swarozgar Yojana
SHG	Self Help Groups
SIDBI	Small Industries Development Bank of India
SKDRDP	Shree Kshetra Dharmasthala Rural Development Project
SKS	Swayam Krishi Sangam
SML	SHARE Microfin Limited
SPV	special purpose vehicle
UNCDF	United Nations Capital Development Fund
UNDP	United Nations Development Programme
UNICEF	United Nations Children's Fund
UPP	Ultra-poor program

Table of Contents

Abstract.....	5
Acronym and Abbreviations	6
Table of Contents.....	11
List of Figures	17
List of Table.....	19
Acknowledgements.....	20
Preface.....	21
1. Introduction	26
1.1 Chapter Summary.....	27
1.2 Background	27
1.3 Microfinance Defined	29
1.4 Evolution of Microfinance	30
1.4 Indian Story of adoption of Microfinance techniques.....	31
1.5 Evolution of Microfinance Industry – global perspective.....	35
1.5.1 Delivery Models of Microfinance	36
1.5.1.1 Grameen Bank Model	36
1.5.1.2 Joint Liability Group Model.....	37
1.5.1.3 Individual Lending Model.....	38
1.5.1.4 The Group Approach.....	38
1.5.1.5 Village Banking.....	39

1.6.	Microfinance Delivery Models in India	39
1.6.1	SHG-Bank Linkage Program (SBLP) model:.....	40
1.6.2	MFI Models:	42
1.6.2.1	NGO MFIs:	44
1.6.2.2	Non-profit Section 25 MFIs:.....	44
1.6.2.3	Mutual Benefit MFIs.....	45
1.6.2.4	For-Profit MFIs.....	45
1.6.2.5	Characteristics of MFIs:.....	46
1.6.3	Banking Correspondents (BC) Models:.....	46
1.6.4	Post Offices:.....	47
1.7	Funding in MFIs.....	47
1.8	Conclusions	51
1.9	References:	53
2.	Poverty and Microfinance	56
2.1	Chapter Summary.....	57
2.2	Poverty	57
2.2.1	Approaches to Poverty	59
2.2.2	Poverty Measurement	62
2.2.3	Poverty Snapshot	66
2.3	Conclusions	72
2.4	Reference.....	74

3	An analysis of performance of Microfinance Institutions (MFIs) in India post Andhra Pradesh Crisis with comparison to its peers globally	76
3.1.	Chapter Summary.....	77
3.2.	Data and Methodology:	78
3.3.	MFI market:.....	80
3.4.	Portfolio Size:.....	81
3.5.	Costs:.....	84
3.7	Sustainability:.....	92
3.8	Portfolio Quality.....	97
3.9	Interest Rates:	99
3.10	Chapter Conclusion	104
3.11	References	106
4	A Critical Evaluation of SKS Microfinance Fiasco: Comparison with Crisis in Global Microfinance Industry.....	109
4.1.	Chapter Summary:.....	110
4.2.	Introduction:	110
4.3.	Quantitative Analysis of SKS:	113
4.4.	Innovative methods in SKS:.....	114
4.5.	SKS' non-profit social mandates:	118
4.6.	SKS Governance and Investors:.....	120
4.7.	Crises around the world:	121

4.8.	The Andhra Pradesh Crisis:.....	124
4.9.	Conclusions:.....	132
4.10.	References	134
5.	Securitization of Microloans – An Indian Perspective of an innovation in Microfinance Industry.....	139
5.1.	Chapter Summary:.....	140
5.2.	Introduction:.....	141
5.3.	Methods of Funding:	144
5.4.	Securitization: new saga in MFIs funding	146
5.5.	Securitization structure:.....	151
5.6.	Securitization of micro loans in India:	157
5.6.	Risks of Securitization	160
5.7.	Benefits of Securitization in Microfinance context.....	162
5.8.	Conclusions:.....	163
5.9.	References:.....	165
6.	Alternative ways of managing supply side in microfinance: Study of RRBs, Cooperative societies, Chit Funds and informal lenders	169
6.1.	Chapter Summary:.....	170
6.2.	Introduction:.....	170
6.3.	Primitive framework for poverty reduction	171
6.3.1	Primary Agricultural Cooperative Credit Societies (PACs).....	171

6.3.2	Land Development Banks (LDB).....	172
6.3.3	Credit Unions/Credit cooperative societies	172
6.3.4	Regional Rural Banks (RRBs).....	173
6.4.	Phases of Reforms and Mission Drift	174
6.5.	Chit Funds	177
6.7	Existence of informal finance:	181
6.8	Conclusions:.....	185
6.9	References:.....	187
7.	Conclusions	192
7.1	Review of research objectives:.....	193
7.2	Empirical findings from the research:.....	193
7.3	Recommendations:.....	199
7.4	Limitations of Data and Design:	200
7.5	Further Research:	201
7.6	Policy Implications and Contributions:.....	201
7.7	References:.....	205
8	Appendix	206
	Appendix 8.1.....	207
	Appendix 8.2.....	209
	Appendix 8.3.....	211
	Appendix 8.4.....	212

Appendix 8.5.....	213
Appendix 8.6.....	214
Appendix 8.7.....	215
Appendix 8.8.....	216
Appendix 8.9.....	217
Appendix 8.10.....	218
9. Bibliography:.....	219

List of Figures

Figure 1-1: Life-History map for Amin, Male, 61 years old, rural Bangladesh	28
Figure 1-2: Evolution of Microfinance Industry.....	36
Figure 1-3:No. of SHGs provided with the bank loans (in millions)	43
Figure 1-4: Comparison of clients of formal and informal MFIs	44
Figure 2-1: Development as good change – from ill-being to wellbeing	58
Figure 2-2: India Poverty Headcount Index at \$1.25 a day	63
Figure 2-3: Lorenz Curve of Income distribution.....	64
Figure 2-4: Money Distribution	67
Figure 2-5: World Income map.....	68
Figure 2-6: Regional Share of the World’s extreme poor (%).....	67
Figure 2-7: Gini Coefficient of India	69
Figure 2-8: Gini Coefficient of World	71
Figure 2-9: Helping to improve Donor Effectiveness in Microfinance	72
Figure 3-1: CRILEX – the M-CRIL India MFI Growth Index.....	81
Figure 3-2: Gross Loan Portfolio of MFIs	82
Figure 3-3: GLP of MFIs with large portfolios for FY 2011	82
Figure 3-4: GLP of India and peer countries for FY 2011	83
Figure 3-5: Percentage of female borrowers for FY 2011	83
Figure 3-7: Average Cost per loan (USD) in 2011	85
Figure 3-8: Average cost of loan per USD100 loan in 2011	85
Figure 3-9: Average Cost per borrower (USD) in FY2011	86
Figure 3-10: Borrowers per staff members for FY 2011	86
Figure 3-11: Average LLR across countries for FY 2011	87
Figure 3-12: Average write off ratio for peer in FY 2011	89

Figure 3-13: Average ROE in FY 2011	89
Figure 3-14: Average ROA in FY 2011	90
Figure 3-15: DE Ratio for MFIs in FY2011	90
Figure 3-16: Profit margin for MFIs in FY2011	91
Figure 3-17: OER for FY 2011	92
Figure 3-18: OSS for MFIs in FY2011	94
Figure 3-19: Finex Index by MCRIL	98
Figure 3-20: PAR (30) for FY2011	99
Figure 3-21: Historical PAR (30)	100
Figure 3-22: Comparison of countries Prime Lending Rates and Portfolio Yield in 2011 ...	102
Figure 3-23: Comparison of countries Prime Lending Rates and Portfolio Yield in 2010 ...	102
Figure 4-1: SKS stock run up in Indian Rupee (INR)	112
Figure 4-2: Share Prices and Price to Earnings (PE)	113
Figure 4-3: Return on Equity (ROE)	114
Figure 4-4: Effect of SKS innovation	117
Figure 4-5: Personnel expenses/loan portfolio	118
Figure 4-6: Gross Loan Portfolio (USD)	121
Figure 4-7: Write off ratios of SKS and India	125
Figure 5-1: Comparison of regular MFI portfolio with securitized portfolio from IFMR	160
Figure 6-1: Analysis of count of RRBs.....	177
Figure 6-2: Number of SHGs holding Savings Accounts 2008-2013	182

List of Table

Table 1-1: Borrowing pattern in India	33
Table 1-2: Client outreach—borrowers with outstanding accounts (in millions).....	43
Table 3-1: OSS as of 2011	94
Table 3-2: Other Sustainability ratios	95
Table 3-3: MFI Characteristics	103
Table 4-1: Top Five MFIs with their Gross Loan Portfolio in Mn USD (SKS is excluded).115	
Table 4-2: International Microfinance Crises	122
Table 4-3: Andhra Pradesh Crisis effects	127
Table 4-4: Variables used in OID index	130
Table 5-1: Private Equity deals in India	144
Table 5-2: Summary of a few Microfinance deals in India	152
Table 5-3: IFMR Capital Pioneer Trust I.....	159
Table 5-4: IFMR Capital MOSEC I.....	159
Table 6-1: Performance of RRBs.....	178
Table 6-2: The Share of Rural India Debt by Source	179
Table 6-3: Share of Institutional and Non-Institutional Agencies in outstanding cash debt of Major States in Rural Areas.....	183
Table 6-4: Summary of Informal Financing	184

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Preface

“The test of our progress is not whether we add more to the abundance of those who have much; it is whether we provide enough for those who have too little.” - Franklin D. Roosevelt.

The World Bank defines poverty as “The inability to attain a minimum standard of living”, which was “consumption-based” and comprised of two elements: “the expenditure necessary to buy a minimum standard of nutrition and other basic necessities and a further amount that varies from country to country, reflecting the cost of participating in everyday life of society” (World Bank Group, 2012).

India has housed so many civilizations and endured so many invasions. It is filled with both, tremendous wealth and extreme poverty. Poverty in India is widespread and is prevalent in nearly every city and village, and bolstered by significant income disparity between the rich and poor.

This thesis deals with microfinance and various methods employed for poverty reduction. There is enormous literature stating that demand for microfinance is too huge. Globally as of 2008, 1.3 billion People (22.4 per cent) live on less than \$1.25 a day (World Bank Group, 2012). Increasing the income poverty line to \$2.50 a day raises the global income poverty rate to about 43 per cent, or 2.5 billion people (World Bank Group, 2012). Now the world population stand about 7.2 billion and helping such a huge population count is a daunting task.

With all praises, criticism and discussions about microfinance, microfinance has reached one hundred and ninety million individuals worldwide in 2009 (Reed, 2011). This shows that microfinance is able to serve a very small percentage of the demand from poor people. Hence this research topic is relevant to address how the microfinance can be used to meet the

demand. We try to understand what are the hurdles to meet the goals and how there can be innovation in terms of microfinance delivery.

There were active microfinance systems in India more than 3,000 years ago (Young, 2006) and various rotating savings systems and credit associations have been in existence for more than 500 years in Africa and South America under the names of Susus (Ghana), Pasanaku (Bolivia) or Tandas (Mexico).

Many initiatives and methods have been adopted across globe. Every year, several conferences and summits discuss about poverty reduction. World Bank has initiated Millennium development goals, several governments maintaining separate budget for poverty reduction. It might be unwise to not acknowledge the efforts put in world wide. In India, Government initiatives dominated the microfinance space till 1970s, post which microfinance revolution picked up.

Since independence of India, all the governments have been planning to reduce poverty and enhance the living conditions of the population. There were several initiatives in place by government to aid its poverty alleviation plans.

Over a 30-year period, microfinance has transformed itself drastically. Started initially by what is often referred to as a “civil society”, microfinance was largely built upon initiatives from non-governmental organizations (NGOs), and cooperatives. We have many success stories for microfinance. Well-known example is Grameen Bank. It started as a small pilot project with NGO-features in Chittagong, Bangladesh, in 1976. The Grameen Bank is now a well-established financial institution under the legal status of a cooperative, serving over six million clients in Bangladesh, with hundreds of replications worldwide. Such initiatives, alongside a thousand more, were fairly disconnected. Things have improved a lot now, with a lot of information flow and best ideas are being adopted by many.

Armendariz & Labie (2011) has classified microfinance trends as follows:

- *Change in lending methodology:* microfinance gained popularity for having introduced solidarity groups and village banking. Now it has many more approaches.
- With joint liability, mostly among women borrowers.
- *Change in the supply of financial products:* Microfinance has changed from regular micro credit to supply of other financial services.
- *A larger and a more diverse pool of suppliers:* There are many more providers of microfinance other than NGOs, cooperatives. There are newer social investors coming in along with profit motivated investors giving rise to Microfinance Investment Vehicles (MIVs).
- *A radical transformation in supervision and regulation:* stringent supervision for fully regulated suppliers is being set-up in many countries
- *Fundamental change in financial priorities:* Microfinance providers are moving from self-sustenance to profit generation.

The objectives of the thesis are as follows:

1. To understand the characteristics of Indian MFIs like profitability, interest rates, size, etc.
2. To gain understanding of other methods of microfinance funding other than borrowing from banks/donors and then lending it to poor.
3. Understanding any financial innovations in microfinance sector.
4. Understanding the conventional methods of microfinance like Credit unions, Regional rural banks, etc. and practices adopted by these institutions.

Thesis Outline

This thesis consists of seven chapters which analyses the supply side of microfinance in India along with the references to global microfinance

Chapter one introduces to the various forms of microfinance in India and world. We analyse various forms of funding for raising capital for microfinance sector. *Chapter two* analyses poverty concepts which connect dots with microfinance purpose of helping poor get out of poverty. *Chapter three* analyses how the MFIs are performing in India with comparison to its peer across globe. There is a special reference to pre and post AP crisis which was widely debated by practitioners and academicians. *Chapter four* is a case study of SKS microfinance which ventures into capital markets for raising money. Its IPO was discussed as success and soon as failure. *Chapter five* looks into another innovative way of raising money from securitization, this was widely criticized worldwide for credit crisis. But it has made its way to Indian microfinance industry. We analyse its design and implementation in microfinance space. *Chapter six* discusses alternative ways of microfinance which include formal, semi-formal and informal finance. MFIs failed to deliver the promise and money lenders still continuing their business with poor raising a wide discussion amongst many practitioners for the success of microfinance. *Chapter seven* concludes the research with summarizing the empirical findings, policy implications and scope for further research. Microfinance provides a meaningful support for poverty eradication.

References:

- Armendariz, B., & Labie, M. (Eds.). (2011). *The handbook of microfinance* (pp. 1-27). World scientific.
- Reed, L. R. (2011). State of the microcredit summit campaign report 2011. *Microcredit Summit Campaign. Washington DC.*
- World Bank Group (Ed.). (2012). *World Development Indicators 2012*. World Bank Publications.
- Young, B. (2006). The Normative Power of Ideas in Microfinance Discourses: From Microcredit to the Commercialization of Microfinance. In *1st GARNET Conference Global Financial and Monetary Governance, the EU, and Emerging Market Economies, Amsterdam University.*

1. Introduction

“Small loans can transform lives, especially the lives of women and children. The poor can become empowered instead of disenfranchised. Homes can be built, jobs can be created, businesses can be launched, and individuals can feel a sense of worth again.” -

Natalie Portman, Academy Award[®]-nominated actress

1.1 Chapter Summary

This chapter introduces microfinance and establishes the foundation of the research. All the aspects of this introduction are linked to the objective of the research. Discussion about evolution of microfinance industry is followed by Indian story of Microfinance where we discuss about initiatives that were launched even before independence. We touch upon various delivery models in world and India which takes us to one of the objectives of analysing the microfinance institutions. This leads us to analyse the funding structure that microfinance institutions have and get introduced some of the newer concepts of its funding.

1.2 Background

Microfinance has been in discussion lately, whether it is for praise from the Norwegian Nobel committee or criticism from the BBC as a “death trap”. Despite various issues and fiascos worldwide, microfinance provides very useful economic functions and is a deeper subject than it appears. As it is rightly said by Norwegian Nobel Committee (2006):

“Lasting peace cannot be achieved unless large population groups find ways to break out of poverty. Microcredit is one such means.... Microcredit has proved to be an important liberating force in societies where women in particular have to struggle against repressive social and economic conditions. Yunus’s long-term vision is to eliminate poverty in the world. That vision cannot be realised by means of micro-credit alone. But Muhammad Yunus and Grameen Bank have shown that, in the continuing efforts to achieve it, micro-credit must play a major part”.

Poor people are not given enough support from the society they live in.

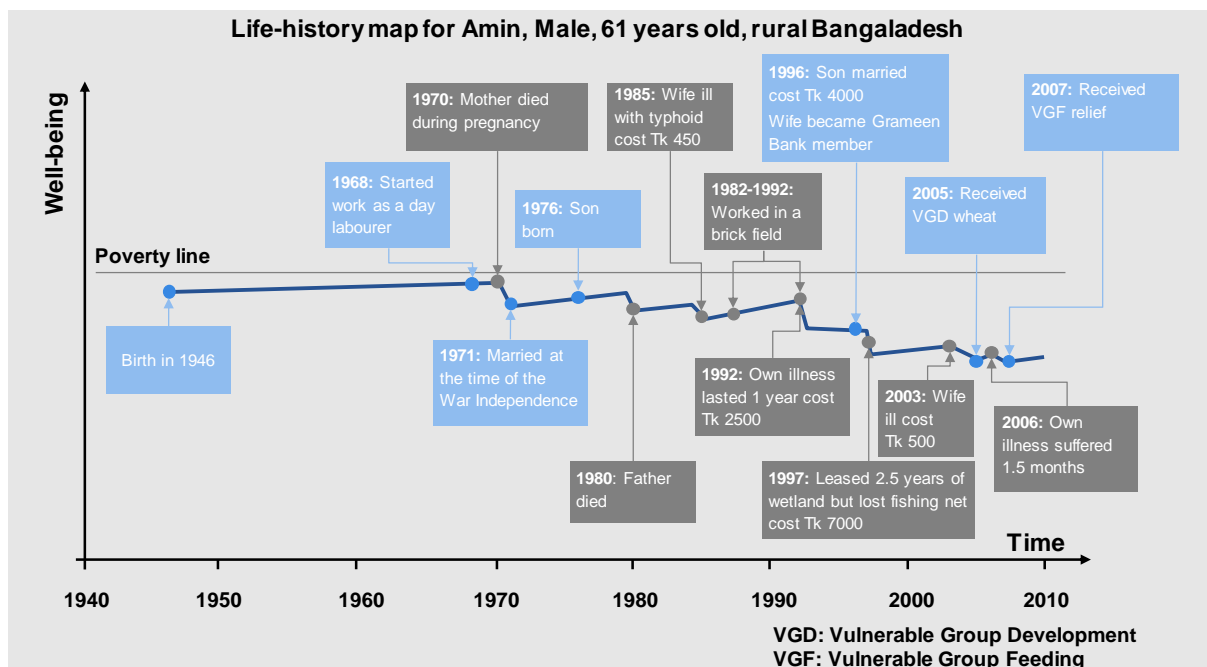
“To me, the poor are like Bonsai trees. When you plant the best seed of the tallest tree in a six-inch deep flower pot, you get a perfect replica of the

tallest tree, but it is only inches tall. There is nothing wrong with the seed you planted; only the soil-base you provided was inadequate. Poor people are bonsai people. There is nothing wrong with their seeds. Only society never gave them a base to grow on.” (Yunus, 2007).

Society needs to be developed in such a way that poor people are assisted so that they do not pass on the poverty to next generation.

Let us look at the typical life trajectory of a chronically poor person (Figure 1-1)

Figure 1-1: Life-History map for Amin, Male, 61 years old, rural Bangladesh



Source: Adapted from Davis et al. (2010). All names and locality names have been changed to retain anonymity.

Amin from Bangladesh lives with his wife Rohima and their only income source is a small shop that they run in in the local village bazaar. They regularly go without food because of their poverty and both suffer from chronic illnesses. Amin was born in poverty and his situation did not improve over time, despite ten years of salaried work in a brick factory and a loan from the Grameen Bank. On the contrary, a number of events (the War of Independence) in the 1970s, illnesses, the expenses for their son’s wedding) have combined to keep him trapped in chronic poverty. His life history demonstrates a snapshot of a poor person’s life.

Professor Muhammad Yunus did a great contribution to help poor people to avoid these kind of situation. He was the founder of micro-credit. In 1974, while teaching Economics at Chittagong University in Bangladesh, he led a field trip to Jobra, a poor village next to the University. There he interviewed a woman who made bamboo stools and found out that she needed to borrow 15 pence from a moneylender to buy bamboo for each stool made. The moneylender charged up to 10% interest a week and as a result she was left with only 1 pence profit. If she had been able to borrow at lower rates, she could have increased her profit and raised herself above subsistence level. Shocked by this, Yunus decided to find out how many in Jobra village were borrowing from the moneylenders. There were 42 and Yunus decided to lend £17 to them. Yunus found that this small amount of money not only helped them to survive, but also helped them create the initiative and enterprise needed to pull them out of poverty. This was to be the start of what was to become Grameen Bank (Yunus, 1998, p. 3 - 12). He was pleasantly surprised to see 98 percent of the borrowers pay their loans back (Yunus, 1998, p. 81). Yunus focussed more on lending to women. He said that money brought in a household by a woman brought more benefits to the family than a man (Yunus, 1998, p. 88). Yunus and his Grameen bank concept were adopted world-wide, based on the apparent benefits. In the mid 1990's, Yunus started to promote microfinance as a panacea for poverty reduction (Hulme, 2008). Ledgerwood (1999, p. 7) countered that microfinance is not a panacea for poverty alleviation and that poorly designed microfinance can make things worse by disrupting informal markets that have reliably provided financial services to poor households over the centuries.

1.3 Microfinance Defined

The term Microfinance was defined as a sphere of finance comprising microcredit, micro savings and other micro financial services as per Hans Dieter Seibel who coined this term in 1990 (Seibel, 2005). Since then, there were numerous definitions for microfinance like,

provision of broad range of services such as savings, deposits, loans, payment services, money transfers and insurance to poor and low income households and their micro-enterprises (Asian Development Bank, 2000). The definition of microfinance by Asian Development Bank is not restricted to the below poverty line people, but it includes low income households also. In narrower sense though, microfinance is often referred to as microcredit for tiny informal businesses of micro entrepreneurs, the services being mainly delivered by socially oriented non-governmental organisations (NGOs) (Christen, Lyman & Rosenberg 2003, p. 6). In general, microfinance is the way of improving the conditions of poor people by providing them financial assistance in terms of microcredit or other financial services. Microfinance is a collection of lower cost, short term financial products for people who do not have access to traditional financial services including individual and group loans, savings, cheque cashing, payment orders, micro insurance, loan guarantees and remittances (Diop et al, 2007, p. 27). Sharma (2007) defines microfinance as the provision of services which include savings, loans, payment services, money transfers and insurance to poor, low income households and microenterprises. Platteau et al (2009) say that microfinance is the practice of providing small scale financial services to the world's poor, mainly loans and savings and increasingly other products like insurance and money transfer. In this research, we restrict the definition of microfinance as the supply of micro loans or credit to the poor.

1.4 Evolution of Microfinance

The history of micro credit is traced back to the early 1700s when Jonathan Swift, an Irishman, had the idea to create a banking system that would reach the poor. He created the Irish Loan Fund, which gave small short term loans to the poorest people in Ireland who were not being served by commercial banks, in hopes of creating wealth in the rural areas of Ireland. This idea took years to catch on, but then grew quickly and expanded globally. By the 1800's, the Irish Loan Fund had over 300 banks for the poor and was serving over 20% of

the Irish population. In the 1800s similar banking systems showed up all across Europe targeting the rural and urban poor. Jonathan acknowledged that under the then prevailing lending system, the poor would never be able to create wealth; they would be stuck in a cycle of borrowing and repaying without ever making personal economic development. He founded the first rural credit union in 1864 to break this trend. This system was different compared to the previous banks, as it was owned by its members, provided reasonable lending rates and was created to be a sustainable means of community economic development. The idea of credit unions spread globally and by the end of the 1800s, these microcredit systems had spread all the way from Ireland to Indonesia.

1.4 Indian Story of adoption of Microfinance techniques

The main source of interest in microfinance in India was from agriculturalists who were interested in the management of financial resources of impoverished farmers, and in particular how to improve access to credit to increase yields. A landmark study conducted by the Reserve Bank of India (RBI) known as the All-India Rural Credit Survey, revealed that the local moneylender was the predominant source of rural credit but his practices worked against the best interests of the farmer and were considered ‘anti-developmental’ (Ayyar & Ramaswami 1956). Throughout the last century, the government of colonial and post-colonial India has made various attempts at improving credit access for the poor. The government could recognise that there is a link between access to finance and poverty reduction, thus various policy initiatives started aimed at financially including the rural poor. The main objective of those credit initiatives was,

“to overcome the monopoly power of private moneylenders, the lack of collateral of small farmers, and the absence of a proper market in loanable funds” (Ellis, 1992, p. 171).

In the early 20th century, moneylenders were the dominating force in the domain of credit supply. The colonial administration was aware of the exploitative relationship between creditors and debtors. In many cases, creditors were not only suppliers of credit; they were also buyers of crops, labour employers and landlords. Most debtors repeatedly borrowed money in order to be able to repay debts that they had accumulated earlier, thus entering a vicious circle of indebtedness (Shah et al., 2007). The colonial administration tried to put a stop to the exploitative relationship between moneylenders and the poor and encouraged the establishment of co-operative credit societies by passing the Cooperative Credit Societies Act in 1904 (Misra, 2010; Shah et al., 2007). The co-operatives in India were mostly managed by rich landowners and moneylenders and did not help changing the exploitative relationship between creditors and debtors (Shah, Rao and Shankar, 2007). Despite the establishment of cooperative credit societies in 1904, traders, landlords and moneylenders still provided 78.6% of rural credit in 1951, while the share of co-operatives and commercial banks was merely at 3.9% (refer Table 1-1).

Despite the meagre development, the initiatives kept coming from government to improve institutional positioning of finance. By 1969, Government of India started to nationalize commercial banks in order to meet some of the new policy goals, such as making it easier for non-wealthy individuals to have access to a bank (Karmakar 2008, p. 20). Furthermore, in 1976, regional rural banks (RRBs) were set up with the aim to provide credit to India's rural poor. The number of rural bank branches increased tremendously between 1969 and 1993, which Shah et al. (2007) call 'social coercion', in which the RBI forced banks to expand into unbanked areas. Next step was setting up Priority Sector Lending targets for each bank. According to RBI guidelines, 40% of all bank lending had to go to priority sectors (Refer Appendix 8.1 for details). Burgess and Pande (2003 and 2005) argue that RBI's policy of

rural bank expansion had positive impacts in terms of reducing rural poverty and increasing non-agricultural output.

Table 1-1: Borrowing pattern in India

	1951	1961	1971	1981	1991	2002
<i>Institutional Agencies</i>	7.2	14.8	29.2	61.2	64	57.1
Government	3.3	5.3	6.7	4	5.7	2.3
Co-op. Society/Bank	3.1	9.1	20.1	28.6	18.6	27.3
Commercial bank incl. RRBs	0.8	0.4	2.2	28	29	24.5
Insurance	NA	NA	0.1	0.3	0.5	0.3
Provident Fund	NA	NA	0.1	0.3	0.9	0.3
Others institutional agencies*	NA	NA	NA	NA	9.3	2.4
<i>Non-Institutional Agencies</i>	92.8	85.2	70.8	38.8	36	42.9
Landlord	1.5	0.9	8.6	4	4	1
Agricultural Money lender	24.9	45.9	23.1	8.6	6.3	10
Professional Money lender	44.8	14.9	13.8	8.3	9.4	19.6
Traders and Commission Agents	5.5	7.7	8.7	3.4	7.1	2.6
Relatives and Friends	14.2	6.8	13.8	9	6.7	7.1
Others	1.9	8.9	2.8	4.9	2.5	2.6
<i>Total</i>	100	100	100	100	100	100

*: includes financial corporation/institution, financial company and other institutional agencies.

Note: Percentage share of different credit agencies to the outstanding cash dues of the households as on 30th June.

Source: All India Rural Credit Survey (1954); All India Debt and Investment Survey (AIDIS), Various Issues, Reserve Bank of India.

In addition to the formal financial measures government initiated some other initiatives for poverty alleviation. Some of these measures are mentioned below, but describing all of them is out of the scope of this research.

The **Integrated Rural Development Programme (IRDP)** was launched in 1978-79 in order to deal with the dimensions of rural poverty in the country. The programme covered small and marginal farmers, agricultural workers and landless labourers and rural craftsmen and artisans and virtually all the families of about 5 persons with an annual income level below 3500. The main aim of IRDP was to raise the levels of the Below Poverty Line (BPL) families in the rural areas above the poverty line on a lasting basis by giving them income generating assets and access to credit and other inputs.

The **Swarnajayanti Gram Swarozgar Yojana (SGSY)** was launched in 1999 as a successor to the IRDP, which was perceived to have failed in bringing about poverty alleviation in the country. The objective of SGSY is to bring assisted family above the poverty line within three years by providing them income generating assets through a mix of bank credit and Government subsidy. The SGSY is a multi-sectoral, multi-level and multi-sectional programme integrating involvement and participation of Banks, Govt. agencies, NGO, and other line departments at various stages. The programme covers selection of the BPL families, identification of key activities, preparation of project reports, selection of cluster of villages for each key activity, formation of groups, sanction and timely supply of credit, assets creation, marketing of goods produced, post-sanction follow-up and monitoring to turn around poor families socio-economically and uplifting them above poverty by providing income generating assets. The **National Rural Employment Guarantee Act (NREGA)** bill notified in 2005 and came into force in 2006 and further modified it as the **Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA)** in 2008. This scheme guarantees 100 days of paid work to people in the rural areas. **National Rural Livelihood**

Mission (NRLM) is a poverty alleviation project implemented by Ministry of Rural Development, Government of India, and SGSY is now remodelled to form NRLM thereby plugging the shortfalls of SGSY programme. This scheme is focused on promoting self-employment and organization of rural poor. The basic idea behind this programme is to organize the poor into Self Help Groups (SHG) and make them capable for self-employment. This scheme was launched in 2011 with a budget of \$5.1 billion and is one of the flagship programmes of Ministry of Rural Development. This is one of the world's largest initiatives to improve the livelihood of poor.

Microfinance foundation was laid in the 1990s, microfinance institutions (MFIs) started to become popular in India as the economy started expanding and becoming more competitive (Harper, 2002, p.36). In 1992, the National Bank for Agriculture and Rural Development (NABARD) started a program to finance and promote the disbursement of loans to SHGs, which consist of small groups of women who start their own businesses from micro-loans (Harper, 2002, p.36).

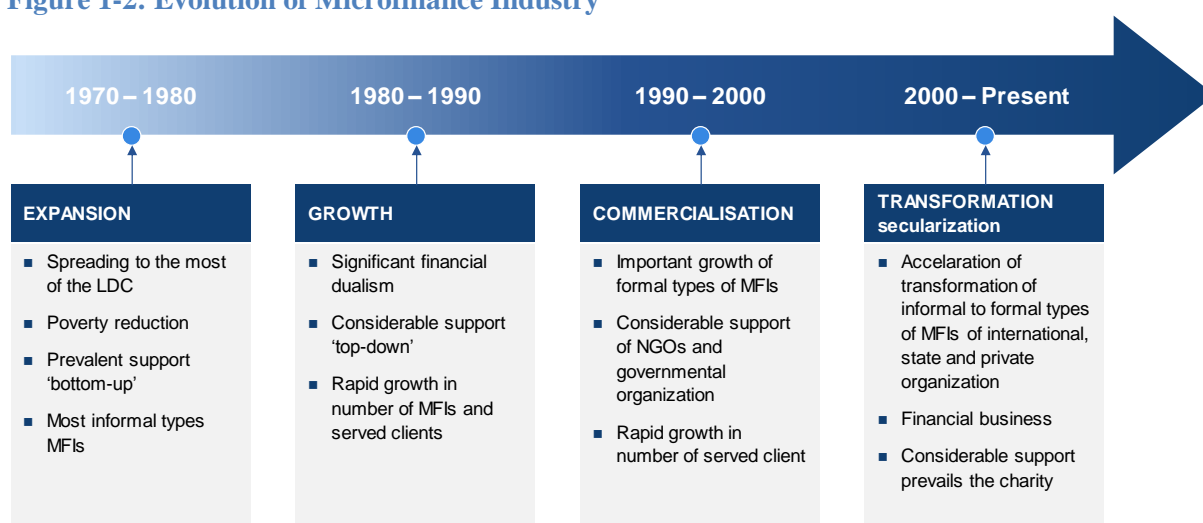
1.5 Evolution of Microfinance Industry – global perspective

The biggest developments in micro finance occurred in the 1970s when Grameen Bank in Bangladesh started off as an action based research project by a Professor Yunus who conducted an experimental credit program. This nonprofit program dispersed and recovered thousands of loans in hundreds of villages. Similar experiments have been in countries like Brazil in addition to Bangladesh (Ledgerwood, 2000).

Figure 1-2 explains various phases of microfinance institutions growth. First phase marked providing social benefits and taking priority over the raising of the MFIs profitability. Different voluntary groupings were established. There was a high appeal for poverty reduction. The second phase marked development of formal MFIs along with informal MFIs,

this called as financial dualism. It has a top down approach wherein profits were also motives behind their establishment. Third phase was more about conversion of informal to formal MFIs and considerable support from government, NGOs, etc. The fourth phase is about accelerated growth, there is a debate about charity or business model. Substantial interest of financial investors in the rural markets increases the microfinance activities.

Figure 1-2: Evolution of Microfinance Industry



Source: Adapted from “Microfinance – tool for poverty alleviation in the less developed countries” by Srnc (2007). Institute of Tropics and Subtropics, Czech University of Life Sciences, Prague

1.5.1 Delivery Models of Microfinance

The concept of microfinance involves informal and flexible approach to the credit needs of the poor. There is no single approach or model that fits in all the circumstances. Therefore, a number of microfinance models emerged in different countries/states according to the suitability to their local conditions. Broadly, the microfinance delivery methods can be classified into following groups:

1.5.1.1 Grameen Bank Model

Grameen Bank (GB) model is one of the oldest and most successful models of microfinance. This model was developed in Bangladesh. The Grameen Bank is based on the voluntary formation of small groups of five people to provide mutual, morally binding group guarantees

in lieu of the collateral required by conventional banks (also known as Group based lending). Women were initially given equal access to the schemes, and proved to be not only reliable borrowers but also astute entrepreneurs as well. GB has successfully reversed conventional banking practices by removing collateral requirements and has developed a banking system based on mutual trust, accountability, participation and creativity.

Group based lending is one of the most novel approaches of lending small amounts of money to a large number of clients who cannot offer collaterals. The size of the group can vary, but most groups have four to eight members. The group self-selects its members before acquiring a loan. Loans are granted to selected member(s) of the group first and then to the rest. A percentage of the loan is required to be saved in advance, which points out the ability to make regular payments and serve as collateral. These loans are given out in solidarity groups where the members are not responsible for other members' repayment. The loans are also given out in joint liability group where members are jointly accountable for the repayment of each other's loans and usually meet weekly to collect repayments. To ensure repayment, peer pressure and joint liability works very well. The entire group will be disqualified and will not be eligible for further loans, even if one member of the group becomes a defaulter.

The members remain dependent on field officers regarding their all group related activities. Grameen model has been replicated in more than 40 countries in Asia, Africa, and Latin America with modifications to suit local conditions and cultures. The programme of BancoSol in Bolivia and most of the solidarity groups in Latin America follow this methodology.

1.5.1.2 Joint Liability Group Model

NABARD is using this model for providing credit to the tenant farmers, cultivating land either as oral lessees or share croppers, and small farmers who do not have proper title of their land holding. Many other countries are also using this model. There were segments

within the poor, such as share croppers/ oral lessees/ tenant farmers, who were left out and whose loan requirements were much larger but who had no collaterals to fit into the traditional financing approaches of the banking system. In this model, four to ten individuals are organised in a group known as a Joint Liability Group (JLG). The group members can avail bank loans against mutual guarantee and there is no condition of their own savings fund. All members sign a joint liability contract, making each one jointly liable for repayment of all loans taken by all individuals in the group. Thus, only social collateral is provided to the lending institution. In this sense, social collateral of borrowers takes the place of traditionally accepted forms of physical collateral; joint liability lending relied upon social capital of the group (Besley & Coats, 1995).

1.5.1.3 Individual Lending Model

In this method, individuals can get loans without any membership of a group. This is a straightforward credit lending model in which micro-loans are given directly to the borrowers. In this model, the financial institutions have to make frequent and close contact with individual clients to provide credit products customised to the specific needs of the individual. It is most successful for larger, urban-based, production-oriented businesses. The model is followed by many financial institutions like the Association for the Development of Micro-Enterprises (ADEMI) in Dominican Republic, Bank Rakyat Indonesia, Senegal Egypt, Self-Employment Women's Association in India, etc.

1.5.1.4 The Group Approach

The group approach delegates the entire financial process to the group rather than to the financial institutions. All financial activities like savings, getting loans, repayment of loans and record keeping are managed at the group level. In this method, 10-20 members are organised to form a group. These group members make regular savings of fixed amount in a

common fund. The amount and frequency of savings is mutually decided by the group members. After the successful working of such a group for some months the group is linked to a financial institution for getting credit. The financial institutions issue loan in the name of group and whole group is considered responsible for repayment. The amount of loan depends upon the total accumulated amount of saving of the group. Group members themselves decide about the criteria of dividing the loan among the group members. In India, the group based credit delivery method known as SHG- Bank Linkage Programme (SBLP) and is a predominant method of providing microfinance. Programme Hubungan Bank Danksam (PHBK) project in Indonesia and the Chikola groups of K-REP in Kenya are also using such group based credit delivery models.

1.5.1.5 Village Banking

Foundation for International Community Assistance (FINCA), implemented a village banking model in its effort to create financially sustainable solidarity groups during mid-1980s in Bolivia. Village banking is dependent on external funding. It needs that members have compulsory 20% savings of the loan amount granted with beneficiaries compelled to repay the loan - principal, interest and savings within 16 - 24 equal weekly instalments. The model is used by various MFIs like Co-operative for Assistance and Relief Everywhere (CARE) in Guatemala; Save the Children in El Salvador; Burkina Faso in Bolivia, Mali, and Ghana; Freedom from Hunger and Catholic Relief Services in Thailand and Benin, Opportunity International, Consultative Group for Assisting the Poor (CGAP), etc

1.6. Microfinance Delivery Models in India

India has been the host for maximum number of delivery models even in modern microfinance. SHG based and MFI models are popular in India.

1.6.1 SHG-Bank Linkage Program (SBLP) model:

SHGs are informal groups of 10–20 individuals formed by people coming together for mutual help and cooperation on various activities including financial matters. They pool in small amounts of thrift money and lend it to group members who need credit. SHGs can be promoted by NGOs, banks, state governments, MFIs or cooperatives. SHGs can have their own savings account with a bank, and often this linkage with a bank is facilitated by an NGO working in the area. The account is operated by the SHG's authorised signatories, and most banks provide the SHGs with a loan that is in proportion to the savings of the group.

The bank loans are given without any collateral and at specified interest rates. Banks find it easier to lend money to the groups rather than providing small funds to individual members. The peer pressure ensures timely repayments and replaces the collateral for the bank loans (Karmarkar, 2008).

MicroSave (2011) argues that as a community led model, SHGs have an inherent limitation on the quantum of savings that it can mobilise and maintain. This limitation can only be addressed if members also have access to personal savings accounts, outside the group model, where they can save with the confidence that not everyone in the village will come to know of their savings balance and where savings will not be at the risk of group dynamics. SBLP model is common in India, which was developed by National Bank for Agricultural and Rural Development (NABARD). NABARD did a research project with the NGO Myrada in 1987 which was the genesis of this idea. This was piloted in 1992 and the SBLP was fully operational in India in 1996. The programme was supported by the Reserve Bank of India. The RBI allowed the savings accounts of SHGs to be opened by the formal banking system and classified SHG-lending as priority sector lending for commercial banks, RRBs and cooperative banks (Green, 2005).

Various models connected to SHGs are discussed below:

Model I: SHGs promoted, guided and financed by banks

In this model, banks themselves take up the work of forming and nurturing the groups, opening their savings accounts and providing them bank loans.

Model II: SHGs promoted by NGOs/ Government agencies and financed by banks

In this model, NGOs and other formal agencies in the field of microfinance facilitate organising, forming and nurturing of SHGs and train them in thrift and credit management. The banks directly give loans to these SHGs.

Models III: SHGs promoted by NGOs and financed by banks using NGOs/formal agencies as financial intermediaries.

This is the model where the NGOs take on the additional role of financial intermediation along with the formation of groups. In areas where the formal banking system faces constraints, the NGOs are encouraged to form groups and to approach a suitable bank for bulk loan assistance. This method is generally used by most of the NGOs having small financial base.

SHG Successes:

At group level:

- Group formation and nurturing is the key to a successful SHG;
- Group composition gives thrust on affinity and homogeneity;
- Members learn to maintain financial discipline;
- Members own stake in the group is in the form of savings;
- Collective wisdom in credit decisions;
- The peer pressure enables the group to minimize the aggregate risks of failure;
- Savings and credit is a continuing process and not a one-time affair;

- Freedom of selecting the purpose for loans to members, with benefit of peer counselling.

At bank level:

- Emphasis on grading of SHGs.
- (a) The group formation and nurturing process is intensive and not rushed through;
- (b) Banks grade the SHGs for credit support based on parameters of group dynamics, regularity in savings, internal lending and participation level;
- (c) NGOs grade the SHGs before recommending them for bank loan linkage; and
- (d) The weak SHGs have to wait and overcome weaknesses.
- Cost effective, operationally simple and low risk strategy for expanding client base and business.
 - Externalizing some of the credit functions to the SHG.
 - Bank loans only after initial savings and internal lending has stabilized.
 - Banking with disciplined clients and not beneficiaries.
 - More than 95 per cent on-time repayment from the poor some of whom were possibly defaulters earlier.

The SHG mechanism has enabled the marginalized poor to access credit and harnesses their entrepreneurial skills and seeks a way out of the poverty. The form SHG has now changed from inception and there are many SHGs working towards helping the poor.

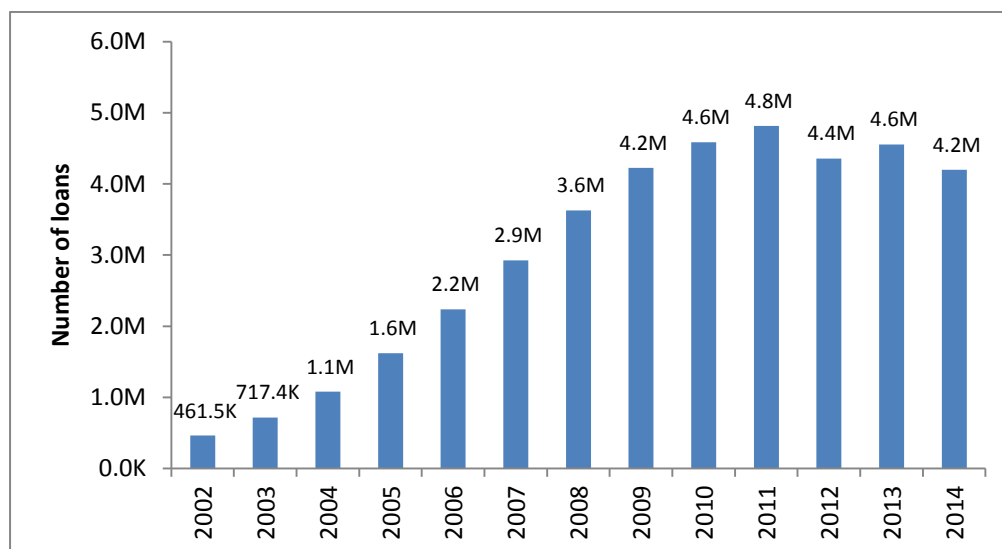
Figure 1-3 shows the growth of number of SHGs provided with bank loans. It started with 460,000 in 2002 and reached its peak of 4.8million SHGs in 2011.

1.6.2 MFI Models:

The semi-formal institutions that undertake microfinance services as their main activity are generally referred to as microfinance institutions (MFIs). While both private and public

ownership are found in the case of formal financial institutions offering microfinance services, the MFIs are mainly in the private sector.

Figure 1-3:No. of SHGs provided with the bank loans (in millions)



Source: Adapted from *Microfinance India State of Sector Report 2011* by Srinivasan (2011) and *Inclusive Finance India Report 2014* by Nair & Tankha (2014).

While there is no published data on private MFIs operating in the country, the number of MFIs is estimated to be around 800 (Karmarkar, 2008, p. 60).

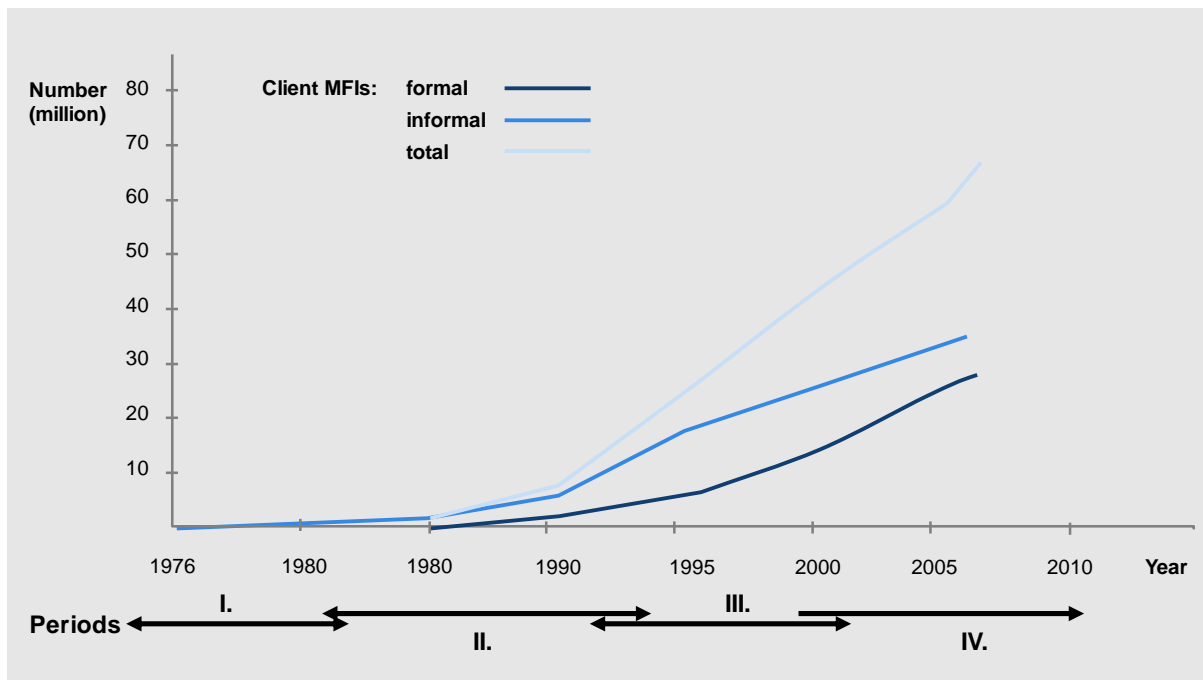
Table 1-2: Client outreach—borrowers with outstanding accounts (in millions)

	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
Banks-SHG	38	47.1	54	59.6	62.5	61.0	65.0
MFI	10	14.1	22.6	26.7	31.8	26.8	28.0
Total	48	61.2	76.6	86.3	94.3	88.4	93.0

Source: Adapted from *Microfinance India State of Sector Report 2012* by Puhazhendhi (2012)

Table 1-2 shows the number of client served by MFI model and SHG model. Since 2009, the total number of clients has been around 90 million. Figure 1-4 shows the growth of formal and informal MFIs.

Figure 1-4: Comparison of clients of formal and informal MFIs



Source: Adapted from *Microfinance – tool for poverty alleviation in the less developed countries* by Srnec (2007)

1.6.2.1 NGO MFIs:

This type of MFI model uses NGOs for their functioning. There are number of NGOs functioning and working in underserved areas. There are many NGOs which are registered as Trusts or Societies. Apart from financial intermediation, they have been helping SHGs (Self Help Groups) in social activities, capacity building, trainings, auditing, etc. Looking at their activities, we can infer that NGO MFIs are varying significantly in size, philosophy and approach. Hence they have been out of the purview of regulations; hence law has prohibited them to accept any public deposits.

1.6.2.2 Non-profit Section 25 MFIs:

These are the MFIs which come under the Section 25 of Companies Act, 1956. They have to maintain minimum net owned funds of Rs. 5 Crore. At least 85% of net assets are in the nature of “qualifying assets”. For any asset to have status of “qualifying assets”, the loans needs to be disbursed to rural household with annual income not exceeding Rs. 60,000 or

urban and semi-urban household income not exceeding Rs. 1,20,000. NGO MFIs can find themselves setting up a non-profit company under this section. They are not allowed to pay out dividends to its members. They are not allowed to accept deposits. But if any such company wishes to accept public deposits, it will have to comply with the minimum capital norm of Rs. 2 crore, and can accept only term deposits after being rated by an accredited rating agency. In such an event, the difference between not-for-profit companies and for-profit companies is lost and is generally limited to whether profits are being shared by promoters or not.

1.6.2.3 Mutual Benefit MFIs

The mutual benefit MFIs are the Mutually Aided Co-operative Societies (MACS). These are registered under the State Co-operative Societies Act and are not regulated by RBI. MACS enjoy the advantages of operational freedom and virtually no interference from the government because of the provisions in the Act that societies under the Act cannot accept share capital contributions or loans from the state government (Karmarkar, 2008, p. 61).

1.6.2.4 For-Profit MFIs

For-profit MFIs include Non-Banking Financial Companies (NBFCs). The MFIs in India which are larger in size belong to this category. These companies are registered under the Companies Act, 1956; and are regulated by RBI. These companies can deposit the savings of their clients with them. NBFCs, along with Section-25 companies, account for about 80 per cent of microfinance outreach in India, both in terms of clients served as well as loan portfolios. Some of the large NBFCs in the field of microfinance are: Sanghamitra, BASIX, SHARE Microfin Ltd., Indian Association for Savings and Credit (IASC), Cashpor, etc. The profit motive makes it more efficient and the social impacts that they generate to be more sustainable (Hermes & Lensink, 2007). Even if they are self-sufficient, many fear that they

might focus more on profitability rather than serving the poor borrower calling for a “mission drift” (Copestake, 2007).

1.6.2.5 Characteristics of MFIs:

Major characteristics of any type of MFIs are mentioned in Appendix 8.2. MFIs success is measured in terms of its breadth and depth of outreach.

Breadth of Outreach

The breadth of outreach refers to the number of poor served by a microfinance institution (Hishigsurem, 2004). Various studies have used the number of borrowers as a measure of microfinance breadth of outreach (Nyamsogoro, 2010; Mersland & Strom, 2009; Harmes *et al.*, 2008). It is generally assumed that the larger the number of borrowers the better the outreach.

Depth of Outreach

According to Ledgerwood (1999), the number of borrowers or clients as a measure of outreach considers only the total number of clients served from various products of MFIs without their relative level of poverty. Thus, average loan size has been used as a proxy measure of depth of outreach using relative level of poverty. Smaller loans indicate poorer customers (Mersland & Strom, 2009; Cull *et al.*, 2007). However, they argue that average loan size does not consider the relative number of the poorest with small loan sizes. Moreover, the majority of microfinance clients may be average poor or non-poor whose loan sizes are relatively large and, therefore, could easily influence the computed average loan size figure.

1.6.3 Banking Correspondents (BC) Models:

In January 2006, the Reserve Bank permitted banks to utilise the services of NGOs, MFIs (other than NBFCs) and other civil society organisations as intermediaries in providing

financial and banking services through the use of business facilitator and business correspondent (BC) models. The BC model allows banks to do ‘cash in – cash out’ transactions at a location much closer to the rural population, thus addressing the last mile problem. The BC model uses the MFI’s ability to get close to poor clients – a necessity for savings mobilisation from the poor – while relying on the financial strength of the bank to safeguard the deposits.

1.6.4 Post Offices:

A pilot SHG - post office linkage programme was launched by NABARD in December 2003. The loans are set up so that NABARD provides the funds and the Post Office disburses the loans to SHGs. The interest rate is nine per cent, three per cent of which is commission for the Post Office, the rest is returned to NABARD. SHGs must open accounts with their local post office, and once they are identified by NGOs or recommended by NABARD, they are watched for six months. A committee made up of representatives from NABARD, relevant NGOs and the Department of Post determine a credit rating and those SHGs with qualifying marks are eligible for these loans. The upper loan limit is Rs 24,000 (USD 515) or four times the deposit the SHG has in their post office (Micro-credit at the Post Office, 2008).

1.7 Funding in MFIs

Initially MFIs’ operations were dominated with donor funds. But these were not sufficient to cover all the demands of micro-credit and over a period donors expected MFIs to be self-sufficient and grow organically.

There are six sources of funding for any MFI i.e.

- Deposits
- Social Capital
- Commercial Microfinance

- Commercial debt financing
- Equity
- Structured Finance

Deposits are source for funding in MFIs which are regulated (Dieckmann et.al, 2007). According to Swanson (2007), most of the estimated 10,000 existing MFIs in world are not deposit-taking institutions, and are unlikely to become so, given the cost and complexity of complying with the regulations. So this type of funding is limited in nature.

Social Capital includes donor, government grants and soft loans driven by social motives. Microfinance has received significant attention from the donor community, based upon its potential as a powerful tool for poverty alleviation. As such, many millions of dollars have been spent on promoting microfinance programs around the world. For most MFIs, the principal source of funding is from grants and highly subsidized loans, or so-called soft loans.

Commercial Microfinance

Profit could be the major motivation behind many funders in microfinance industry. However, most private funders in the financial service market are driven by both social and profit motives. Such investment in businesses or funds that intentionally set out to generate social or environmental good alongside financial returns is also getting popular. Pension funds and insurance companies are increasingly investing in financial service markets for both social value and diversification in returns with other investments that they typically make. Although institutional investors may have both social and financial motivations, they do require a financial return. As a result, the majority of their funding goes to established, profitable providers. Individual investors are driven by the dual trends of retail investing and high net-worth investing. While some high net-worth individuals have made direct investments in financial service providers (typically as equity), the vast majority invest via microfinance investment vehicles, whereas smaller retail investors channel funds through

donations to foundations or NGOs, peer-to-peer aggregators (discussed below), or increasingly, through microfinance investment vehicles.

Commercial debt financing is an important tool in MFI funding and management; both short-term as well as longer-term debt financing. Traditional way of microfinance is to borrow from banks and lend it to borrowers.

Equity Funding

Equity is an ownership interest in a financial service provider through the form of shares that represent a claim on the providers' assets in proportion to the percentage of the class of shares owned. As owners, equity shareholders take on the highest level of risk and are the last to be paid out in the case of institutional failure. Along with this higher level of risk comes a higher level of expected reward. Unlike debt, where most returns are fixed, equity owners can earn unlimited returns through *dividends* or gains made from selling their shares. Earnings made by the provider are either retained, increasing the equity on the balance sheet, or they are distributed in the form of dividends to owners. A public offering is an issue of securities that is offered to institutional and individual investors through a securities house such as a stock exchange. When an institution raises funds for the first time on a capital market, it is called an initial public offering (IPO). An IPO is a key opportunity for investors who have invested in an institution in the early stages of its development to exit or liquidate some of their investment.

Among the Indian MFIs, equity funding is not a new phenomenon; BASIX was incorporated in 1996 and started off as the largest private sector MFI, SML, Spandana were following suit with SKS being a distance away¹. BASIX had a regional rural bank type of product portfolio – trying to address the needs of the poor as well as the non-poor.

¹ BASIX: Bhartiya Samruddhi Finance Ltd; SML: SHARE Microfin Limited; SKS: SKS Microfinance Ltd.

April 20th, 2007 was a landmark day for the world of microfinance. Banco Compartamos—an esteemed microfinance institution from Mexico founded in 1990—completed a milestone initial public offering of its stock. The IPO was thirteen times oversubscribed and in financial terms was considered a remarkable success (Rosenburg, 2007). In the first day of trading following the IPO, the stock's share price surged 22 percent.

SKS followed the same suit of approaching stock market for raising funds. The stock market debut was very successful with SKS stock price closing at Rs. 1,233 on first day of listing, compared to the issue price of Rs.950. Unfortunately this IPO success did not last for long and after Andhra Pradesh government promulgating an ordinance to regulate microfinance institutions, it touched a low of Rs.85 (Refer 4.8).

A detailed analysis of SKS microfinance and its fiasco is described in chapter 5.

Structured Finance

Structured finance facilitates access to funding for providers that would not otherwise be credit worthy on their own and facilitates investment from funders who would not otherwise be willing to take exposure to an institution without added credit protection. Structured finance includes guarantee structures for debt instruments (bonds and loans) through partial credit guarantees, risk-sharing facilities, and participation in securitizations.

Securitization is a form of financing that involves the pooling and transfer of financial assets to a special purpose vehicle (SPV). This SPV then issues securities that are repaid from the cash flows generated by the pooled assets. In general, any asset class with relatively predictable cash flows can be securitized. The most common assets include mortgages, credit card debt, auto and consumer loans, corporate debt, and future revenues. This type of transaction allows financing to be based primarily on the risks of the asset pool rather than solely on the risk of the institution that originated the assets. Securitization can be a valuable tool to increase liquidity, spread credit risk, gain access to new investors, lower the cost of

funds, and remove assets from balance sheets, thereby reducing the Financial Service Provider (FSP's) debt/equity ratio. A lower debt/equity ratio can be beneficial to an FSP to meet minimum regulatory capital adequacy requirements, and generally to improve its overall creditworthiness. Securitization structures are most appropriate for a provider that seeks financing but is unable to tap funding sources for the desired length of time (term) and funding cost because of its perceived credit risk. It is important to note, however, that only providers that have sound credit risk management techniques and a well-performing portfolio and have demonstrated capable lending practices should consider securitization.

1.8 Objectives

This chapter has provided a comprehensive review of microfinance background and concepts. We defined microfinance in various ways from narrower definition to broader ones. We observe that, in general, microfinance is the way of improving the conditions of poor people by providing them financial assistance in terms of micro credit.

The discussion in this chapter leads to the objective of this thesis:

1. To understand the characteristics of Indian MFIs like profitability, interest rates, size, etc.
2. To gain understanding of other methods of microfinance funding other than borrowing from banks/donors and then lending it to poor.
3. Understanding any financial innovations in microfinance sector.
4. Understanding the conventional methods of microfinance like Credit unions, Regional rural banks, etc. and practices adopted by these institutions.

1.9 Conclusions

We introduced various ways employed in eradicating poverty in India and across world. Indian story of microfinance also covered the contributions made by various agencies in

microfinance. The professional money lenders' contribution did come down from 44.8% to 9.4% from 1951 to 1994, but it went up to 19.6% in 2002. India had many poverty eradication programmes and establishments of financial institutions for helping poor. However, this has not helped to get rid of money lenders and inclusion of all poor in the financial system. With the start of co-operative movement, India started another fight with poverty. This was followed by nationalization of commercial banks and setting up of RRBs. Set up of IRDP, SGSY, NREGA, MGNREGA, NRLM depicted that nothing was strong enough to fight poverty and government initiatives kept improving.

The data implies that microfinance institutions are supporting increasing number of poor people. The small loans helped women start and run small businesses, where they were able to make money. We discussed various delivery models of microfinance and their advantages and limitations. The funding of MFIs is also important aspect as we need to understand the source of funding and its limitations. All government initiatives were based on non-profit motive basis. But with advent of commercial microfinance, it has opened up a whole new era of development, albeit with few drawbacks, which we shall discuss in next chapters. SKS story of equity financing made news, along with the innovative financing methods of using structured finance.

This chapter sets the foundation of all the forthcoming chapters. The point to be taken away in this chapter is that, though there are many types and number of organizations working towards poverty reduction, there are many hurdles for their delivery. We need to understand poverty and its measurement to deepen our understanding in microfinance, which we cover in the next chapter.

1.9 References:

- Asian Development Bank (2000). *Finance for the Poor: Microfinance Development Strategy*, Asian Development Bank, Manila
- Ayyar, S. V., & Ramaswami, A. (1956). Reorganisation of rural credit in India. *Indian Journal of Agricultural Economics*. Jg, 11, 22-35.
- Besley, T. & Coate, S. (1995). Group lending, repayment incentives and social collateral. *Journal of Development Economics*, Vol. 46, pp. 1-18
- Burgess, R. & Pande, R. (2005). Do Rural Banks Matter? Evidence from the Indian Social Banking Experiment. *The American Economic Review*, 95 (3), p.780-795.
- CGAP, (2011). 2010 MIV Survey Report. CGAP, Washington, DC. Retrieved from <http://www.syminvest.com/download/cgap-2010-miv-survey-market-data.pdf>
- CGAP, (2012). 2011 Sub-Saharan Africa Regional Snapshot. CGAP, Washington, DC.
- Christen, R. P., Lyman, T. R., & Rosenberg, R. (2003). Microfinance consensus guidelines: Guiding principles on regulation and supervision of microfinance. Retrieved from http://www.cgap.org/docs/Guideline_RegSup.pdf
- Copestake, J. (2007). Mainstreaming microfinance: Social performance management or mission drift? *World Development*, 35, 1721-1738
- Cull, R., Demirguc-Kunt, A. & Morduch, J. (2007). Financial performance and outreach: A global analysis of leading micro banks, *The Economic Journal*, vol. 117, pp. 107-133.
- Davis et al. (2010). Life history: Amin, Male, aged 61, Srirampur village, Kurigram District. Bath: Social Development Research Initiative Edited by Louisa Frears. Retrieved from <http://www.sdri.org.uk>.
- Dieckmann, R., Speyer, B., Ebling, M., & Walter, N. (2007). Microfinance: An emerging investment opportunity. *Deutsche Bank Research. Current Issues. Frankfurt*.
- Diop, A., Hillenkamp, I., Servet, J. M., & Hillenkamp, I. (2007). Poverty versus Inequality in B. Balkenhol (Ed.), *Microfinance and Public Policy: Outreach, Performance and Efficiency* (p.288) New York: Palgrave Macmillan.
- Ellis, F. (1992). *Agricultural Policies in Developing Countries*. Cambridge: Cambridge University Press.

- Green, A. (2005). Combining Strengths: Synergies between Cluster Development and Microfinance. *United Nations Industrial Development Organization, Vienna*.
- Hermes, N., Lensink, R., & Meesters, A. (2011). Outreach and efficiency of microfinance institutions. *World Development*, 39(6), 938-948.
- Harper, M. (2002). *Beyond micro-credit: Putting development back into micro-finance*. T. Fisher, & M. S. Sriram (Eds.). Oxfam.
- Hermes, N., & Lensink, R. (2007). The empirics of microfinance: what do we know? *The Economic Journal*, 117, F1 - F10
- Hishigsurem, G. (2004). Evaluating mission drift in microfinance: Lessons for programs with social mission. *Evaluation review*, vol. 31, pp. 203-260.
- Hulme, D. (2008). The Story of the Grameen Bank: From subsidised microcredit to market-based microfinance. *Brooks World Poverty Institute Working Paper*, (60).
- Karmarkar, K. (2008). *Micro-Finance in India*. New Delhi, Sage Publications.
- Ledgerwood, J. (1999). *Microfinance handbook: An institutional and financial perspective*. World Bank publications.
- Ledgerwood, J. (2000). *Sustainable Banking with the Poor: Microfinance Handbook an Institutional and Financial Perspective*. World Bank publications.
- Mersland, R. & Strom, R. (2009). Performance and governance in microfinance institutions”, *Journal of Banking and Finance*, vol. 33, pp. 662-9.
- Micro-credit at the Post Office. (2008). Retrieved from <http://www.thebetterindia.com/306/micro-credit-at-the-post-office#sthash.jTqAJ0OI.dpuf>
- MicroSave (2011). *Deposit: Assessment in India*. Retrieved from <http://www.microfinancegateway.org/gm/document-1.9.50366/Microfinance-MicrosaveDpps.pdf>
- Misra, B. S. (2010). *Credit Cooperatives in India: Past, Present and Future*. London: Routledge.
- Nair, T. Tankha, A. (2013). *Microfinance India State of Sector Report 2013*, New Delhi, Sage Publications.
- Nair, T. Tankha, A. (2014). *Inclusive Finance India Report 2014*, New Delhi, Sage Publications
- Norwegian Nobel Committee. (2006). *Announcement of the Nobel Peace Prize for 2006*. Retrieved June 11, 2011, from http://nobelpeaceprize.org/en_GB/laureates/laureates-2006/announce-2006/.

- Nyamsogoro, G. D. (2010). *Financial sustainability of rural microfinance institutions (MFIs) in Tanzania* (Doctoral dissertation, University of Greenwich).
- Platteau, S. & Hedwig, S. (2009). *Trends in Microfinance 2010 –2015*. Retrieved from <http://www.microfinancegateway.org/gm/document-1.9.36738/14.pdf>
- Puhazhendhi V (2012). *Microfinance India State of Sector Report 2012*, New Delhi, Sage Publications
- RBI. (2013). Master Circular- Introduction of New Category of NBFCs - ‘Non-Banking Financial Company-Micro Finance Institutions’ (NBFC-MFIs) - Directions Retrieved from <http://rbidocs.rbi.org.in/rdocs/notification/PDFs/49010713MFIFL.pdf>
- Rosenberg, R. (2007). CGAP Reflections on the Compartamos Initial Public Offering. *Focus note*, 42.
- Seibel, H. D. (2005). *Does history matter? The old and the new world of microfinance in Europe and Asia* (No. 2005, 10). Working paper/University of Cologne, Development Research Center.
- Shah, M., Rao, R. & Shankar, P. S. V. (2007). Rural Credit in 20th Century India: Overview of History and Perspectives. *Economic and Political Weekly*, 42 (15), p.1351-1364.
- Sharma, A. (2001). Developing sustainable microfinance systems. *Asian Development Bank*: Retrieved from www.unescap.org/drpad/projects/fin_dev2/adbsharma.pdf
- Srinivasan N (2011). *Microfinance India State of Sector Report 2011*, New Delhi, Sage Publications
- Srnec K. (2007). Microfinance – tool for poverty alleviation in the less developed countries. [habilitation Thesis.] Institute of Tropics and Subtropics, Czech University of Life Sciences, Prague.
- Swanson, B. (2007). The Role of International Capital Markets in Microfinance. Paper presented at a symposium on Credit Markets for the Poor, Columbia, University Business School.
- Yunus, M. (2007). *Creating a world without poverty: Social business and the future of capitalism*. PublicAffairs.
- Yunus, M., 1998. *Banker to the Poor: Micro-Lending and the Battle Against World Poverty*. New York: PublicAffairs

2. Poverty and Microfinance

“The key to ending extreme poverty is to enable the poorest of the poor to get their foot on the ladder of development . . . the poorest of the poor are stuck beneath it. They lack the minimum amount of capital necessary to get a foothold, and therefore need a boost up to the first rung.”

—Jeffrey Sachs

American economist and director of the Earth Institute at Columbia University

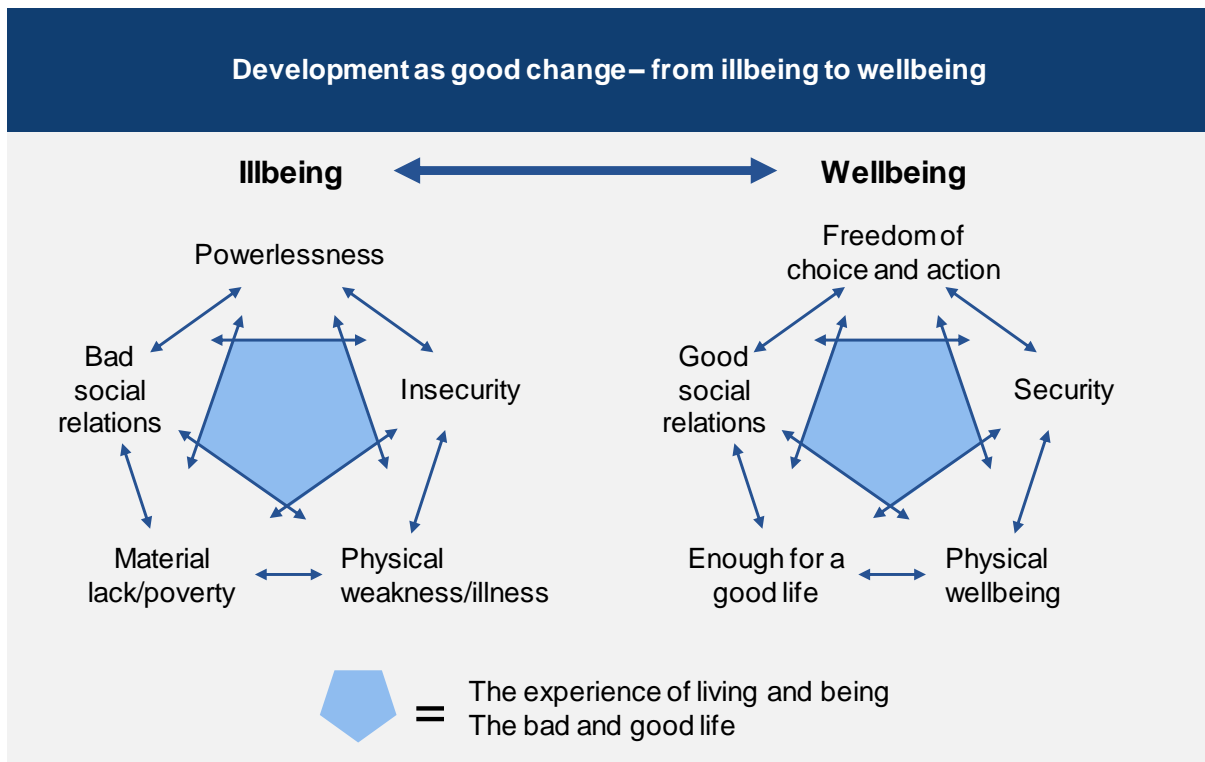
2.1 Chapter Summary

After viewing microfinance delivery mechanisms in India and world, there is need to understand the concept of poverty. The relationship between microfinance and poverty must be grounded for clear understanding of the roadmap to poverty eradication using microfinance. This chapter understands various poverty approaches related to microfinance. Poverty theories along with the poverty measurement are foundation of understanding the kind of problem we are tackling using microfinance. To do so I claim that, first, it is important to comprehensively understand what it meant by the term ‘poverty’, which is used extensively throughout the developmental discourse. How does the term mean different things to different people? What has been the historical evolution of our thinking on poverty and how has this been reflected in the microfinance literature? Do those who study poverty in-depth independently identify a role for microfinance?

2.2 Poverty

We speak of microfinance as a means of alleviating poverty. Everybody knows what poverty is, what its effects are, how it causes and how big is this national problem. So understanding the concept of poverty and estimate the extent of poverty in terms of breadth and depth is important foundation for microfinance. There is no common understanding of what constitutes poverty, but we are aware of its effects on individual or civilization. Poverty is nothing but lack of resources for an individual (Øyen et al, 1996). According to the World Bank (2000), “poverty is pronounced deprivation in wellbeing.” Both definitions are similar in a way where lack of resources is lack of economic, social, political and psychological resources. Chambers (2006) has mentioned five dimensions of ill being, wellbeing and their inter-linkages (Figure 2-1).

Figure 2-1: Development as good change – from ill-being to wellbeing



Source: Adapted from *What is poverty? Who asks? Who answers?* By Chambers (2006)

In Haughton & Khandker (2009), poverty is seen through material wellbeing, food security, employment, power and voice of individuals. The researchers focus mainly on poverty causes and poverty outcomes in classical poverty approach (Øyen et al, 1996). Poverty can be defined in absolute terms as, below a fixed threshold level or basic needs satisfaction. Perhaps the broadest approach to well-being is the one articulated by Sen (1987), who argues that well-being comes from a capability to function in society. Thus, poverty arises when people lack key capabilities, and so have inadequate incomes or education, or poor health, or insecurity, or low self-confidence, or a sense of powerlessness, or the absence of rights such as freedom of speech.

There is one interesting approach of distributive justice which deals with fair allocation of resources amongst the diverse members of any society. In distributive justice approach we have various sub approaches. Egalitarianism is the approach where the proponents support the equality in welfare; utilitarianism supports maximization of sum of utility. In

libertarianism claims that removing governmental programs and regulations such as welfare, the minimum wage, and subsidized housing benefit. Libertarianism is the belief that each person has the right to live his life as he chooses so long as he respects the equal rights of others. Libertarians defend each person's right to life, liberty, and property.

Since the creative work on poverty by Amartya Sen, scholars have improved and deepened their understanding of the concept of poverty. We would introduce poverty approaches as a support to our research.

2.2.1 Approaches to Poverty

Theoretically, if all the approaches identify the same people as being poor, any one of these approaches can be used to measure poverty. However, empirical evidence shows that poverty rates in countries differ significantly, depending on which approach is adopted.

Monetary Approach:

It is the most commonly used method for identification and measurement of poverty (Booth, 1887; Rowntree, 1902). It identifies poverty with a shortfall in consumption (or income) from some poverty line (Poverty line concept will be discussed in subsequent sections). The approach is consistent with the view that utility is an adequate definition of well-being and monetary expenditure a satisfactory measure of utility. The monetary approach focuses on improving the economic situation of the poor, so their income can be raised above the poverty line. Policymakers may interpret this as reason to emphasize economic growth and optimal distribution of monetary income (Caterina, et al., 2003, p.28). Results of monetary policies will often be short term, not long term and sustainable, if we fail to identify and tackle the root causes of poverty. World Bank is the strong proponent of this approach when we consider microfinance. The bank reiterate that there is a strong relationship between financial system development and economic growth, and a causal relationship between strong financial systems and per capita income, but that government should not attempt to engineer

credit expansion, and should rather focus on developing a sound business environment (World Bank, 2005).

Basic Needs Approach:

The basic needs approach to poverty emerged in the 1970s. It not only focused on addressing material deprivation, but was also described as a “human right” and “freedom from want” (Streeten, 1981 p.26). It refers to minimum consumption (food, shelter, clothing) and a varying set of “basic services” available such as water and sanitation, health care, education, public transport, cultural facilities. The basic needs approach was originally strongly advocated by the International Labour Organization (ILO). It was then adopted by the development community and in many developing country national plans. It was a useful concept as it connected poverty reduction with community development. The objective of basic needs theory therefore is to assist the poorest of the poor in reaching their potential as human beings, by addressing their non-material needs – which includes a sense of purpose in work and in life, self-reliance, access to power, political freedom, national and cultural identity, as well as their material needs (Streeten and Burki, 1978). In terms of microfinance, there is no direct literature which captures the connection between microfinance, credit and basic needs approach.

Capability Approach:

Expanding on the work of Streeten and the basic needs theory, Amartya Sen & Jean Dreze introduced new terminology to the poverty discourse, describing an individual’s ability to command a set of alternate bundles of commodities as an ‘entitlement’, which is determined by what is owned – an ‘endowment’ (Dreze & Sen, 1989). An entitlement failure, which may be a result of the loss of an endowment or an unfavourable change in an exchange, is what leads to the inability to survive. The capability approach defines poverty as the absence of function or failure to achieve “basic capabilities” including the “ability to satisfy certain

crucially important functions up to certain minimally adequate levels” (Sen, 1993, p. 41). The idea of “capabilities” is the ability to be well-nourished, to be able to avoid morbidity or premature mortality, to be able to communicate, to read and write, and to contribute to community life (Pressman and Summerfield, 2000). He argued that economics should first and foremost be about expanding options available to people and hence increasing their capabilities. When we try to relate this to microfinance, we find that there are some citations from Sen with respect to capability approach. He referred to the availability of credit as a ‘basic economic entitlement’ (along with education, training and land reform) (Sen, 1999 p. 7), and in ‘India: Development and Participation’, the non-availability of credit is referred to as an ‘economic handicap’ (Dreze & Sen, 1996 p.199).

Poverty and Vulnerability:

Vulnerability refers to the likelihood that people will fall into poverty as a result of either a shock in the economic system or due to personal misfortune. Vulnerability is understood as one’s responsiveness and resilience to risk (Moser, 1998). Poverty is a state which is assessed after the fact, vulnerability “focuses on assessing the extent of the threat of poverty or low well-being, measured ex ante, before the veil of uncertainty has been lifted” (Dercon, 2005 p.486). By reducing poverty, one also reduces vulnerability, and by addressing vulnerability, one can also reduce poverty. Financial services have a direct and obvious role to play in reducing vulnerability. As risk is strongly related to vulnerability, access to micro-insurance products, which seek to spread various risks over a large group of people, can play a role in reducing the negative outcomes of vulnerability.

Assets and Sustainable Livelihoods:

Based on the work of Chambers & Conway (1992), the ‘Sustainable Livelihoods’ approach expands on the idea of capabilities to also include the assets people own and the activities they engage in to create a living. ‘Sustainable livelihoods’ is not explicitly a theory of

poverty, but rather a framework for understanding the objectives, scope and priorities of development, according to poor people themselves. Adopted and developed by the United Kingdom's Department for International Development (DFID), its poverty-reducing intentions are based on the principles of being people-centred, responsive and participatory, multi-level, partnership-based (private and public sector), sustainable (environmentally, institutionally, socially and economically) and dynamic. A schematic model developed by DFID notes that people operate within a context of vulnerability, in which they have access to assets, which obtain meaning and value through prevailing social, institutional and organisational environments. Five specific livelihood capitals (or assets) are identified: human, physical, social, natural and financial. According to DFID, financial capital refers to the financial resources people rely upon to obtain certain livelihood outcomes. They include both stocks (cash and liquid assets such as livestock, jewellery, and credit), and regular inflows of money (earned income, remittances, pensions etc.). A much more prominent and dynamic role to microfinance emerges in the literature on Assets and Sustainable Livelihoods theories where financial assets are explicitly identified as one of five asset groups that can contribute to a sustainable livelihood.

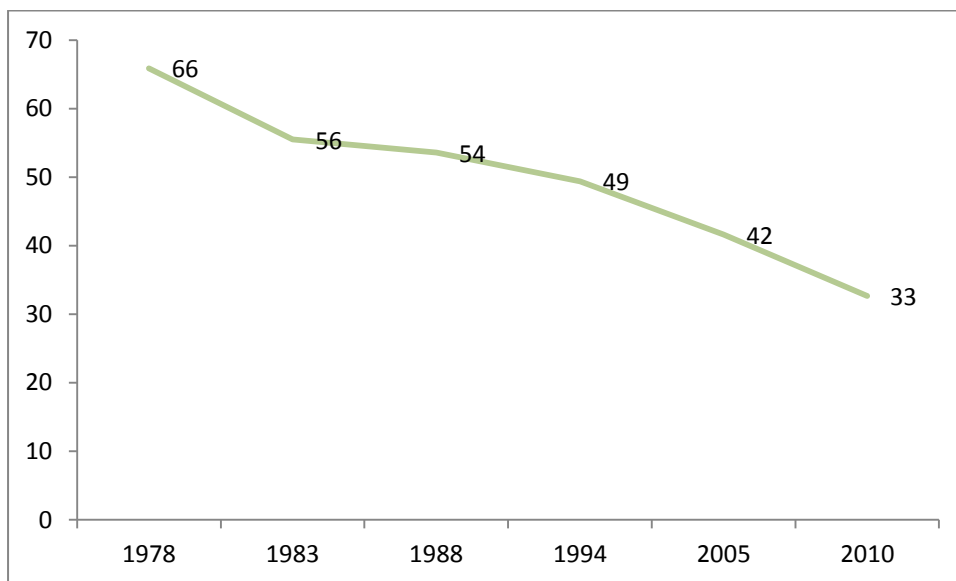
2.2.2 Poverty Measurement

After we analyse the poverty, we need to have a credible measure for the same. This way the policy makers can know whether their policies are working towards their goals. There are many measures like head count index, poverty lines, poverty gap and squared poverty gap. I am describing few of them here, but some of the advanced poverty measures are beyond scope of this thesis.

Headcount index (HCI): It measures the proportion of population which is poor. It is used to quantify those in poverty and extreme poverty (Klugman, 2002). This gives one number

which comes handy when understanding any economy's poverty extent. Figure 2.2 shows that HCI has been decreasing continuously since 1978. However, this ratio does not come without any drawbacks. HCI does not give us information like how the poor are distributed whether most of them are extremely poor or are near the threshold. HCI biases policies towards richest poor keeping other out of policy purview.

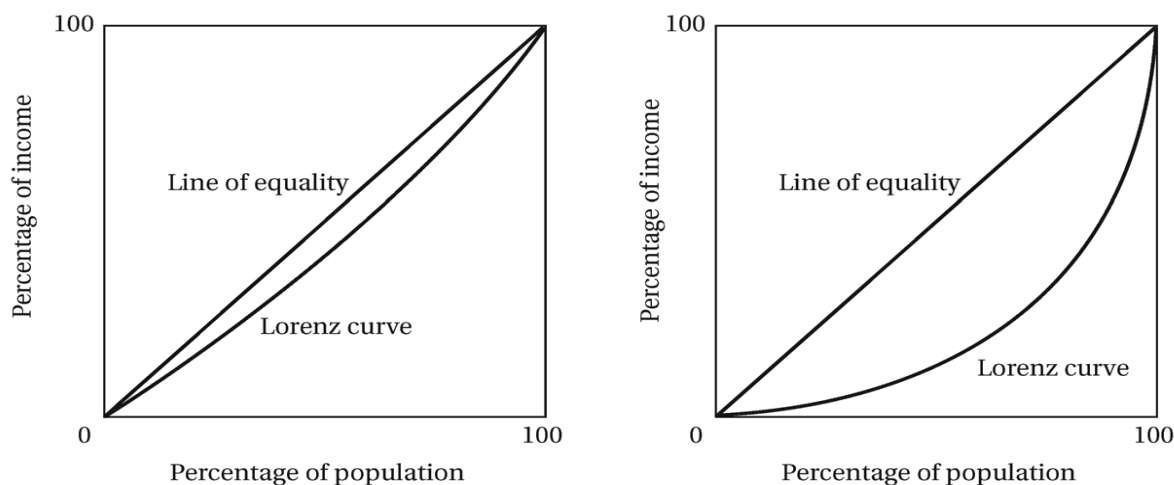
Figure 2-2: India Poverty Headcount Index at \$1.25 a day



Source: <http://www.indexmundi.com>

Poverty Gap Ratio: It reports the average normalized income shortfall from the poverty line using the censored distribution, the non-poor being assigned a distance of zero from poverty line. We refer to poverty gap therefore as the minimum amount of resources or money needed to eradicate poverty. That is the amount needed to lift the poor to the poverty line. This is demonstrated in the Lorenz curve (Figure 2-3). Greater the curve of the Lorenz curve, greater is the income inequality, which is nothing but Gini Coefficient. The Gini coefficient (also known as the Gini index or Gini ratio) is a measure of statistical dispersion intended to represent the income distribution of a nation's residents, and is the most commonly used measure of inequality

Figure 2-3: Lorenz Curve of Income distribution



(a) A relatively equal distribution

(b) A relatively unequal distribution

Source: Adapted from *Economic development* by Todaro & Smith (2009). Boston: Pearson Addison

Poverty Lines: Looking at the measure of poverty, we need to define a threshold which divides population into poor and non-poor. This can help the policy makers to target a specific group of population. Poverty line is defined as the cut off line in income or consumption below which an individual is considered poor (Klugman, 2002; World Bank, 2001). Countries have their country specific poverty lines that reflect the country's economic and social circumstances and expenditure pattern. All these measures which use poverty line helps us to understand how many people are below this line and how far below the line. Two major poverty lines can now be depicted:

- Relative Poverty Lines refer to individuals' income etc. in relation to the overall distribution of income or consumption in a country. It can be set at 50% or 40% of mean consumption.
- Absolute Poverty Lines are based on absolute standards of what households should be able to count on to meet basic needs.

To construct a credible poverty line which may be either quantitative or qualitative, Klugman (2002) suggests that these three processes identified are ideal to be followed.

The first is to identify the relevant dimension of poverty to measure, and the indicators of well-being in those dimensions. Second is to identify a poverty line or threshold below which an individual becomes poor. Third is to select a poverty measure to be used for reporting for the population as a whole or its subgroups. So by these processes it would be easier to identify the poor in a given population, the types of poverty they are afflicted with, and to determine the types of antipoverty interventions to apply.

Poverty lines in practice:

In 1990, the World Bank implemented a standard poverty line to measure extreme poverty in the developing world. It chose a \$1 a day poverty line, measured in 1985 purchasing power parity (PPP). The PPP exchange rates are used because they take into account the local prices of goods and services that are not traded internationally. PPP exchange rates are the essential ingredients of determining internationally comparable poverty lines. These rates are essentially the cost of living indices among the countries. They allow us to make international comparisons of costs of living in different countries. The World Bank arrived at the \$1 a day poverty line based on the country specific national poverty lines for a sample of 33 countries using 1985 PPP exchange rates. The base year for PPP exchange rates is important in arriving at the poverty line. For instance, the World Bank has determined that \$1.08 in 1993 PPP (in 1993 prices) dollars is an appropriate international poverty line, then utilizing the 1993 PPP conversion rates, we can estimate the equivalent value of this poverty line in country's local currency in 1993 prices. The ten countries with the lowest poverty lines in 1993 PPP were chosen and median poverty line of these countries was calculated at \$1.08 per person per day. Thus, the World Bank adopted \$1.08 in 1993 PPP dollars to be its new international poverty line, which is still referred to as \$1 a day poverty line.

However, an important notion to take into consideration is that one dollar in 1990 is not one dollar in 2010. Today a \$1.25 a day poverty line measured in 2005 prices replaces the \$1.08 a

day poverty line measured in 1993 prices (UNDP, 2009). This is the common norm for identifying poverty groups in any country. These numbers are more for developed countries and lower for lower income countries. The \$1.25 a day poverty line (in 2005 PPP \$) is the extreme poverty line and represents the poverty line typical of the world's poorest countries. The \$2 a day poverty line (in 2005 PPP \$) is the median (average) poverty line for all developing countries and represents a slightly higher standard of living. The \$1.25 and \$2 a day poverty lines are typically used to measure poverty globally and to compare poverty across countries in less developed regions.

In India, poverty line was based on per capita calorie consumption. The underlying poverty-line consumption baskets were anchored in the per-capita calorie norms of 2400 and 2100 in rural and urban areas, respectively. This line was known as Lakdawala poverty line who headed the expert group in 1993. This was used till 2004-05.

International poverty lines:

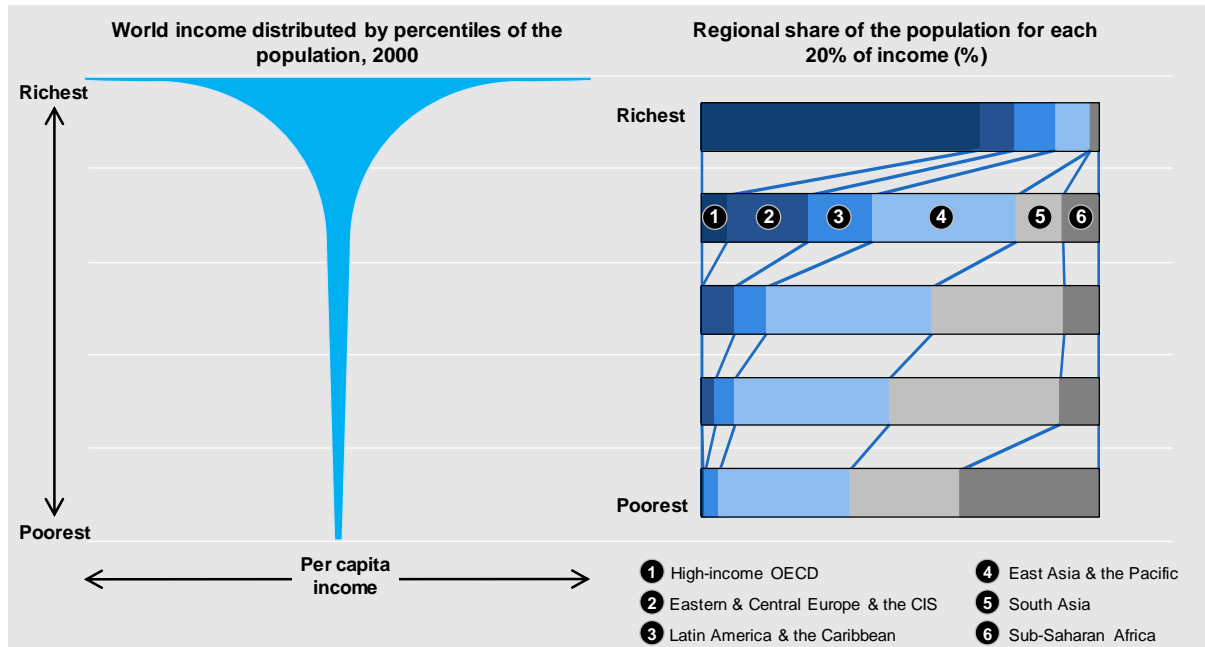
The extreme poverty line is set at \$1.25 a day in 2005 PPP terms, which represents the mean of the poverty lines found in the poorest 15 countries ranked by per capita consumption. The new poverty line maintains the same standard for extreme poverty—the poverty line typical of the poorest countries in the world—but updates it using the latest information on the cost of living in developing countries.

2.2.3 Poverty Snapshot

As per the UN, more than 2.8 billion people, close to half the world's population, live on less than the equivalent of \$2/day and more than 1.2 billion people, or about 20 per cent of the world population, live on less than the equivalent of \$1/day. Figure 2-6 shows how the world income is distributed. Since India being highly populated, it is in the centre focus in poverty map. Some of the African states are in extreme poverty states with income less than \$1000

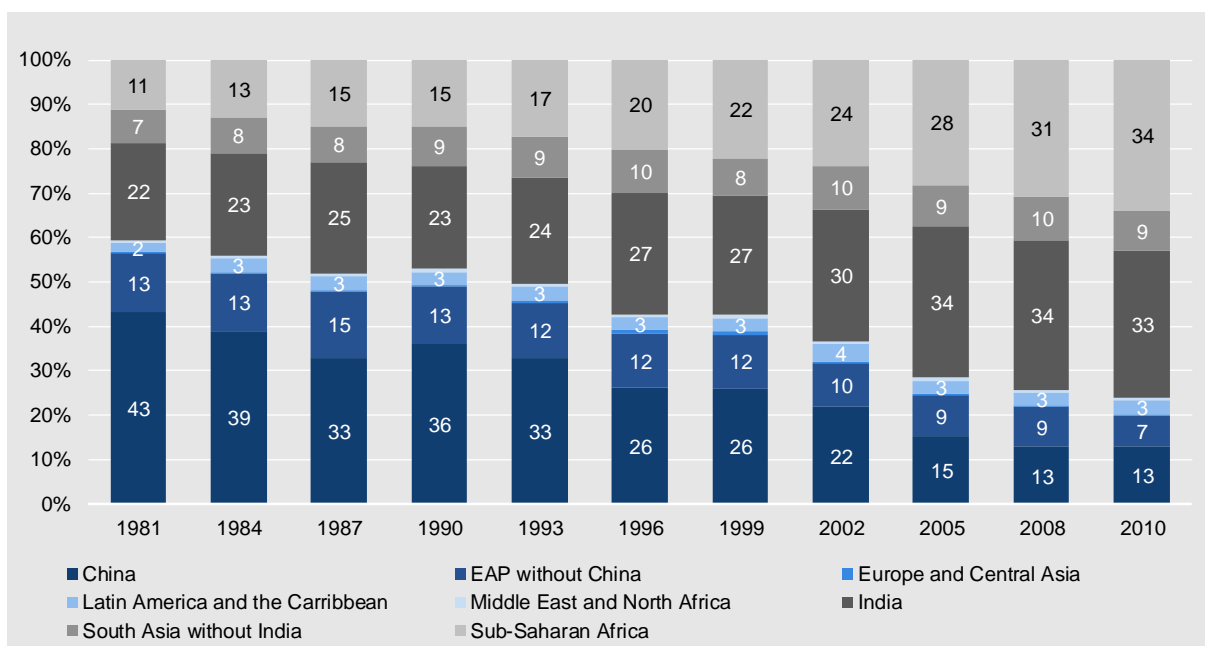
per capita. India stands at the top most position in terms of share of poor people in world (Figure 2-5).

Figure 2-4: Money Distribution



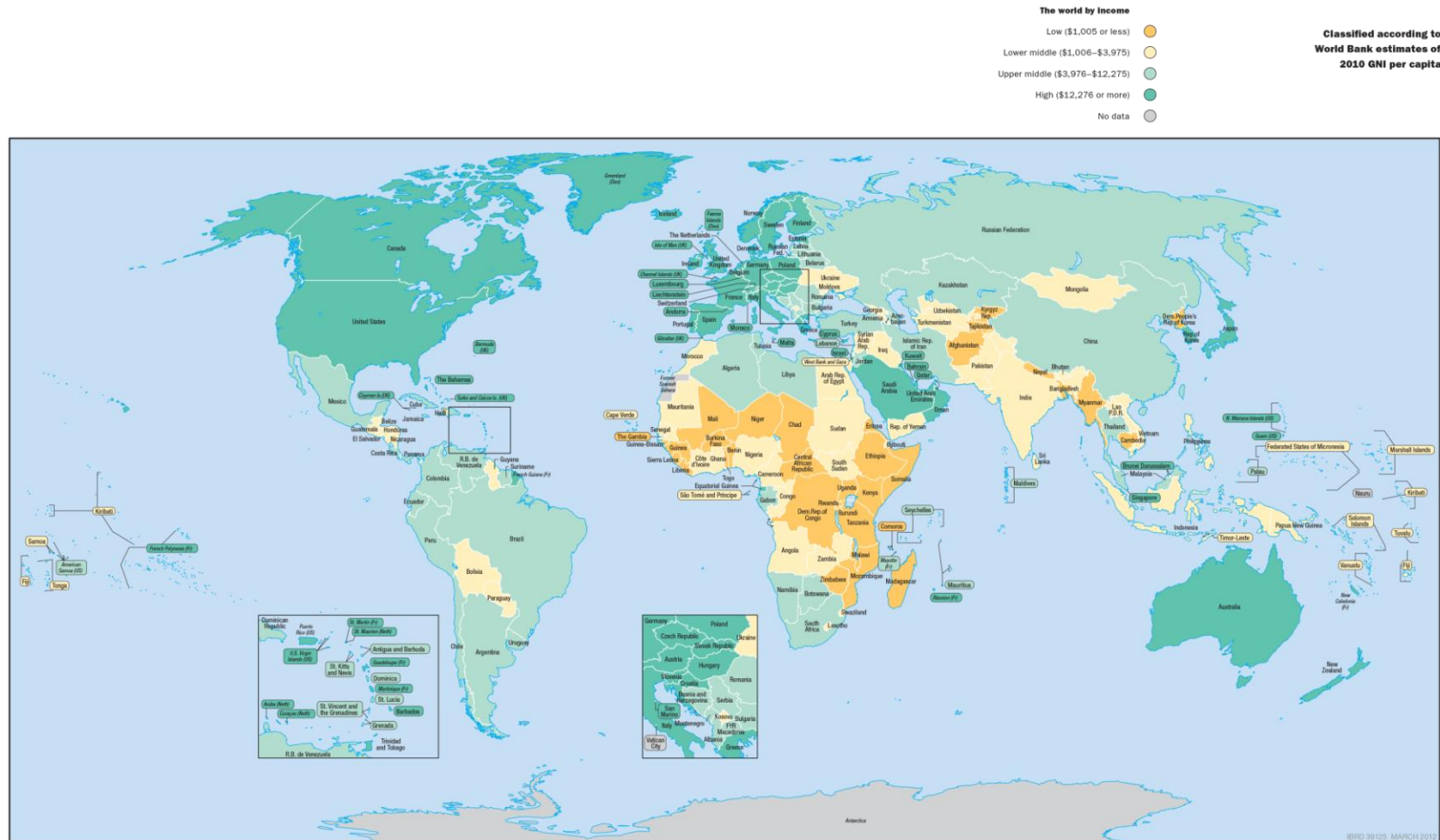
Source: Adapted from *Trends in global income distribution, 1970-2000, and scenarios for 2015* by Dikhanov (2005) Human Development Report Office (HDRO), United Nations Development Programme (UNDP).

Figure 2-5: Regional Share of the World's extreme poor (%)



Source: Adapted from *World Development Indicators 2012* by World Bank Group (Ed.). (2012). World Bank Publications

Figure 2-6: World Income map

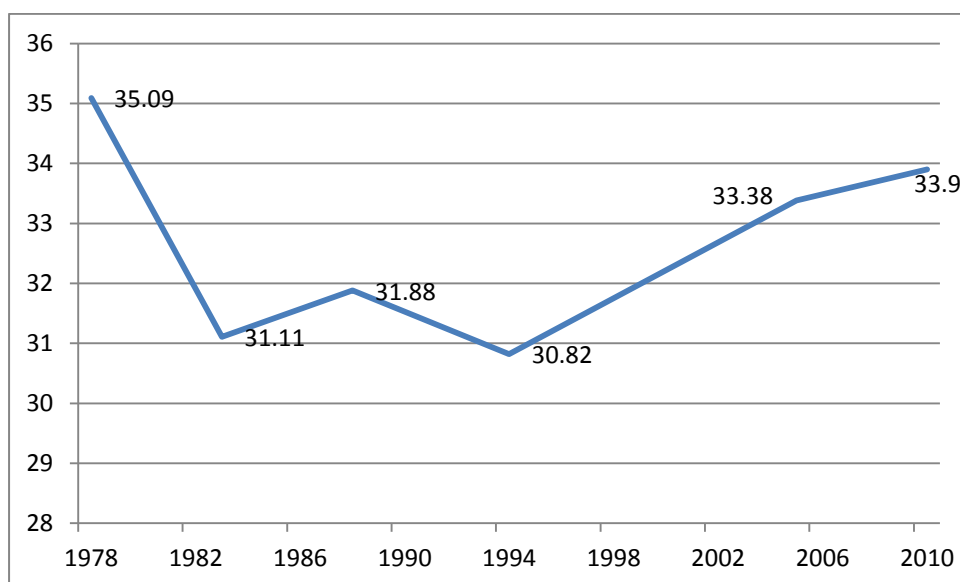


Source: Reprinted from *World Development Indicators 2012* by World Bank Group (Ed.). (2012). World Bank Publications

Inequality

We have discussed in previous sections that only showing poor countries or poverty levels is not sufficient. Studying inequality is also equally important. Inequality is a broader concept than poverty in that it is defined over the *entire* population, and does not only focus on the poor. The most widely used single measure of inequality is the Gini coefficient as discussed in previous section. It is based on the Lorenz curve, a cumulative frequency curve that compares the distribution of a specific variable (e.g. income) with the uniform distribution that represents equality. Higher the Gini coefficient higher is the inequality as shown by Figure 2-8. Figure 2-7 shows the heat map for Gini coefficient for the whole world. It shows that Gini coefficient of India though dropped from 35 in 1978 to 30.82 in 1994, it rose in 2010 to 33.9. Figure 2-10 shows the Lorenz curve for Rural India, and it appears that Indian policies are able to reduce the inequality; same is true for Urban India.

Figure 2-7: Gini Coefficient of India

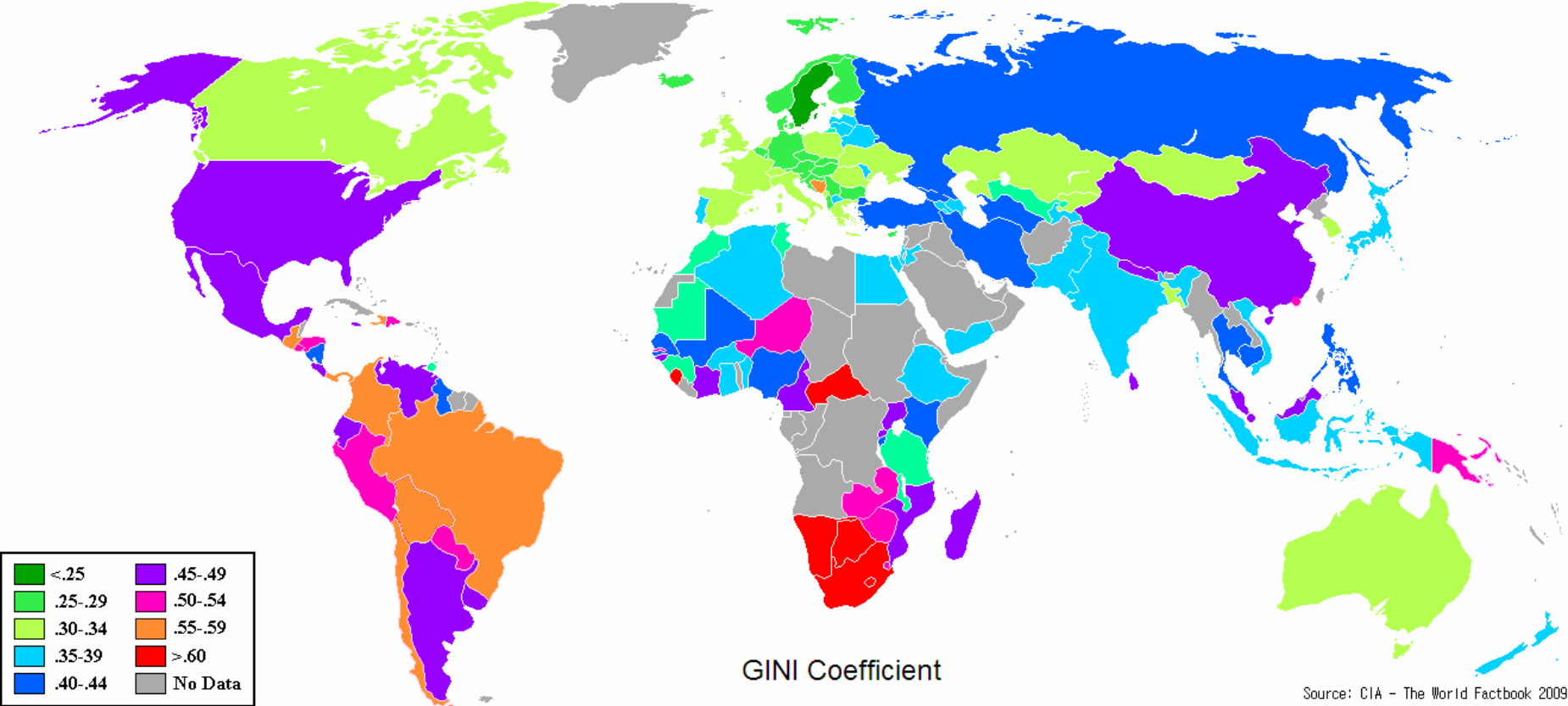


Source: Adapted from *World Development Indicators 2012* by World Bank Group (Ed.). (2012). World Bank Publications.

Extent of poverty is necessary to understand the importance of the microfinance research.

These measures even if not directly related to microfinance, but their understanding helps the policy makers and practitioners to target the poverty reduction goals in a desired way. There is no way that any academician or practitioner can afford to neglect the poverty measurement. Any step taken towards poverty eradication needs to be gauged if they are making sense and continue doing if they are working right for the country.

Figure 2-8: Gini Coefficient of World

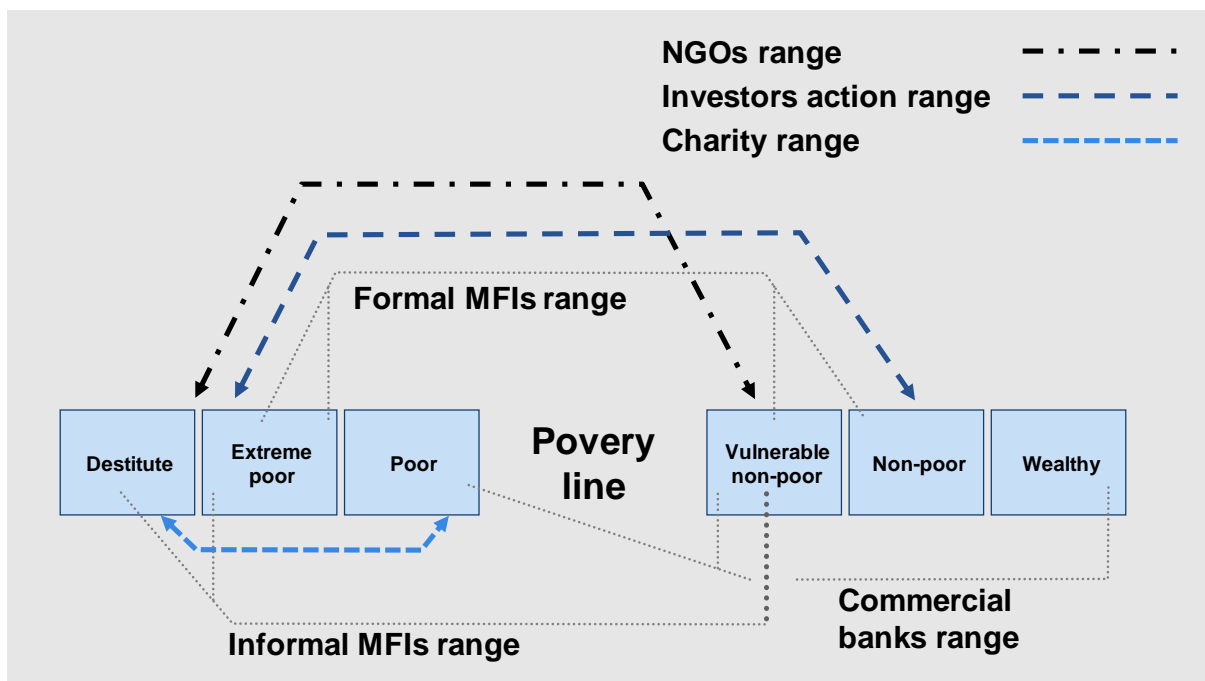


Source: Reprinted from *The world factbook*. By CIA (2009). Potomac Books, Inc

2.3 Conclusions

The purpose of this chapter is to connect microfinance subject with poverty. It is inevitable for us to understand poverty since the very purpose of microfinance is to eradicate poverty. We have identified various poverty approaches and their explicit role in microfinance. The importance of such an undertaking is justified given the extent to which microfinance has advocated itself as a poverty-reducing tool.

Figure 2-9: Helping to improve Donor Effectiveness in Microfinance



Source: Adapted from *Helping to improve Donor Effectiveness in Microfinance*. By The Microfinance gateway, 2006

The review of poverty theory was then juxtaposed with an analysis of the ways in which the microfinance literature has engaged with poverty theory, poverty terminologies and measurements. Monetary Approach and Capability Approach point to financial services as a means of improving the poverty by providing credit. What has emerged is the potential for financial services to reduce risk and vulnerability – via a number of mechanisms including assistance in coping with unexpected shocks; building a households’ asset portfolio, and enabling stable consumption in spite of income fluctuations. This shows that microfinance

2.4 Reference

- Booth, C. (1887). The Inhabitants of Tower Hamlets (School Board Division), Their Condition and Occupations. *Journal of the Royal Statistical Society*(50), 326-340.
- Chambers, R. (2006). What is poverty? Who asks? Who answers?
- Chambers, R. & Conway, G. (1992). Sustainable Rural Livelihoods: Practical Concepts for the 21st Century. IDS Discussion Paper 296. Brighton, Institute for Development Studies.
- CIA, A. (2010). *The world factbook*. Potomac Books, Inc..
- Dercon, S. (2005). Risk, Poverty and Vulnerability in Africa. *Journal of African Economies* 14(4): 483-489.
- Dikhanov, Y. (2005). *Trends in global income distribution, 1970-2000, and scenarios for 2015* (No. HDOCPA-2005-08). Human Development Report Office (HDRO), United Nations Development Programme (UNDP).
- Dreze, J. & Sen, A. (1989). *Hunger and Public Action*. Oxford, Clarendon Press.
- Dreze, J. & Sen, A. (1996). *India: Development and Participation*. Oxford, Oxford University Press.
- Dutta, B; Panda, M. (2014). Lessons of financial liberalization for India: Another view, *Economic and Political Weekly*, Aug 2-14, vol XLIX – 31
- Haughton, J. H., & Khandker, S. R. (2009). *Handbook on poverty and inequality*. World Bank Publications.
- Klugman, J. (ed) 2002. *A sourcebook for poverty reduction strategies*. Washington: World Bank.
- Moser, C. (1998). The Asset Vulnerability Framework: Reassessing Urban Poverty Reduction Strategies. *World Development* 26: 1-19.
- Øyen, E., Miller, S. M., & Samad, S. A. (Eds.). (1996). *Poverty: a global review: handbook on international poverty research* (Vol. 5). Scandinavian University Press.
- Pressman, S. and G. Summerfield (2000). "The Economic Contributions of Amartya Sen." *Review of Political Economy* 12(1): 89-113.
- Rowntree, B. S. (1902). *Poverty. A Study of Town Life*. London: MacMillan and Co.
- Sen, A. (1993). Capability and Well-being. In M. Nussbaum & A. Sen (Eds.), *The Quality of Life*. Oxford: Clarendon Press.

- Sen, A. K. (1999). *Beyond the Crisis: Development Strategies in Asia*. Singapore, Institute for Southeast Asian Studies.
- Streeten, P. (1981). *First Things First: Meeting Basic Human Needs in Developing Countries*. Washington D.C., Oxford University Press, World Bank.
- Streeten, P. and S. J. Burki (1978). Basic Needs: Some Issues. *World Development* 6(3): 411-421.
- The Microfinance gateway (2006): Helping to improve Donor Effectiveness in Microfinance. Available at www.cgap.org
- Todaro, M. P., & Smith, S. C. (2009). *Economic development*. Boston: Pearson Addison
- UNDP (2009). *Human Development Report 2009. Overcoming barriers: Human mobility and development*. New York, UNDP.
- Wilson, W.J. (1990). *The Truly Disadvantaged. The Inner City, the Underclass, and Public Policy*. Chicago: University of Chicago Press
- World Bank (2005). *World Development Report 2005: Better investment climate for everyone*. Washington D.C., World Bank.
- World Bank. 2000. *World Development Report 2000/2001: Attacking Poverty*. Washington, DC: World Bank.
- World Bank Group (Ed.). (2012). *World Development Indicators 2012*. World Bank Publications.

3 An analysis of performance of Microfinance Institutions (MFIs) in India post Andhra Pradesh Crisis with comparison to its peers globally

“This is not charity. This is business: business with a social objective, which is to help people get out of poverty.”

—*Muhammad Yunus*

Founder of Grameen Bank and Nobel Peace Prize recipient

3.1. Chapter Summary

Here we analyze the characteristics of MFIs to understand its operations and advise how it can improve its reach. MFIs have changed from donor based to for-profit, or at least to be self-reliant after the donor funds are used up. Donor-based MFIs hold back microfinance from growing, as funding from donors are limited, but it also jeopardizes the development of the business since donors might diminish the incentives for MFIs to become more efficient and cut costs (Schreiner & Murdoch, 2001).

Studying sustainability of MFIs is an important area, as there is no point in having unsustainable MFIs that will go bust after it uses the funds (Schreiner, 2000). Nyamsogoro (2010) states that sustainability is very important for any MFIs, as they are helping many poor below poverty line, they cannot afford to lose the capital and stop lending to poor.

In this chapter we would analyze Indian MFIs in terms of various parameters and arrive at a snapshot of the Indian Microfinance Sector.

Andhra Pradesh Crisis:

Andhra accounted for 27.93% of country's borrowers and 7.28% of country's population (Srinivasan, 2009, pp.39). Andhra Pradesh had 36.4% share in Self Help Group (SHG) linkage program (Srinivasan, 2009, pp.25). So this makes Andhra a big stakeholder for microfinance sector. Many MFIs including SKS had concentrated their operations in Andhra making them vulnerable to concentration risk. The country's growth story was clearly visible in Andhra Pradesh and borrowers were getting good services as Andhra was having presence of many MFIs. Andhra Pradesh was topping the Microfinance Penetration Index (MPI) with score of 3.64 and Microfinance Poverty Penetration Index (MPPI) with score of 6.35 in 2010 (Srinivasan, 2011, pp.16). MPI is computed by dividing the Share of the State in microfinance clients with share of population. MPPI is derived by dividing the share of the

state in microfinance clients by share of the state in population of Poor. This implies that microfinance had high penetration in Andhra Pradesh. High levels of penetration are also a cause for concern as they indicate that the debt levels could exceed the repayment capacity of the poor households (Srinivasan, 2009). Andhra Pradesh had 9.63 loan accounts per household (Srinivasan, 2010, pp.4). A Minister in the government of AP admitted on 3rd December 2010 that 75 suicide cases had come to the notice of AP government by that date (FullHyd.com, 2010). Microfinance Focus (2010) has reported that there have been 54 suicides by microfinance borrowers in the State of Andhra Pradesh alone during . A study (Ashta, et al, 2011) on microfinance and suicide has two important conclusions. First, the suicides among Microfinance customers in Andhra Pradesh do not seem to be any greater than the average suicide rate in India and second the cross-sectional state-wise data in India also seems to suggest a strong link between suicides and microfinance and an even stronger link between the bank SHG model and suicide rates. Thus, the measures to protect people apply as much to banks as to MFIs.

The Government intervened in MFIs operations. It issued an ordinance restricting MFIs recovery and lending operations. Ordinance put controls on client acquisition, extent of loan, terms of repayment, places at which customers could meet for transactions. There were arrests of few staff members who ventured into customer habitat subduing any opposition to this ordinance. There was also stern warning from regulators that directors of NBFCs may also face arrest (State Government of Andhra Pradesh, 2010).

3.2. Data and Methodology:

By studying the characteristics of MFIs encompasses understanding of MFI portfolio, operating costs, and portfolio quality. For this purpose, we have used data from mixmarket.org (MIX). MIX receives data from MFIs world-wide for various parameters; it is

a self-reported number by MFIs. The single-most important benefit and strength of using the MIX Market data is that the reporting from MFIs has been collected in a unified and standardized framework. Hence we can compare same parameter across all MFIs.

Our research area is encompassing all MFIs in India that report to MIX. The MIX Market data is a merged set of two sources, as it is possible to download yearly datasets of indicators for all MFIs that report in a given year (the data only contains a selected range of variables) as well as to download datasets for individual MFIs. It was attempted to keep the data as up-to-date as possible, so the final download of data from the database (and update of tables and graphs) was per August 31, 2014. There were many MFIs which were reporting the data late. If we take latest date, then we will be missing out on most of the MFIs and our analysis will not reflect the true situation. Hence for the consistency purpose, we have kept 2011 as the primary study year.

The peer countries for comparison were chosen as follows: Bangladesh, Bolivia, Bosnia & Herzegovina, Morocco, Nicaragua, Nigeria and Pakistan. These countries in past have been hit by at least one microfinance crisis and share similar poverty profiles (refer Table 4-2).

For each microfinance institution, available data include descriptive statistics, financial data, and data on outreach. Descriptive statistics cover the year of the MFI's establishment, if it is regulated, a verbal statement of the institution's goal, key notes on its historic background and development process, products provided, its main funding sources, the percentage of operations comprised by microfinance, a list of Mix Market funds investing in the MFI, possible investment opportunities, as well as individual presentations of internal reports. Financial data describe the internal structure of each MFI, and include data of fields such as balances, financing structure, returns and revenues on assets and equity, profit margins, costs,

and poverty have a connection, though not direct. But increased financial services to poor can help them come out of poverty.

Poverty measurement also is an important aspect for any policy makers. We have seen that HCI is not suitable as the policies could be biased towards richest poor thereby marginalizing poorest of poor. Hence it is necessary to have a strong foundation in understanding that some measures may misguide the microfinance practitioners. If we study the HCI for India, it has been decreasing over period depicting decrease in poverty. But we look at Gini coefficient of India; it has increased from 30.84 to 33.9 during 1994 to 2010. This straight away questions the policies as the inequality has increased. For our research, we consider poor people who are below the poverty line laid down by World Bank. This research is concerned more about managing the supply side. Nevertheless, understanding surrounding areas of interest makes it a strong research.

and risk. Outreach data provide information on direct interaction with clients. This covers average loan and savings balances per borrower/saver, the number of active borrowers, savers, and personnel, the distribution of male and female borrowers, and the ratio of average loans/savings per borrower/saver to per capita gross national income.

MFIs reported their data to the MIX database on a voluntary basis. Thus, the data is biased towards MFIs that both deem it in their interest to disclose information, and are able to deliver data of a sufficient quality. For the same reason, the data will suffer from survivorship bias / attrition bias. This occurs because MFIs can stop reporting to MIX and the data might be missing for few months for a particular MFI. MFIs can stop reporting because of many reasons like poor financial performance or reasons which might cause setback to its reputation. However, the dataset is a good representation of Indian MFI universe, given the longevity and breadth of its coverage. Using all data of all MFIs available helps us to overcome the survivor bias in the analysis.

The data for few countries appears to be very high. One reason is that there are very few MFIs reporting to mixmarket making the country average for that parameter is very high. Other reason being few MFIs are not reporting some parameters for some years. Though, it is not feasible to verify every bit of information, the quality of the dataset seems good².

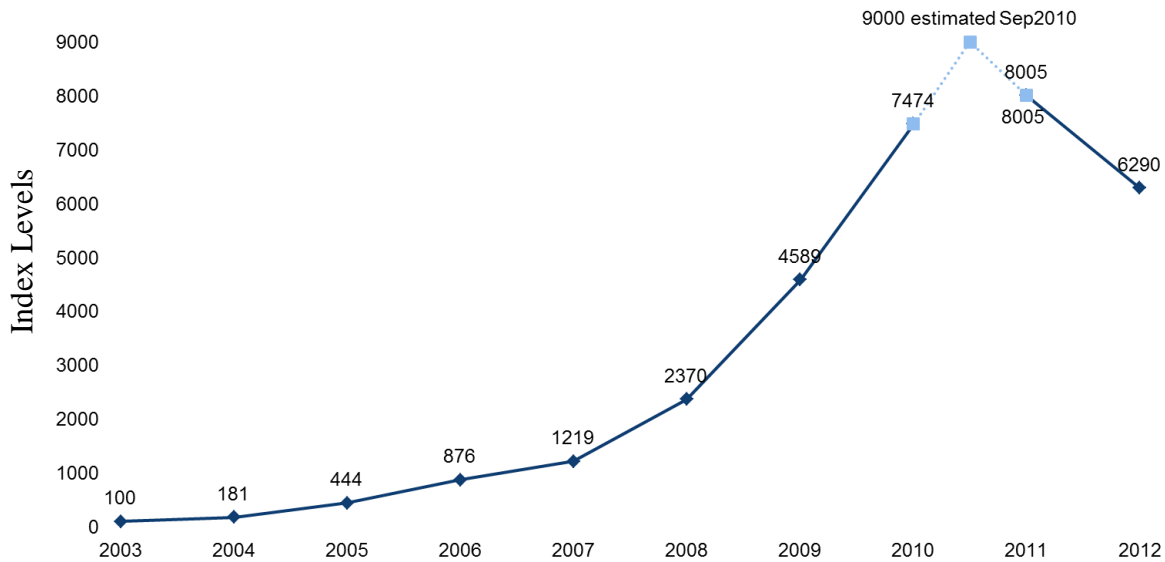
3.3. MFI market:

CRILEX – the M-CRIL India MFI Growth Index, a composite index of growth of microfinance institutions in India – uses information on the numbers of borrowers and the size of loan portfolio of the 24 largest MFIs (more than 100,000 active borrowers). CRILEX is a new headline benchmark for large Indian MFIs which gives an overall picture of the

² However, there are some high values in the MFI profiles. E.g. MFI data for Nigeria shows very high average cost per loan and few countries show very high average cost per borrower.

microfinance sector. However, deeper insight requires analysing the data, which we have achieved from our study.

Figure 3-1: CRILEX – the M-CRIL India MFI Growth Index



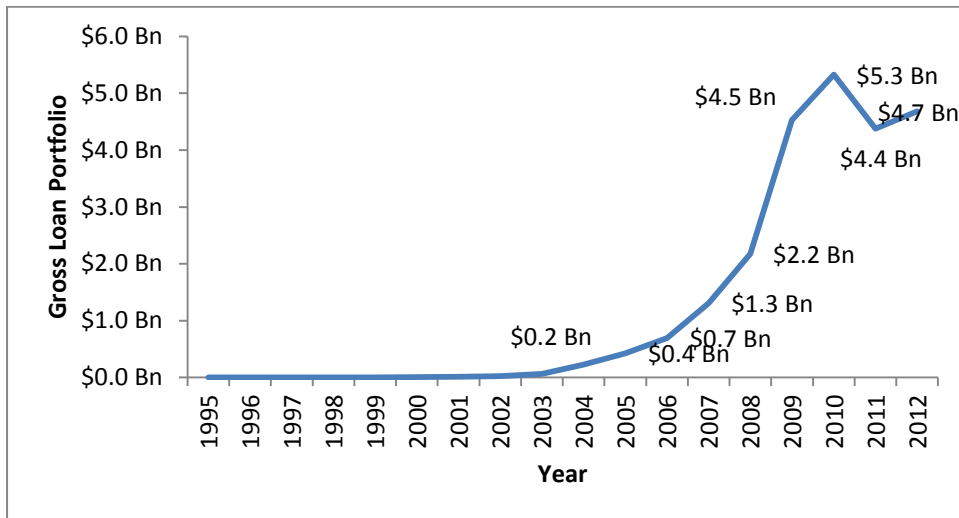
Source: Reprinted from M-CRIL (2012), retrieved from http://www.m-cril.com/BackEnd/ModulesFiles/Publication/CRILEX_India_2012.pdf

3.4. Portfolio Size:

Loans disbursed by MFIs indicate the size of the loan portfolio. Gross loan portfolio (GLP) is all outstanding principals due for all outstanding client loans. This includes current, delinquent, and renegotiated loans, but not loans that have been written off. It does not include interest receivable.

The GLP has been growing at 63% (Figure 3-2) compounded annual growth rate (CAGR) from 2000 to 2012. This shows the growth of this sector has been very rapid. The dip after 2010 is due to the AP crisis, which was the most important phase in the Indian microfinance history. Many MFIs had to shut down its operations and many down sized and wrote off their portfolios.

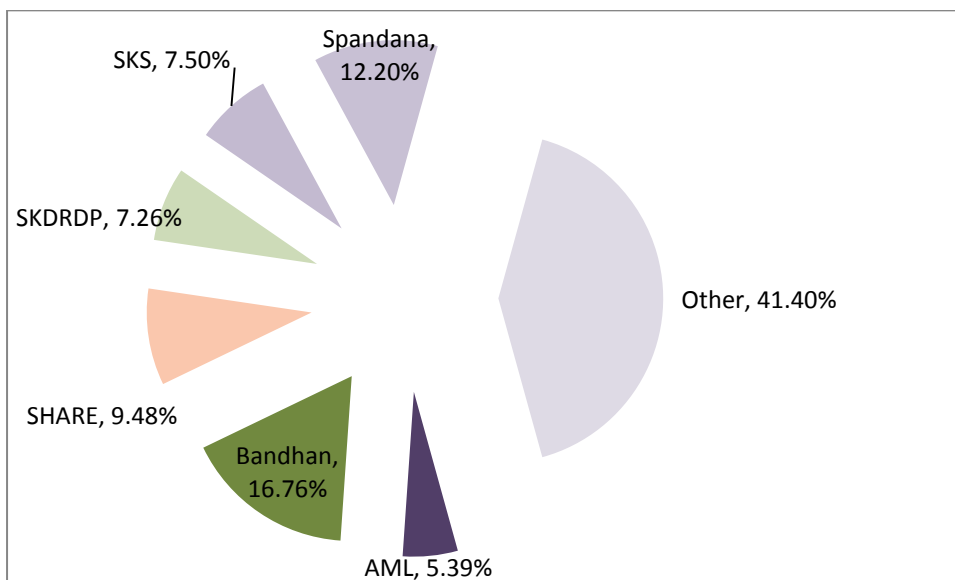
Figure 3-2: Gross Loan Portfolio of MFIs



Source: mixmarket.org

Figure 3-3 shows that microfinance sector is controlled mainly by six MFIs which hold about 60% of the loans outstanding.

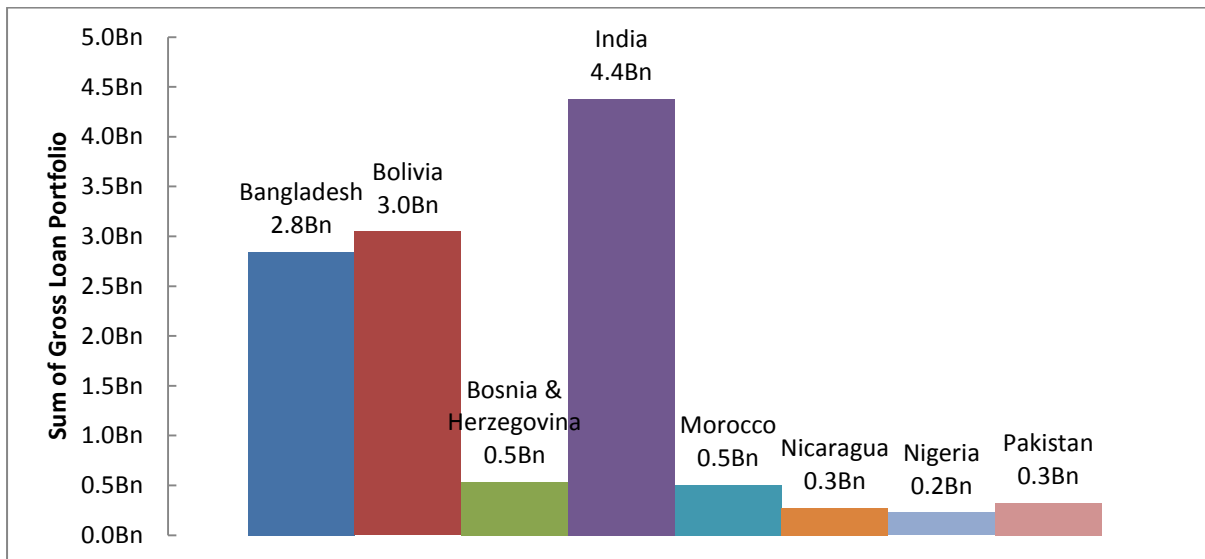
Figure 3-3: GLP of MFIs with large portfolios for FY 2011



Source: Author's calculation using mixmarket.org

We compare the GLP of India and its peer countries in Figure 3-4 and see that India had a very large portfolio that was lent out to poor borrowers.

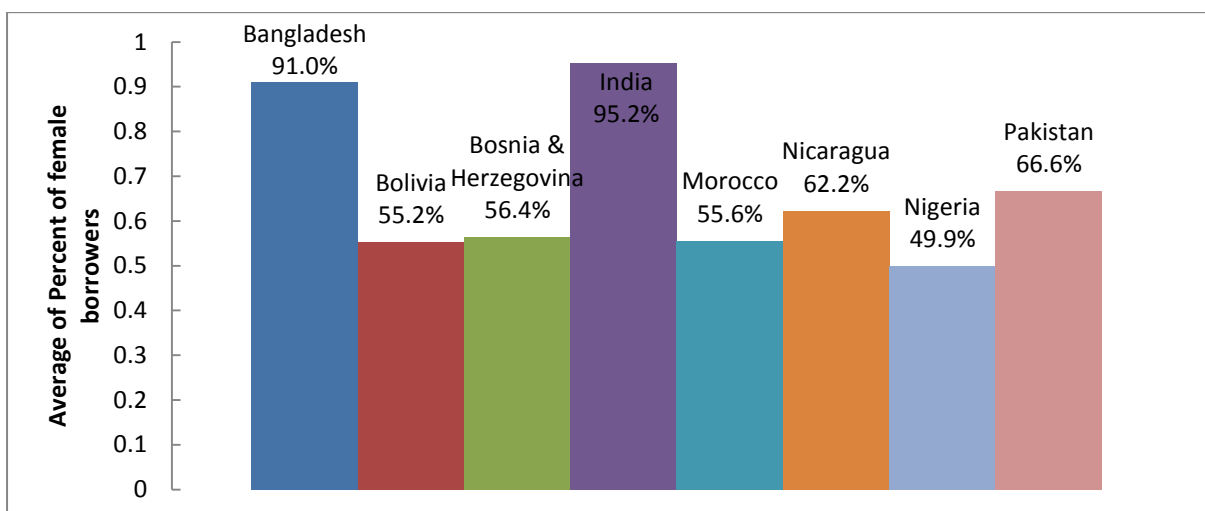
Figure 3-4: GLP of India and peer countries for FY 2011



Source: Author's calculation using mixmarket.org

Microfinance sector usually lends to females who are believed to be more risk averse in their choice of investment, more fearful of social sanctions and less mobile making it easier for MFIs to monitor (Sengupta & Aubuchon, 2008). Figure 3-5 shows that Indian MFIs are supporting female borrowers more than their peer countries substantiating this argument.

Figure 3-5: Percentage of female borrowers for FY 2011



Source: Author's calculation using mixmarket.org

3.5. Costs:

MFIs that provide multiple microfinance services incur various costs. Costs directly attributable to the micro-financial services include for instance personnel expenses (e.g. salary for loan officers), refunding of staff transportation and training for loan officers, loan loss provision, and interest expense on borrowings that refinance the loan portfolio (Helms, 1998). Further the costs of MFIs can be generally categorized in fixed (e.g. office rent) and variable costs (e.g. travel expenses to meet clients) (Churchill & Frankiewicz, 2006, p.338).

Transaction Costs:

It is also worth mentioning the cost to clients which include not only the interest rates and fees, but also transaction cost directly arising for a loan processing. Transaction costs of borrowers include both opportunity costs, for example the time spent for group meetings and meetings with the loan officer, and indirect expenses for notarized documents, transportation/travel expenses to the bank etc.

Cost per loan:

Analysis of the cost per loan provides insight into how operating costs have changed and how efficiently the organisation is operating.

Cost per loan for a few countries in 2011 is shown in Figure 3-6, implies a much lower numbers for India showing that the costs were kept in check by the industry.

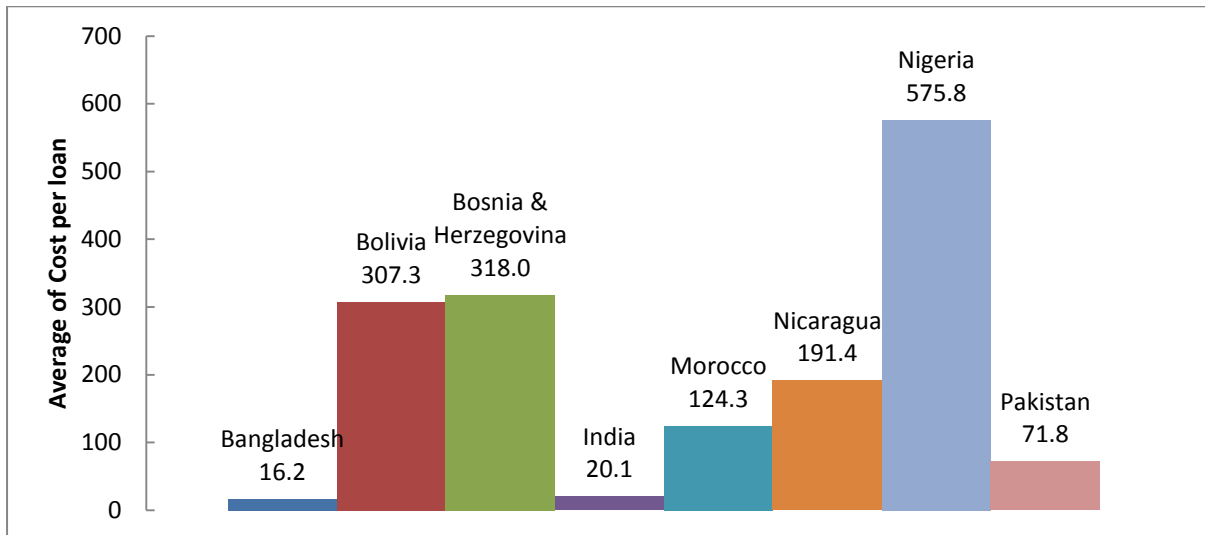
However this graph has a drawback as each country has different loan size. Hence there is a need to compare across the same base. Figure 3-7 shows the cost per loan of USD 100, and India spent USD 10.7. This shows that Indian MFIs are efficient in managing costs.

Cost per borrower:

This is also an indicator for cost. MFIs have higher cost control in terms of reducing it, since it can control the administrative expenses and using methods to keep costs under check.

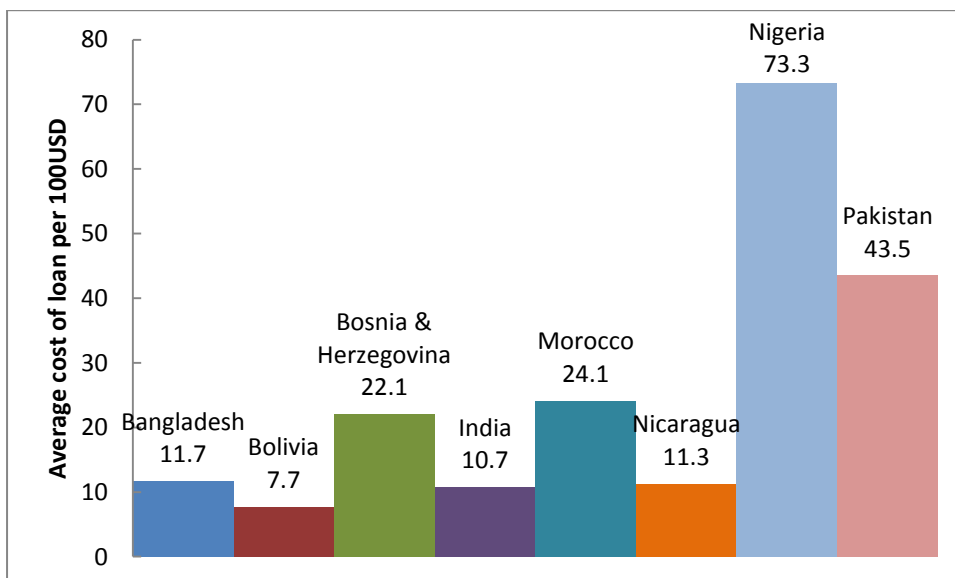
Some of the costs are easy to control but some are difficult to control like salary which driven by market and not efficiency. Costs include expenses related to operations, including all personnel expense, depreciation and amortization, and administrative expense.

Figure 3-6: Average Cost per loan (USD) in 2011



Source: Author’s calculation using mixmarket.org

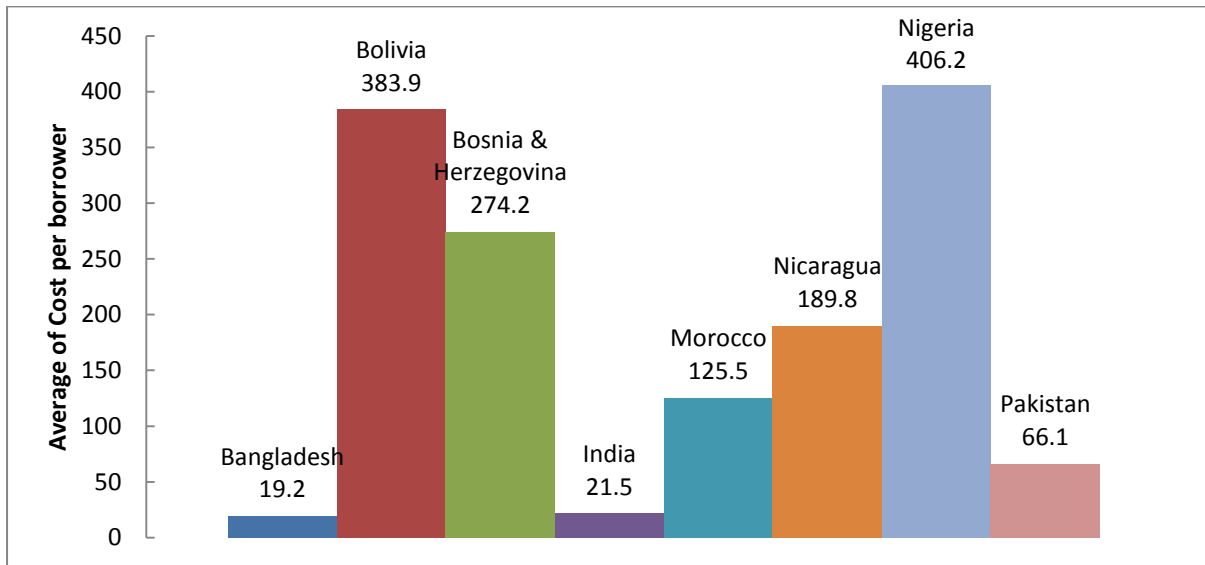
Figure 3-7: Average cost of loan per USD100 loan in 2011



Source: Author’s calculation using mixmarket.org

Note: Average cost for few countries like Nigeria appears to be very high as only 7 MFIs have reported data to mixmarket.

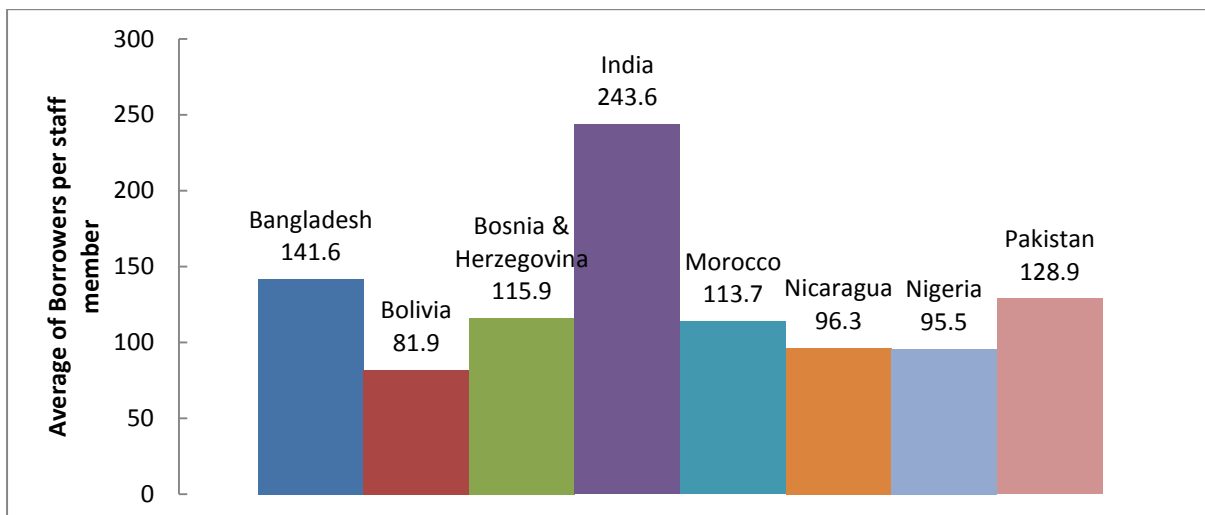
Figure 3-8: Average Cost per borrower (USD) in FY2011



Source: Author's calculation using mixmarket.org

One of way of improving efficiency is to have multiple borrowers per staff member. India being very dense country it is possible to have one loan officer to attend many borrowers in nearby villages. The same result is confirmed by Figure 3-9.

Figure 3-9: Borrowers per staff members for FY 2011



Source: Author's calculation using mixmarket.org

Loan Loss Ratio (LLR):

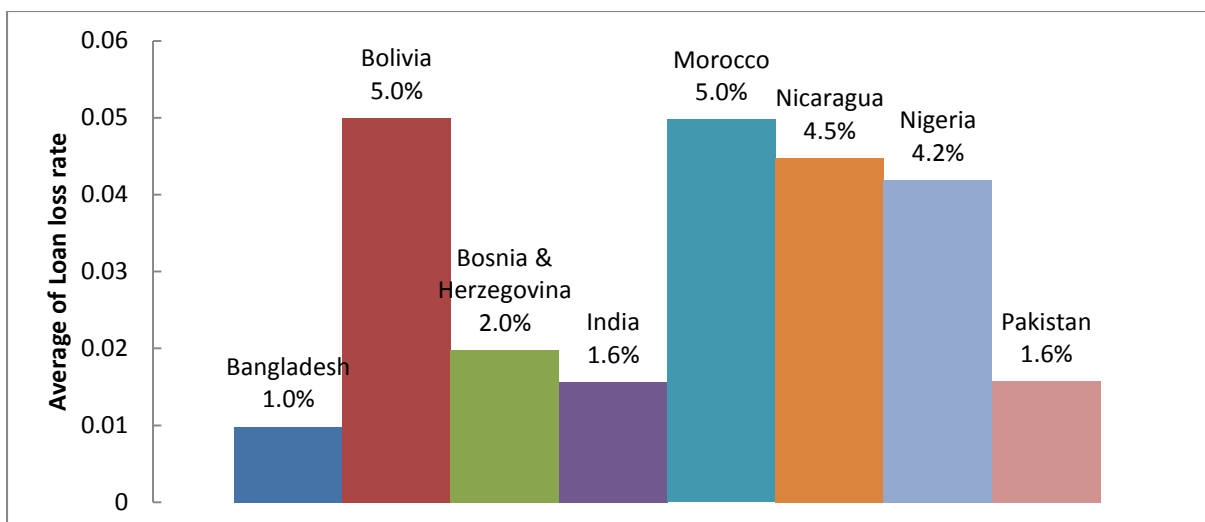
It is an important measure of an MFI's strategy to tackle (current and future) delinquency. LLR attempts to pragmatically enable the MFI to counter the default risk in a portfolio by using past as well as future data, and assigning probabilities for likely future losses. Its estimation is based on the key question that, given a category of past due loans and its associated likely probabilistic losses due to delinquency, how much (money) would have to be maintained as a (loan loss) reserve to offset this future loss? Based on the historical default rate or best practices, the LLR indicates what percentage of the loans outstanding is expected to be unrecoverable. Prudent financial management and full disclosure would imply that this figure should reflect the maximum projected unrecoverable loans.

$$LLR = \frac{\text{Write-offs} - \text{Value of Loans Recovered}}{\text{Average Gross Loan Portfolio}}$$

Equation 1

Sustainable institutions will have lower LLR indicating that they have lower unrecoverable loans on the balance sheet. Figure 3-10 implies India is still better than most of the countries

Figure 3-10: Average LLR across countries for FY 2011



Source: Author's calculation using mixmarket.org

Risk Coverage:

The Risk Coverage Ratio is calculated by dividing loan loss reserves by the outstanding balance in arrears over 30 days plus refinanced loans.

$$\text{Risk Coverage} = \frac{\text{Impairment Loss Allowance}}{\text{PAR} > 30 \text{ Days}} \quad \text{Equation 2}$$

This measure shows what per cent of the portfolio at risk is covered by actual loan loss reserves. It gives an indication of how prepared an institution is for a worst-case scenario. It is general practice in microfinance to have higher risk coverage as there is no collateral in the lending. For our sample we found out that 43% of MFIs had risk coverage more than 100%.

Write Off Ratio

$$\text{Write off ratio} = \frac{\text{Value of Loans Written Off}}{\text{Period Average Gross Portfolio}} \quad \text{Equation 3}$$

This ratio represents the loans that the institution has removed from its books because of a substantial doubt that they will be recovered. Loan losses or write-offs occur when it is determined that loans are unrecoverable. Because loan loss reserves already provided for possible losses, loan losses are written off against loan loss reserves and are also removed from the outstanding portfolio.

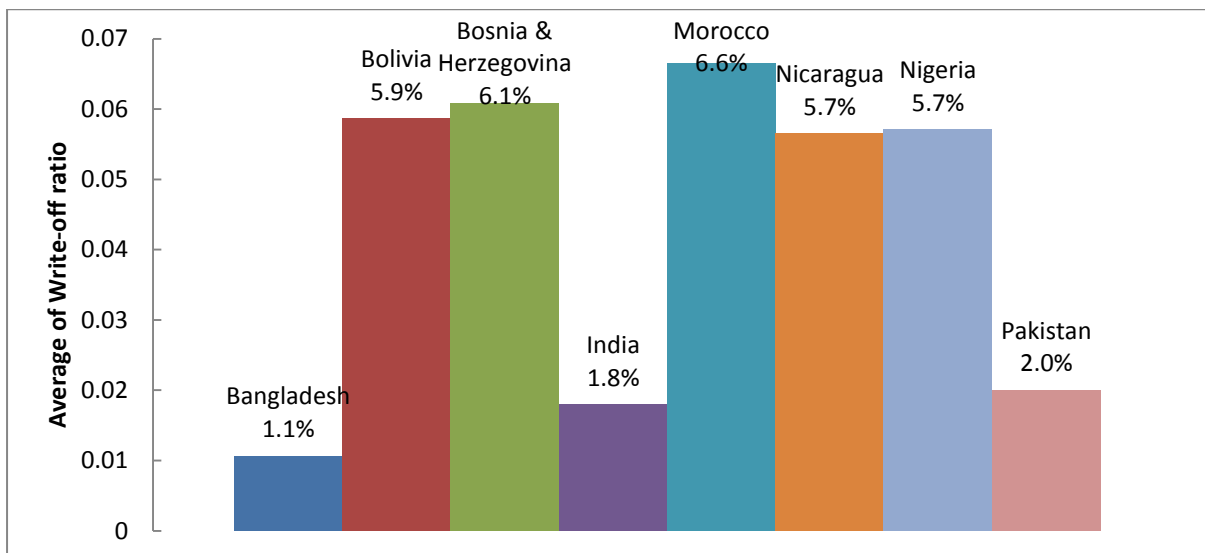
India has about 1.8% portfolio written off (Figure 3-11). In this year India had Bandhan Financial Services Limited (BSFL) having maximum write off of 47.6% followed by SKS 42.62%.

3.6.1. Financial Ratios:

The common profitability measures compare profits with sales, assets, or equity: net profit margin, return on assets, and return on equity. Although most financial services publish these ratios for most companies, they can be calculated independently by using net profit and total revenue from the Income Statement of a company's financial report, and total assets and

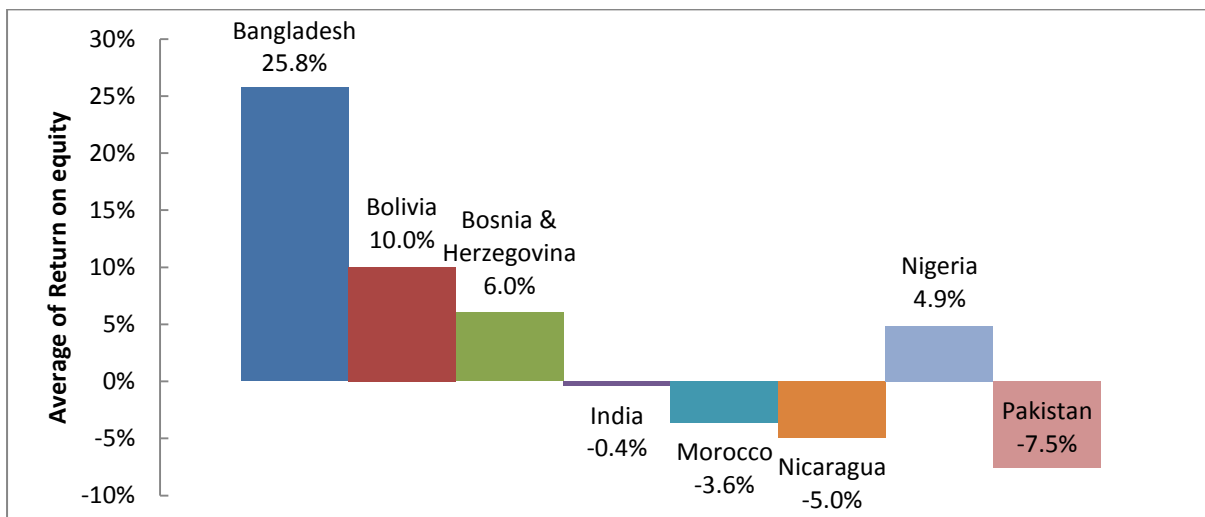
stockholders' equity from the Balance Sheet. Table 3-3 shows that ROE and ROA have been negative because of substantial losses. India stood as one of the worst performing country in Microfinance sector.

Figure 3-11: Average write off ratio for peer in FY 2011



Source: Author's calculation using mixmarket.org

Figure 3-12: Average ROE in FY 2011

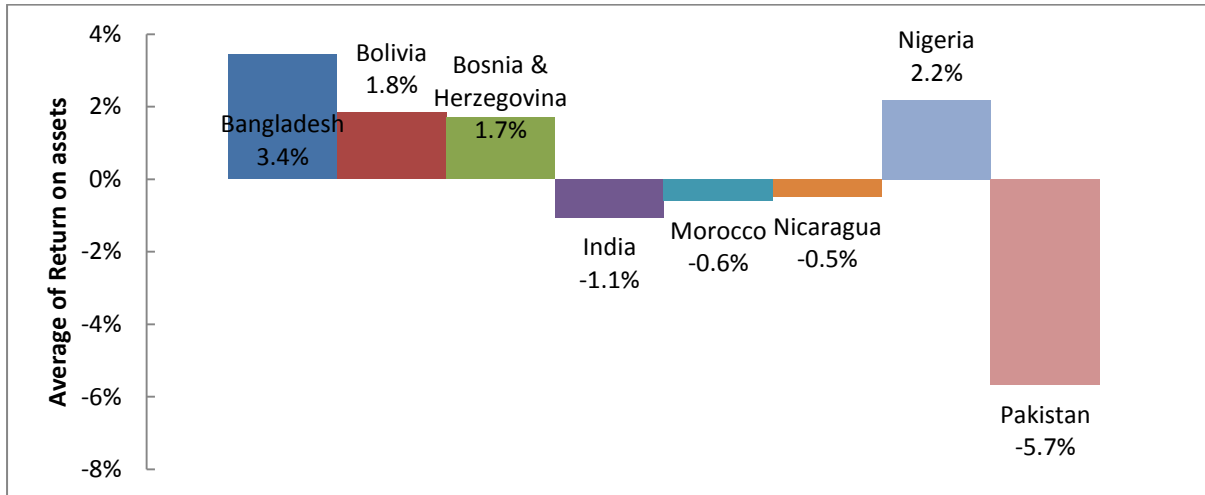


Source: Author's calculation using mixmarket.org

Figure 3-12 and Figure 3-13 show that Bangladesh has much superior ROA and ROE. The D/E ratio is very high for India about 11.6 implying very high leverage. High leverage

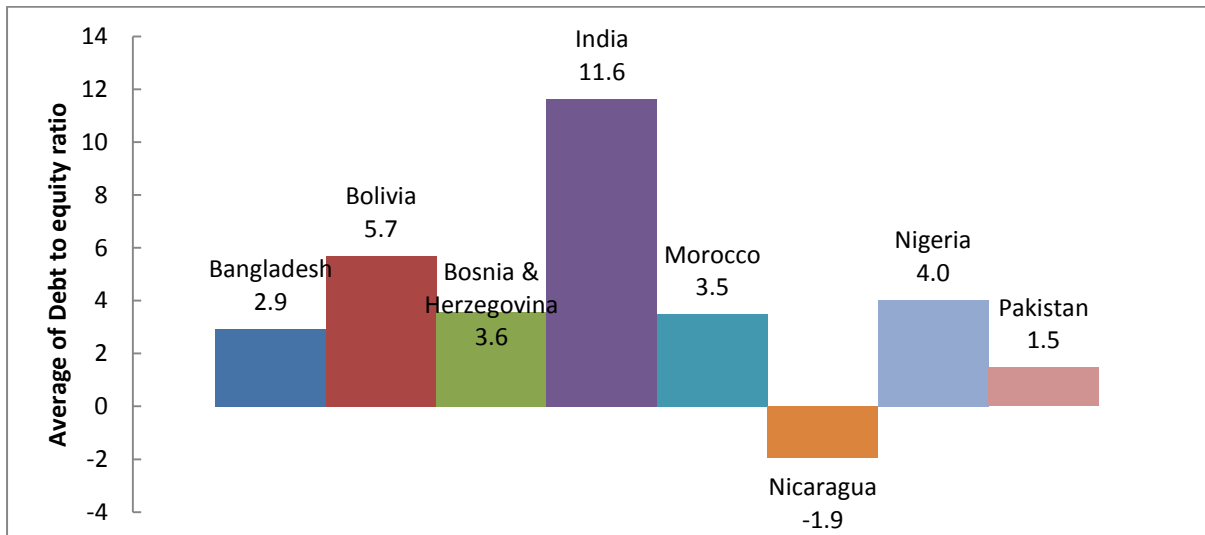
indicates that the returns are good on equity, but we have seen an opposite case. The D/E ratio for 2010 for India was 5.5 and restored to 4.1 in 2012.

Figure 3-13: Average ROA in FY 2011



Source: Author's calculation using mixmarket.org

Figure 3-14: DE Ratio for MFIs in FY2011



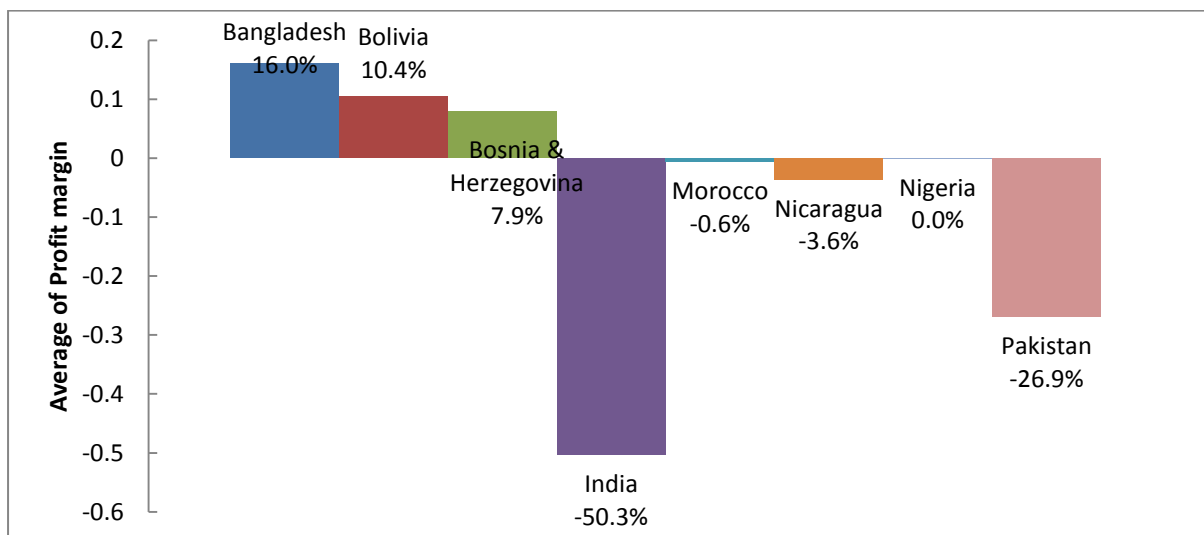
Source: Author's calculation using mixmarket.org

3.6.2 Net Profit Margin:

The net profit margin is an indication of how effective is a company at its cost control. Higher net profit margin indicates that the company is more effective in converting its revenue into actual profits. The net profit margin is calculated by dividing the net income by

revenue or by dividing the net profits by sales. It is expressed as a percentage. Figure 3-15 shows that India had negative profit margin and in 2010 it was 6.8% and in 2013 it was restored to 5.1%

Figure 3-15: Profit margin for MFIs in FY2011



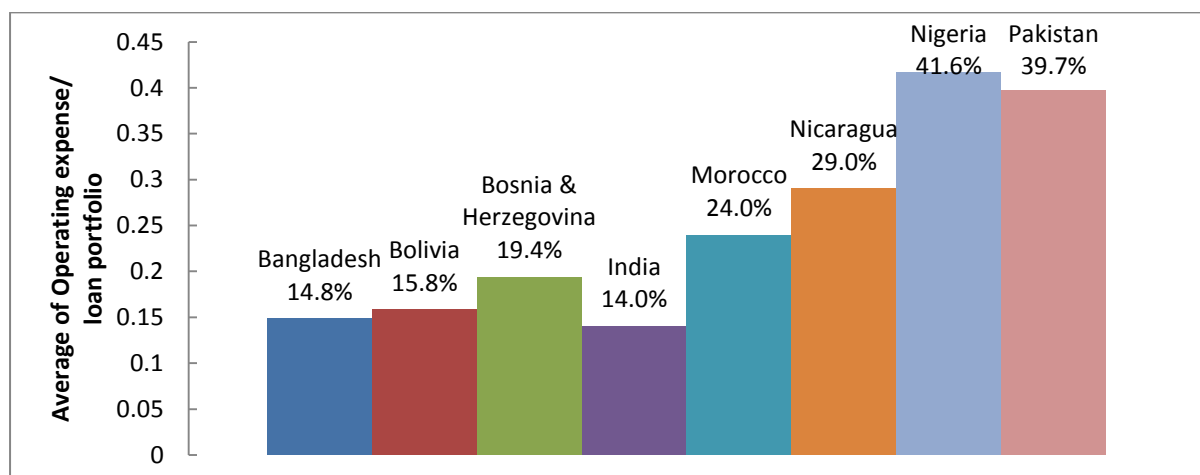
Source: Author's calculation using mixmarket.org

3.6.3 Efficiency and Productivity

Operating Expense Ratio (OER)

Operating expense ratio is the standard measure of efficiency and elaborates the cost side, especially when compared with other components of expenditure. The operating expense ratio measures the total of operating expenses (personnel, administrative and depreciation) as a proportion of the average outstanding portfolio. This is the most standard ratio for measuring operational efficiency. The lower the number better the costs managed by any MFI. For Bangladesh, the average OER stands at 14% which is around similar levels as that of India. India and Bangladesh is able to control its costs in turn would reduce the effective cost to their borrowers (Table 3-3). Figure 3-16 shows that India had much great control on OER which was lowest amongst the group.

Figure 3-16: OER for FY 2011



Source: Author's calculation using mixmarket.org

$$\text{OER} = \frac{\text{Operating Expenses}}{\text{Period Average number of borrowers}} \quad \text{Equation 4}$$

This measures the cost of maintaining an active borrower. A borrower is an individually identifiable person who has at least one current outstanding loan. All borrowers in a group loan are counted separately. Since the size of the portfolio is not included in the denominator as in the Operating Expense Ratio calculation, MFIs with larger loans do not automatically appear more efficient.

3.7 Sustainability:

One might assume that sustainable MFIs are typically for-profit commercial companies, but this is not true. Actually, almost two-thirds of the sustainable MFIs are NGOs, cooperatives, public banks, or other not-for-profit organizations (Rosenberg et al., 2009). Sustainability in general means the ability of a program to continuously carry out activities and services in pursuit of its statutory objectives. Sustainability implies that the institution generates enough income to at least repay the opportunity cost of all inputs and assets (Chaves & Gonzalez-Vega, 1996). Sustainability has two levels: operational and financial.

3.7.1 Operational sustainability (OSS):

OSS indicates whether enough revenue has been earned to cover the MFI's direct costs, excluding the cost of capital but including actual financing costs. Thus formula for calculating OSS is: Operating Income/ (Operating Expenses + provision for loan losses).

If this ratio is greater than 100 percent, the MFI is covering all of its costs through own operations and is not relying on contributions or subsidies from donors to survive (Churchill & Frankiewicz, 2006, p.367). OSS in general includes all the cash costs of running an MFI, depreciation and the loan loss reserve. Sometimes donors will exclude the cash costs of funds from their analysis because "those MFIs that begin to access the commercial financial markets and pay the cost of capital would look relatively worse than other institutions with the same costs and outreach, but who have remained reliant on donor capital to fund their portfolio" (United Nations Capital Development Fund (UNCDF), 2002, p.20). This is due to the fact that some donor fund dependent institutions do not have the same financing cost as commercial MFIs.

OSS is calculated as:

$$\frac{\text{Financial Revenue (Total)}}{\text{Financial Expense+Loan Loss Provision Expense+Operating Expense}} \quad \text{Equation 5}$$

Source: Microfinance Bulletin (2008)

Or

$$\frac{\text{Operating Income}}{\text{Operating Expense}} \quad \text{Equation 6}$$

Source: UNCDF (2002)

We analyse the OSS of the sample and the results are mentioned in Table 3-1. We observe that most of the MFIs are financially sustainable to cover their costs.

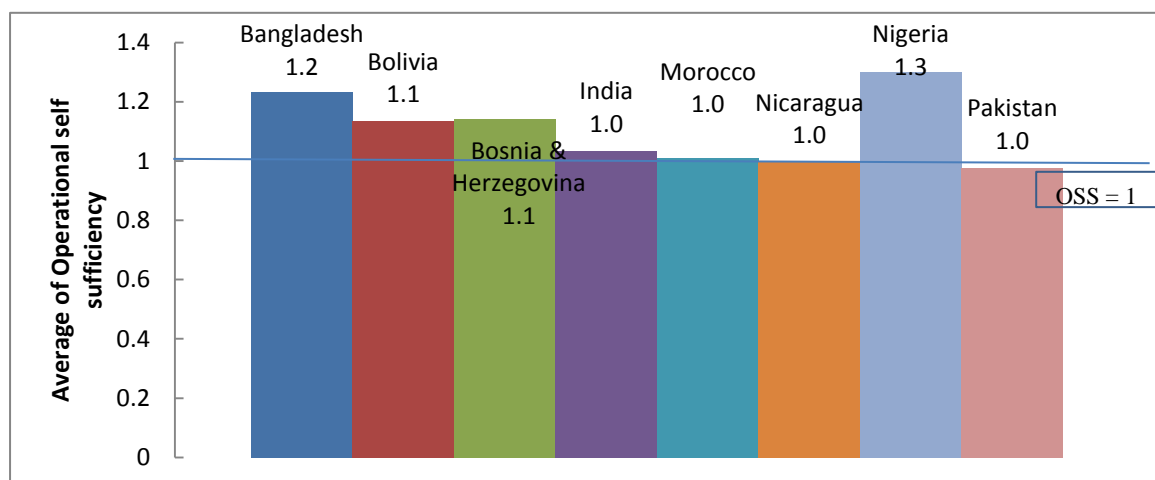
Table 3-1: OSS as of 2011

Operational Self Sufficiency (OSS) as of 2011	
>1	<1
73%	27%

Source: Author’s calculation using mixmarket.org

Even after the Andhra crisis (Refer 4.8) number of MFIs that have OSS above 1 is commendable. Mean OSS is about 1.03 showing that Indian MFI industry is self-sufficient (Table 3-3).

Figure 3-17: OSS for MFIs in FY2011



Source: Author’s calculation using mixmarket.org

3.7.2 Financial Sustainability (FSS):

Financial sustainability of microfinance institutions is probably the key dimension of microfinance sustainability. It refers to the ability of an MFI to cover all its costs from its own generated income from operations (Thapa et al, 1992) without depending on external support (e.g. subsidies). UNCDF distinguishes financial self-sufficiency (FSS) from OSS

only by the fact of an adjusted basis³. The FSS indicator measures the extent to which an MFI covers adjusted operating expenses with operational income. This ratio is calculated by using:

$$\frac{\text{Adjusted Operating Income}}{\text{Adjusted Operating Expense}}$$

Equation 7

Source: UNCDF (2009)

Ledgerwood (1999) additionally states that the FSS indicator should show whether enough revenue has been earned to cover direct costs, (including financing costs, provision for loan losses and operating expenses) and indirect costs (including adjusted cost of capital) (p.217). There are many other sustainability ratios like the ones listed in Table 3-2 which are used, but we will not get into the details of it.

Table 3-2: Other Sustainability ratios

RATIO	FORMULA	PURPOSE	Trend
Return on performing assets	$\frac{\text{Financial income}}{\text{Average Performing Assets}}$	Indicates financial productivity of credit services and investment activities	An increasing ratio is positive
Financial cost ratio	$\frac{\text{Financial costs}}{\text{Average Performing Assets}}$	Shows cost of funds; affected by mix of soft loans, hard loans and net worth	Decreasing ratio is positive

³ Adjusted means showing how MFIs would look like on an unsubsidized basis with funds raised on the commercial market; plus inflation adjustments

Loan loss provision ratio	<u>Loan loss provision</u> Average Performing Assets	Indicates provisioning requirements on loan portfolio of the current period	Decreasing ratio is positive
Operating costs ratio	<u>Operating expenses</u> Average Performing Assets	Key indicator of efficiency of lending operations Trend: Decreasing ratio is positive	Decreasing ratio is positive
Donations and Grants ratio	<u>Donations and Grants</u> Average Performing Assets	Shows dependency of institution on outside funding for operations	Decreasing ratio, relative to the net margin is positive
Operating self sufficiency	<u>Financial income</u> Financial & operating costs	Shows ability of institution to cover costs of operations through internally generated income	An increasing ratio is positive
Financial self sufficiency	<u>Financial income</u> Financial & operating costs + loan loss provision + imputed	Shows whether revenue earned is sufficient to cover all operating, financial	Increasing trend is positive

	cost of capital*	and loan expenses as well as to maintain the value of equity.	
Imputed cost of capital	[Inflation X (average net worth - average fixed assets) + (Inflation-interest rate paid) X <u>Concessional loans</u> Average performing assets	Shows the cost of maintaining the value of the net worth of the organisation	decreasing ratio is positive

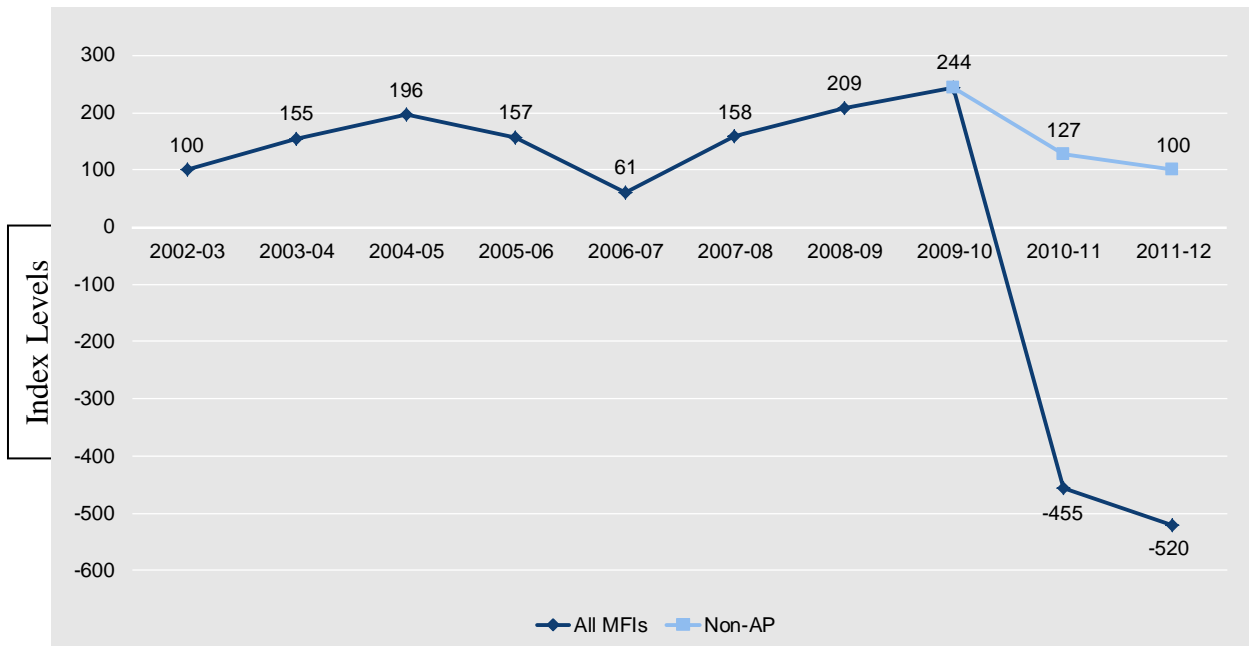
FINEX – the M-CRIL India Financial Performance Index:

FINEX – the M-CRIL India Financial Performance Index is a composite index of the performance of microfinance institutions in India. It uses information on the portfolio at risk (>30 days) and the return on assets of the M-CRIL 24 MFIs. Our analysis showed that 2011 year was bad for Indian Microfinance sector. This is reconfirmed by FINEX. This year’s MFIs have been hit financially and were struggling to make a comeback.

3.8 Portfolio Quality

MFIs have been growing their loan books and increasing their base and keeping costs under control. But this is not enough as they need to monitor the portfolio quality. The MFI should be able to recover their loans on time, and if the loans delinquency is not kept low, then it can erode the loan portfolio and force them to scale down their operations. There are a few indicators which are widely used to monitor the portfolio quality.

Figure 3-18: Finex Index by MCRIL



Source: Reprinted from MCRIL (2012) retrieved from http://www.m-cril.com/BackEnd/ModulesFiles/Publication/CRILEX_India_2012.pdf

Portfolio at Risk (PAR):

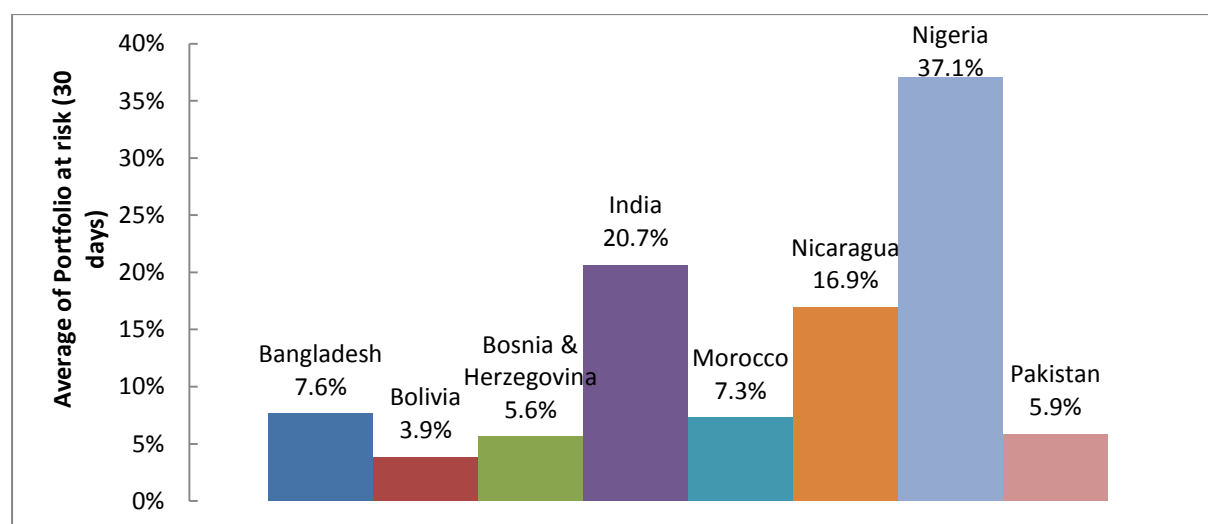
Portfolio at Risk is widely used indicator to check the portfolio quality. The older the delinquency, the less likely is that the loan will be repaid. The standard international measure of portfolio quality in banking is PAR beyond a specified number of days.

$$PAR (x \text{ days}) = \frac{\text{Outstanding Balance in Arrears over } x \text{ Days plus Restructured Loans}}{\text{Total Outstanding Gross Portfolio}} \quad \text{Equation 8}$$

The number of days (x) used for this measurement varies. In microfinance, 30 days is a common breakpoint. If the repayment schedule is different from monthly, then one repayment period-e.g. week, fortnight, or quarter-could be used as an alternative. The mean PAR for Indian MFIs is about 17% and weighted average is about 20% showing the current health of portfolio (Table 3-3). Bolivia is having the least PAR of about 3.9% showing its strong lending techniques or may be because of lessons learned from its crisis in past.

This ratio is relatively manipulation-free, compared to ratios such as the repayment rate which may not take into account loans that are past due. However, in cases of agricultural loans, where there might be balloon payments, PAR 30 ratios may be irrelevant because there is no warning of non-repayment until the event actually occurs. There are some advanced studies on building early warning index to check the delinquencies. This will be discussed in brief in Chapter 4.

Figure 3-19: PAR (30) for FY2011



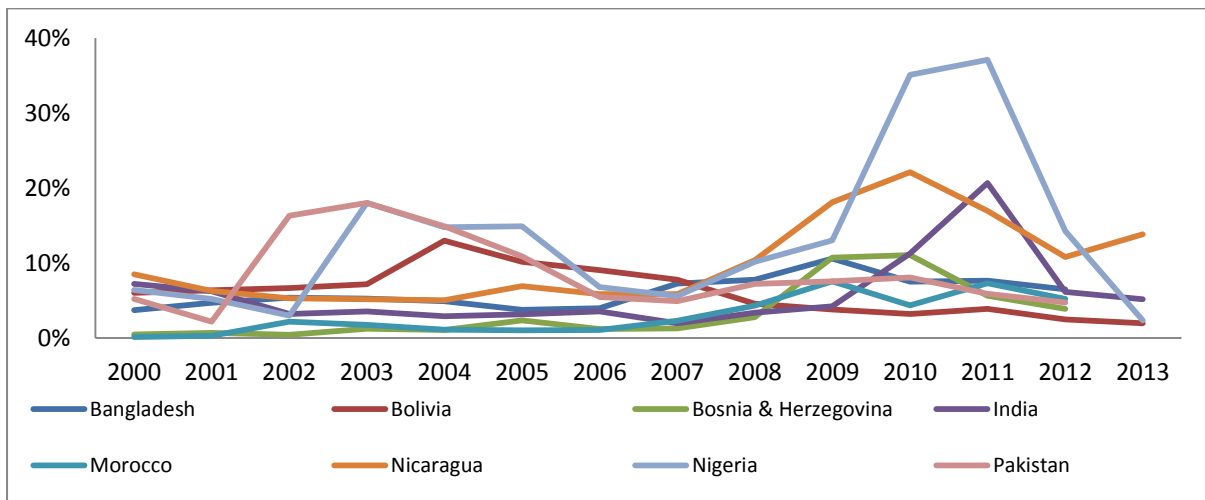
Source: Author's calculation using mixmarket.org

It is possible that these numbers are under reported than the actuals, due to self-reporting characteristic. Hence we should expect that the actual PAR might be higher than reported.

3.9 Interest Rates:

Since interest rates on micro-loans represent the major costs for the clients and at the same time the main income for MFIs, it is now worth taking a closer and systematic look at it. Very often the seemingly high interest rates compared to normal commercial lending rates are the strongest point of criticism for opponents of profitable microfinance business.

Figure 3-20: Historical PAR (30)



Source: Author's calculation using mixmarket.org

As administrative costs for individually tailored microloans are much greater than for normal standardized loans, it is usually inevitably to do micro-lending on a financially sustainable basis without charging interest rates that are substantially higher than what banks normally charge in order to cover the costs. Interest rates should also cover the operating expenses besides refinancing expenditure and consider provisions for potential portfolio risk and inflation. Furthermore higher interest rates for microloans are justified by the complex and labour-intensive structuring, documentation and provision of the credit, the often remote location of the clients and the frequent meetings with MFI's staff during approval and repayment process.

In general it is far less expensive to borrow from commercial MFIs than from local money lenders (Robinson, 2001, p. 7) who typically charge nominal effective interest rates of 10 percent to more than 100 percent a month whereas sustainable microfinance institutions usually charge nominal effective interest rates of 2 to 5 percent a month (Robinson, 2001, p.16-17).

An example that prompted a lot of discussion was the case of the for-profit MFI Compartamos in Mexico, who went public in 2007, as first microfinance bank. At that time,

Compartamos listed shares for over US\$1 billion and earned huge profits by charging their customers interest rates of at least 79 percent per year (Economist, 2008). It argued that they could reach more people by making such profits and were criticized as loan sharks for their usurious rates. This is however not a typical example of the industry, but more of an exception.

It is suggested that interest rates should generate revenue equal to or more than the cost per unit of principal lent. Therefore the interest rate that creates financial efficiency is:

$$r \geq \frac{(i+\alpha+p)}{(1-p)} \quad \text{Equation 9}$$

Source: Khandker et al. (1995, p.39).

r = interest rate charged per unit of principal

i = cost of raising resources per unit of principal

α = expected cost of administering and supervising a loan per unit of principal lent

p = percentage of principal and interest payments due that cannot be recovered

A more precise formula for the proposed annualized effective yield (R)⁴ is:

$$R = \frac{AE+CF+LL+K-II}{1-LL} \quad \text{Equation 10}$$

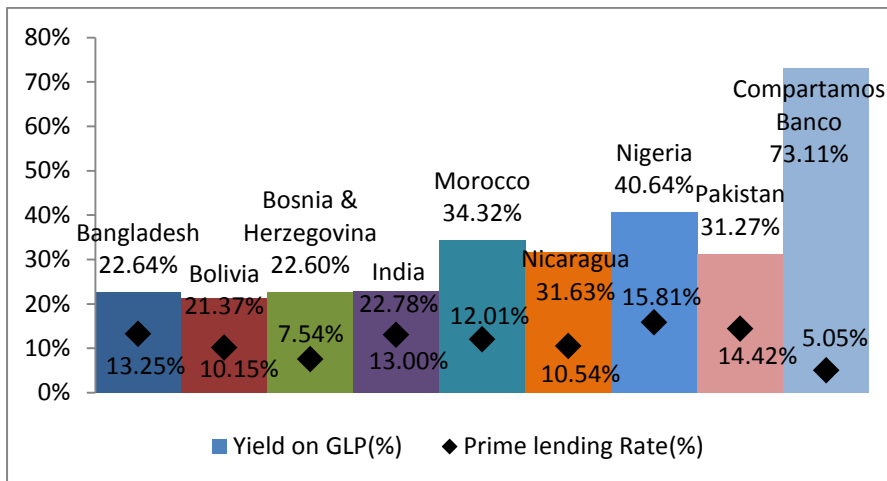
We take the yield on portfolio (nominal) as a proxy for interest rate. Our sample shows the interest rate in Table 3-3. We can see that the mean interest rate for year 2011 was 19.1% with most of the MFIs charging around 22.7%. Weighted average based on gross loan portfolio had 17.77% as interest rate. If we try to analyze the interest rates for 2010, we observe that the rates were on the higher side. This implied that after Andhra Pradesh crisis,

⁴ AE=Administrative expense; CF=Cost of Funds; LL=Loans losses; K= desired capitalization rate; II=Investment income ; all expressed as average percentage of loan portfolio (Ledgerwood, 1999, p.149)

the interest rates were reduced by various measures from government and by MFIs own initiatives.

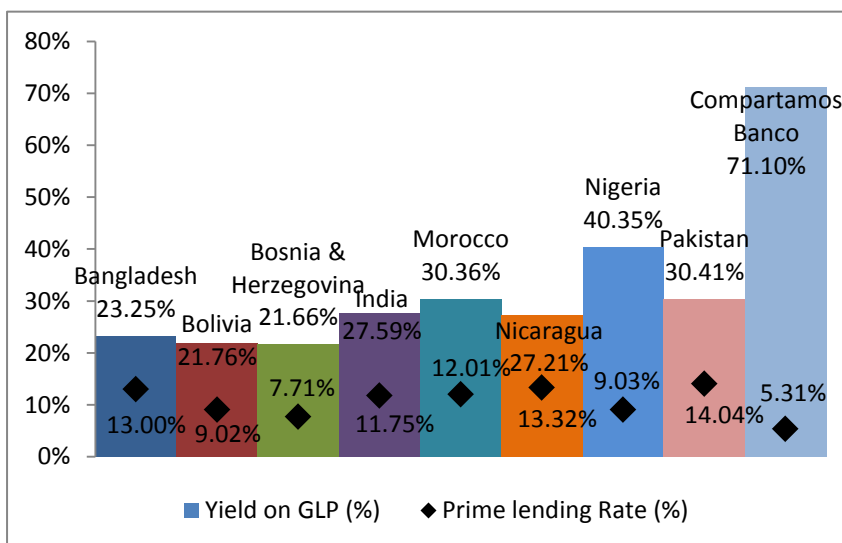
Figure 3-21 compares the yield on GLP (proxy for interest rates) across peer countries with their respective prime lending rates. India has a spread of about 9% which is same as in Bangladesh. However, other countries are way too higher like Morocco charges about 22% and Nigeria 25%. This shows that Indian MFIs are comparatively lending loans at cheaper rates. This story was same in 2010 as well (Figure 3-22), so AP crisis did have marginal impact on the interest rates.

Figure 3-21: Comparison of countries Prime Lending Rates and Portfolio Yield in 2011



Source: Author's calculation using mixmarket.org

Figure 3-22: Comparison of countries Prime Lending Rates and Portfolio Yield in 2010



Source: Author's calculation using mixmarket.org

Table 3-3: MFI Characteristics

	Mean	Median	Maximum	Weighted Average
Cost per Loan in USD	20	16	89	13.4
Cost per borrower	21.5	17	89	14.7
LLR	1.60%	0.00%	47.61%	4.40%
Risk Coverage Ratio	586.30%	75.40%	-	273.20%
Write off ratio	1.80%	0.00%	47.60%	4.50%
ROE	-0.40%	4.60%	-	-8.50%
ROA	-1.10%	0.90%	-	-5.70%
D/E	11.6	2.8	-	5.6
Profit margin	-50.30%	7.10%	-	-47.20%
Operating Expense ratio	14%	13.50%	-	8.90%
OSS	1.03	1.07		0.93
PAR (30days)	17.40%	0.90%	7.11	20.60%
Yield on Portfolio (Nominal) 2011	22.80%	24.00%	47.60%	17.90%
Yield on Portfolio (Nominal) 2010	27.60%	24.00%	88.80%	24.30%

Source: Author's calculation using mixmarket.org

3.10 Chapter Conclusion

M-CRIL has developed an index for understanding the Indian Microfinance sector, but only looking at this will not give us the grass root level snapshots. The AP crisis is very evident in this index and the GLP has also been affected. India's microfinance has 6 major players who control about 60% of the GLP. Across the world comparison of female borrowers in the sample indicate that India has got highest percentage of female borrowers. The Indian market for microfinance is the about \$4.4Bn which highest amongst the sample countries.

In 2011, India is still recovering from AP crisis repercussions shown by negative ROE and ROA. This has hit hard all MFIs in Andhra and rest of India. The net profit margins are still negative. Average OSS is 1.03 and median OSS is 1.07 showing that most of the MFIs are self-sufficient and sustainable. Interestingly weighted average of OSS is 0.93 proving that AP crisis hit hard the larger MFIs rather than smaller ones. We might have to analyze this anomaly deeply, because it is unusual that smaller MFIs were able to recover the loans but larger MFIs found those loans delinquent. This implies the deep crisis that Indian Microfinance sector is going through. MCRIL's FINEX index also substantiated our results.

For any MFI cost is primary driver of sustainability. Since MFIs deal with smaller loans, there is high cost associated with the transaction. It is inevitable for any MFI to work lean and keep costs under strict check. We analyze that cost per loan for India is much lower than its peer countries and cost per borrower is also lower indicating that Indian MFIs are able to restrict the cost in a better way than its peers. This is achieved by having more borrowers per staff members. India is having about 244 borrowers per staff member than other countries which have as low as 82.

MFIs have always been in news for charging very high interest rates and called as modern day moneylenders. The charges however do not look completely correct. No doubt those

MFIs are charging higher interest rates as high as credit card, but they seem to be justifiable because of small loan sizes. Loan size can be large or small, there is similar processing and equal efforts that go in to disbursing these loans. We have identified that Indian MFIs charge around 18% per annum interest on loans as of 2011 down from 24% in 2010. This lowering of interest rate is definitely driven by the Andhra Pradesh government's ordinance and other measures from governments (though its effect was marginal). This is still higher than prime lending rate in India which is about 13%. In the sample of peer countries, all of the countries have lending rates higher than prime lending rate of respective countries.

The analysis period for this study is post AP crisis, so there are many MFIs which have been affected in terms of operations and many had shut down many of the offices. The portfolio quality of the sample MFIs shows that PAR (30 days) is 21% which shows that the portfolio quality has not yet improved and MFIs are sitting on possible delinquent loans. India is one of the worse performing in terms of portfolio quality in 2011.

The complete analysis of MFIs shows that AP crisis has definitely dented the MFIs performance. India will have stronger growth in future fuelled by demand and India's adeptness at controlling costs. With respect to interest rates, every country has charging higher interest rates as compared the countries respective prime lending rates. Microfinance industry justify that loan processing for smaller amount of money is higher and they have to monitor the loans without collateral. These factors amount to higher interest rates. We will have to research individual MFIs revenue streams and figure out if the cost savings of any kind can be passed on the clients.

3.11 References

- Ashta, A., Khan, S., & Otto, P. E. (2011). Does Microfinance Cause or Reduce Suicides. Policy Recommendations for Reducing Borrower Stress. Policy Recommendations for Reducing Borrower Stress (March 3, 2011).
- Chaves, R. A., & Gonzalez-Vega, C. (1996). The design of successful rural financial intermediaries: Evidence from Indonesia. *World Development*, 24(1), 65-78.
- Churchill, C., & Frankiewicz, C. (Eds.). (2006). *Making microfinance work: Managing for improved performance*. International Labour Organization.
- Cull, R., Demirguc-Kunt, A., & Morduch, J. (2009). Microfinance meets the market. *Journal of Economic Perspectives*, 23, 167-192.
- Economist. (2008). Doing good by doing very nicely indeed. *The Economist*, June 28th-July 4th 2008, p.20
- FullHyd.com (2010). *Bill to replace MFI ordinance soon*. Retrieved from <http://news.fullhyderabad.com/hyderabad-news/bill-to-replace-mfi-ordinance-in-andhra-pradesh-soon-2752.html>
- Helms, B. (1998). Cost Allocation for Multi-Service Microfinance Institutions, *Occasional Paper No. 2*, April 1998, Washington DC, CGAP Retrieved from <http://www.unctf.org/mfdl/readings/CGAPocc2.pdf>, accessed 27.04.2009
- Khandker, S. R., Khalily, M. B., & Khan, Z. H. (1995). *Grameen Bank: performance and sustainability* (Vol. 306). World Bank Publications.
- Ledgerwood, J. (1998). *Microfinance handbook: An institutional and financial perspective*. World Bank Publications.
- M-CRIL. (2012). *M-CRIL India Indices of Microfinance 2012*. Retrieved from http://www.m-cril.com/BackEnd/ModulesFiles/Publication/CRILEX_India_2012.pdf

- Microfinance Focus (2010). *Exclusive: 54 microfinance-related suicides in AP, says SERP Report*. Retrieved from <http://www.microfinancetransparency.com/evidence/PDF/12.25%20MF%20focus%20article%20suicides.pdf>
- Mix. (2008). *Microfinance Bulletin Issue No.16*. Retrieved from http://www.themix.org/sites/default/files/MIX_MBB16_Spring%202008%20Issue.pdf
- Nyamsogoro, G. D. (2010). *Financial sustainability of rural microfinance institutions (MFIs) in Tanzania* (Doctoral dissertation, University of Greenwich).
- Robinson, M. S. (2001). *The microfinance revolution: sustainable finance for the poor* (Vol. 1). World Bank Publications.
- Rosenberg, R., Gonzalez, A., & Narain, S. (2009). *The new moneylenders: are the poor being exploited by high microcredit interest rates?* (Vol. 15). [Consultative group to assist the poor](CGAP)].
- Schreiner M. & Morduch J. (2001). Replicating Microfinance in the US: Opportunities and Challenges, *Econ WPA, Development and Comp System*, nr 0109002, May 14, 2011
- Schreiner, M. (2000). Ways donors can help the evolution of sustainable microfinance organizations, *Savings and Development*, vol. 24, pp. 423-37.
- Sengupta, R., & Aubuchon, C. P. (2008). The microfinance revolution: An overview. *Federal Reserve Bank of St. Louis Review*, 90(January/February 2008).
- Srinivasan N (2009). *Microfinance India State of Sector Report 2009*, New Delhi, Sage Publications
- Srinivasan N (2010). *Microfinance India State of Sector Report 2010*, New Delhi, Sage Publications

- Srinivasan N (2011). *Microfinance India State of Sector Report 2011*, New Delhi, Sage Publications
- State government of Andhra Pradesh (2010). An Ordinance to protect the women Self Help Groups from exploitation by the Micro Finance Institutions in the State of Andhra Pradesh and for the matters connected therewith or incidental thereto. State government of Andhra Pradesh
- Thapa, G. B., Chalmers, J., Taylor, K. W., & Conroy, J. (1992). *Banking With the Poor, Report and Recommendations Based on Case Studies Prepared by Lending Asian Banks and Non-Governmental Organisations*. FDC, Brisbane, Australia
- United Nations Capital Development Fund (UNCDF) (2002). *Microfinance Distance Learning Course*, New York, United Nations Publications

4 A Critical Evaluation of SKS Microfinance Fiasco: Comparison with Crisis in Global Microfinance Industry

“offering microfinance as a highly commercial, for-profit venture is the more ethical choice, by far.” - Vikram Akula, Founder of SKS

4.1. Chapter Summary:

Crisis had hit various players from different parts of the world in the global microfinance industry in the past. We look at a number of them and critically evaluate it in the context of SKS crisis in India. SKS established itself as a leader in the Microfinance industry in India, and became the first listed microfinance company in the country. The dream run didn't continue for long, as the Andhra Pradesh government started putting some regulatory conditions in place. We critically evaluate the SKS crisis to ascertain whether the cause was purely the government action or the over-indebtedness amongst the borrowers of the microfinance industry. Further questions on commercialization of microfinance industry are also discussed.

4.2. Introduction:

SKS microfinance, also known as Swayam Krishi Sangam (a term coined by the founder Vikram Akula) started its operations in the year 1998. By end of this year, SKS had 165 borrowers (Akula, 2010, pp95). It touched nearly 6.2 million active borrowers in 2010 as reported in mixmarket.org and now it stands at 4.9 million in 2013. It also reported 87% Compounded Annual Growth Rate (CAGR) in number of borrowers in its annual report of 2010-11. Akula had raised USD 52,000 from friends and relatives to start this venture. Its gross loan portfolio later grew to USD 960 million. It started its operation in a small village in Andhra Pradesh and expanded itself to 18 other states in India. This was an aggressive growth for any microfinance company in the world. Incidentally, this was in line with SKS founder's goal:

“To grow, grow, grow, as fast as we could” (Akula, 2010, pp138).

Such a fast growth was subject of discussion across the sector during the forming phases of SKS. Later its rapid fall was also discussed widely by academicians and practitioners alike.

The steep growth would not have been possible with only charitable funds. Donor or social funds are limited and in most of the countries Microfinance Institutions (MFIs) are not allowed to collect deposits. According to Swanson (2007), most of the estimated 10,000 existing MFIs are not deposit-taking institutions, and are unlikely to become so, given the cost and complexity of complying with the regulations. So accepting deposits and lending remains mainly a bank's job making MFIs handicapped in terms of raising funds and re-distributing it.

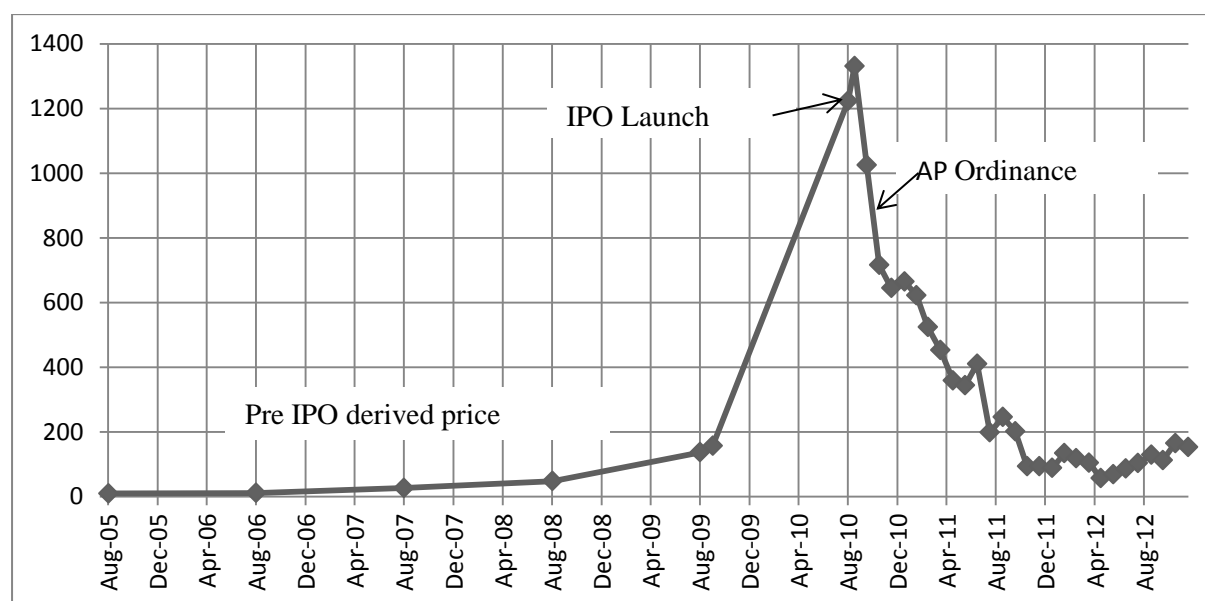
Above point of resource constraints is valid all across the world. Professor Mohammed Yunus had criticised the for-profit microfinance organizations. But Akula contended that Grameen Bank founded by Yunus had been converted to a bank by a special act from Bangladesh government, which led them to access the savings from the poor and mobilizing these deposits (Akula 2010). Chakrabarti and Ravi (2011) pointed out that without the profit motive; it is difficult to have organisations that would engage in the financing activity in a sustained and efficient manner.

All over world, microloans are unsecured and seen as risky by traditional banking system. The banking sector was not able to understand lending to the poor as a viable and profitable activity but only as a social obligation (Thorat, 2006). This makes it difficult for MFIs to convince the banking industry to support them for the funding needs. MFIs are left with the only option to approach private investors. Private investors can be convinced by showing higher Sharpe ratio either by higher returns or lower risk⁵.

⁵ Sharpe Ratio = $\frac{\text{Returns} - \text{risk free rate}}{\text{Risk (standard Deviation of returns)}}$

The pursuit for growth made SKS to launch an IPO after it received many investments from venture capitalists and private investors. This was seen as a very successful move with its IPO getting oversubscribed thirteen times. SKS is among a handful of MFIs globally to have gone public⁶ following the path breaking IPO by Banco Compartamos in Mexico in 2007 (see Rosenberg 2007). The stock market debut was very successful with SKS stock price closing at Rs. 1233 on first day of listing, compared to the issue price of Rs.950. Unfortunately this IPO success did not last for long and after Andhra Pradesh government promulgating an ordinance to regulate microfinance institutions, it touched low of Rs.85. Figure 4-1 shows the SKS stock price movement. We have derived pre-IPO price by calculating Net Asset Value from Red Herring prospect of SKS IPO.

Figure 4-1: SKS stock run up in Indian Rupee (INR)



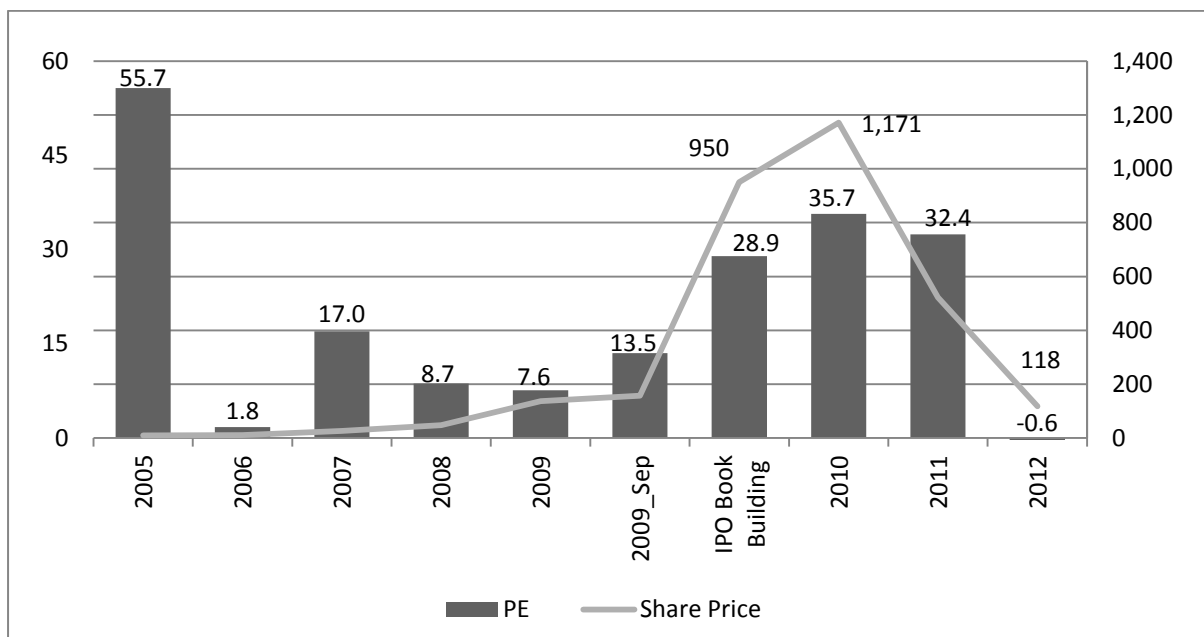
Primary Source: Adapted from SKS Draft Red Herring Prospectus and Google Finance. Rest are author's analysis

⁶ In addition to SKS and Banco Compartamos there are a few other publicly traded financial institutions with microfinance operations or close links to microfinance. Several are discussed in Lieberman et al. (2008).

4.3. Quantitative Analysis of SKS:

The share prices plotted above are overlaid with Price to Earnings (PE) ratio of SKS as shown in Figure 4-2. SKS went through the book building process and had decided Rs. 850-985 as its price band for its IPO allotment. If we calculate the PE ratio for share price of Rs.950 it is about 28.95 which is much higher as compared to its range from year 2006 to 2009 which was below 17. In the quarter ending September 2009, SKS had a net asset value per share of Rs.157.34 and Earnings per Share (Basic) as Rs.11.65, so the PE ratio is 13.35. PE of about 30 shows that SKS stock at Rs.950 was way too expensive. This should have raised some doubts on company's mission drift.

Figure 4-2: Share Prices and Price to Earnings (PE)

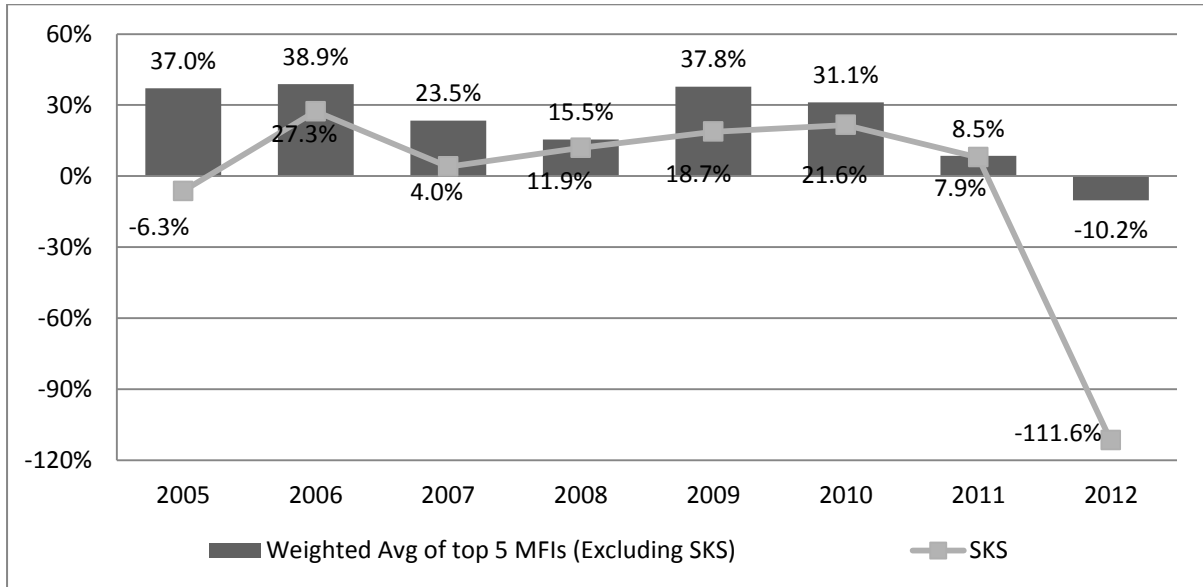


Source: Adapted from SKS Draft Red Herring Prospectus & Google Finance along with Author's analysis

Return on Equity (ROE) data of SKS in Figure 4-3 also raises the same doubts. The ROE of SKS is compared against the weighted average of top five MFIs (based on gross loan portfolio). In this calculation, we exclude SKS if it turns up in top five lists. The details of the

top five MFIs are shown in the table 4.1. The ROE was consistently below the average level of top 5 MFIs, indicating underperformance of SKS.

Figure 4-3: Return on Equity (ROE)



Source: mixmarket.org

4.4. Innovative methods in SKS:

So far we have studied the quantitative statistics of SKS, now we move ahead to understand the qualitative aspects of SKS and how they contributed to SKS' widespread growth.

SKS stood out from its competitors by using innovative techniques in its operations. SKS was studied as a catalytic innovator by Mohan and Potnis (2010). Their 3-year study of SKS identified five factors (Customer focus, Social entrepreneurship, operational innovation, IT, Human Capital management) that worked for SKS to meet the criteria posited by Christensen et al. (2006) for a catalytic innovator. Customer focus (on poor) and social entrepreneurship are both important for social mission. Other factors like operational innovation, IT and Human Capital management are necessary for scalability and financial stability. Mohan and Potnis (2010) concluded that SKS was scaling its operation without mission drift. Mission

drift is a tendency reviewed by numerous microfinance institutions to extend larger average loan sizes in the process of scaling-up (Armendáriz & Szafarz, 2011). So this implies SKS was still focussing on poor and they did not move their lending to better off people.

Table 4-1: Top Five MFIs with their Gross Loan Portfolio in Mn USD (SKS is excluded)

Rank/ Year	2005	2006	2007	2008	2009	2010	2011	2012
1	Spandana	SHARE	SHARE	Spandana	Spandana	Spandana	Spandana	Bandhan
	55	82	92	262	483	961	926	733
2	SHARE	Spandana	Spandana	SHARE	SHARE	SHARE	Bandhan	Spandana
	40	64	90	182	367	787	779	534
3	MMFL	MMFL	SKDRDP	SKDRDP	AML	Bandhan	SHARE	SHARE
	37	50	52	152	239	377	565	415
4	AML	AML	MMFL	AML	Bandhan	AML	AML	SKDRDP
	14	40	51	85	139	332	465	322
5	BASIX	SKDRDP	AML	Bandhan	SKDRDP	BASIX	BASIX	AML
	13	24	45	84	125	315	298	236

Source: Author's calculation using mixmarket.org

We would discuss some of the innovations by SKS in terms of business and operations which helped them target the poor customers and increase its base to cover underserved regions. Akula (2010, pp.51) had identified three constraints for scaling up microfinance activities which were called '3Cs': *Capital Constraints*, *Capacity Constraints* and *Cost Constraints*.

SKS found innovative ways to tackle these constraints which are discussed in subsequent paragraphs.

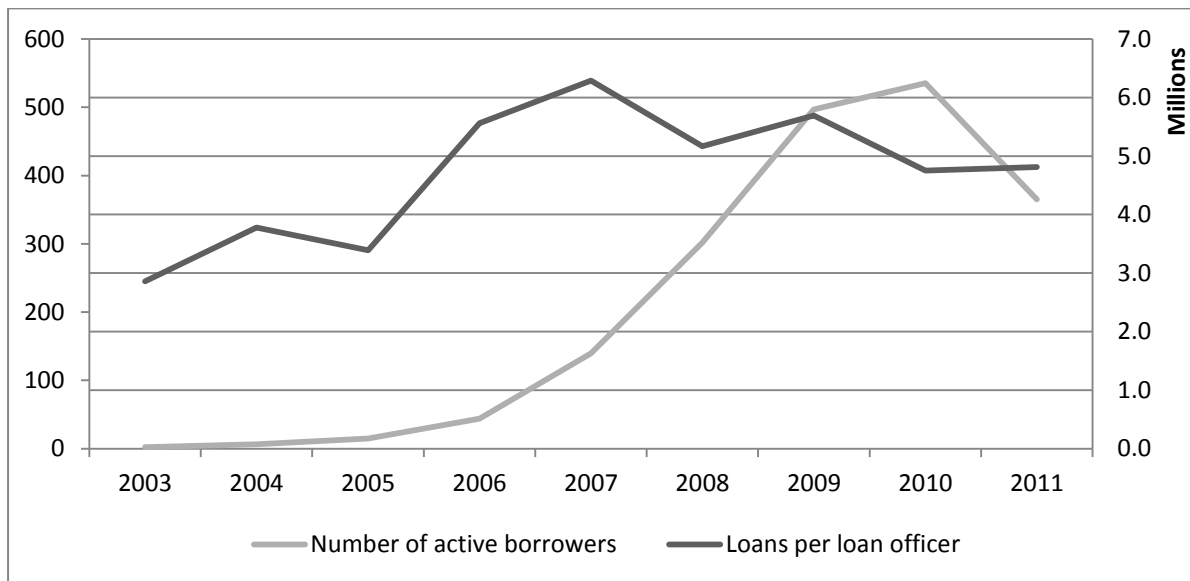
For-profit approach helped SKS garner the social investors to scale up the microfinance activities and tackle *Capital Constraints*.

To tackle *Capacity Constraints* SKS tried to adopt McDonald's time model and Star Bucks Hub and Spoke model to setup their business. This way it developed training processes that allow SKS to train more than 500 new loan officers per month and add more than two new branches per day (Chen, et.al, 2010). Akula (2008) found that for a business focusing on the bottom end of the pyramid, it is imperative that its business model be scalable since profit margins are very low in this market. To improve the *Cost Constraints* SKS included measures like setting up meetings near road so that loan officers could easily travel to other villages. This helped the same loan officer to cover more villages. The borrowers were also asked to bring the repayments segregated into standard denominations for additional time saving. These were few more innovative ways of saving time adopted by SKS. This helped SKS gain efficiency; the loans per loan officer increased from 245 in year 2003 to 410 in 2011 (Figure 4-4). All these approaches helped SKS to achieve "J-shaped" growth for its active borrowers where there is huge growth in its borrower's base.

SKS setup the standardization of the loan process to cut down the time of the loan officers. So SKS developed software for their loan products which saved time on loan processing, it had some simple innovations like pre-populated loans application from the old records in its software system. This cuts down the time needed to process the loans and enhancing the record maintenance. This system could be handled even by less educated employees.

SKS also had developed a robust Management Information System (MIS). They had simple systems developed, so that the field data is available to its head office in a day's time.

Figure 4-4: Effect of SKS innovation



Source: Author's calculation using mixmarket.org

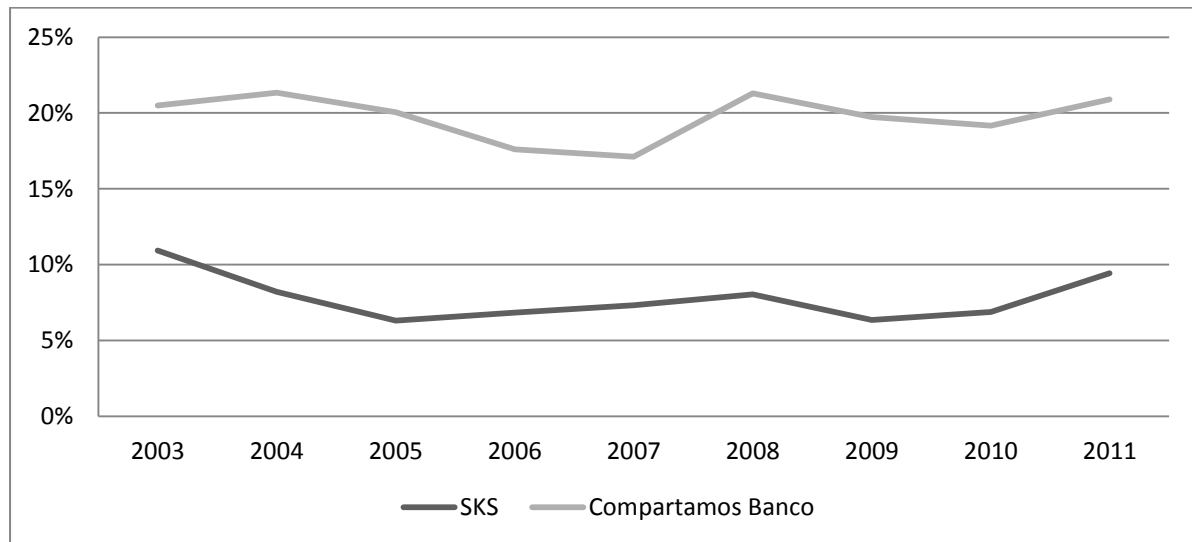
By creating such a simple loan management accounting software which can be used by loan officers with no computer experience, SKS reduced the time spent on accounting matters from several hours to minutes (Bhatnagar et al., 2002). They ran a pilot program of using hand-held devices for loan officers to save more time as loan officers had to fill-up the loan application and feed it to the SKS software. They also mulled on using the smart card in hand-held devices for cash transfer, but the idea was scrapped as regulations never emerged in this area. This was the time when most of the MFIs were paper based and consumed lot of time for processing and monitoring applications.

Human Capital innovation was also aided by MIS. SKS was able to hire staff members from local villages, their systems can be handled even by a tenth grade educated person. This kept their costs low as compared to Compartamos Banco⁷ (refer Figure 4-5), this also could be the reasons for lower interest rates of SKS (around 23.6percent on a declining method basis in

⁷ Since SKS and Banco Compartamos both had launched IPOs, they are compared here.

Andhra Pradesh and Karnataka and 28percent in other states) whereas Compartamos Banco charged as high as 100percent (Lewis, 2008).

Figure 4-5: Personnel expenses/loan portfolio



Source: Author’s calculation using mixmarket.org

The point to be taken from this discussion is that SKS was innovative in its approach. Its peers were not even close to achieve what SKS had achieved in short span of time. It was proceeding in a right direction and it knew what its constraints were for growth.

4.5. SKS’ non-profit social mandates:

SKS has directed its goal over innovations to grow in size and profitability. But its innovation was not limited to only the commercial aspects. There were various social mandates initiated. SKS used to suspend the loan repayments programs during natural calamities like floods, cyclones, etc. For example in 2008, when Bihar was hit by flood which was one of the worst floods in India’s history, SKS suspended its repayment collection drive. Moreover during these times loans officers delivered blankets and food to the affected victims showcasing their non-profit motive (Akula, 2010).

SKS has also designed micro-insurance along with Bajaj Allianz with the premium as low as Rs.20 (about 50cents) per week. For a premium of only Rs 35 per week over a period of five years, customers receive Rs 13,200 in case of natural death and Rs 33,900 in case of accidental death. If unclaimed, the deposit is refunded with interest after five years (The Economic Times, 2010). SKS also worked with Nokia and Airtel for discounted handsets and services to its borrowers (The Hindu, 2008).

In 2008, SKS's affiliate SKS NGO started with a low-cost elementary school with monthly fee of Rs.260-340 (\$5-\$7). This is not limited to children of SKS' borrowers but anyone in the area served by SKS.

United Nations Children's Fund (UNICEF) has donated deworming tablets to Indian government, but due to lack of centralized channelizing system they were not distributed but loans officers from SKS took up extra responsibility of distributing these tablets along with the training on the hygiene and sanitation.

Ultra-poor program (UPP): This program is for absolute poor who live on less than five cents a day. This program has an initiative of pulling up these poorest of poor to the next economic ring. In this they can select from the "asset basket" of their choice ranging from buffalo to chickens to sheep or nonfarm assets like pay telephone, food goods or other necessities like small teashop, etc. The recipients have no obligation to repay. An evaluation of the SKS' UPP indicated that the financial module had helped members to make economic progress (Huda, Lamhauge, & de Montesquiou, 2009).

SKS does have a strong network which can be used for many government projects. They are already using their network for many social initiatives.

4.6. SKS Governance and Investors:

SKS started with five mutually benefit trusts (MBT) and some nominal shareholders. MBTs are special purpose vehicles that would aggregate borrower members of the microfinance organization. MBTs had initial capital of Rs. 20 Million and promoter Vikram Akula had very little holdings. However the SKS had highest compensation for the CEO in the industry, there were stock options for him as well as for others (Sriram, 2010). SKS started building capital from investors and philanthropists. Kumar & Rozas (2011) stated that MBTs were allocated shares worth Rs. 273 million at price of Rs.71/share in 2008 which was very low as compared to other investors. It was not clear as to how other investors (including commercial fund of Sequoia) agreed for this. The allocation story is not stopping short here. In 2007 Akula received shares worth Rs. 16 million (Sriram, 2010) which is a one shot gain of Rs. 65 million and these were sold 18 months later to gain Rs. 150 million. CEO Gurumani and other senior members like COO MR Rao, CFO Dilli Raj also sold their holdings for a significant premium (Sriram 2010). This shows the level of commitments the insiders had for SKS business.

Board member Gurucharan Das resigned in May 2009 followed a few months later by Anu Aga of Thermax and Narayan Ramachandran of Morgan Stanley, all of whom joined as trustees of the MBTs.

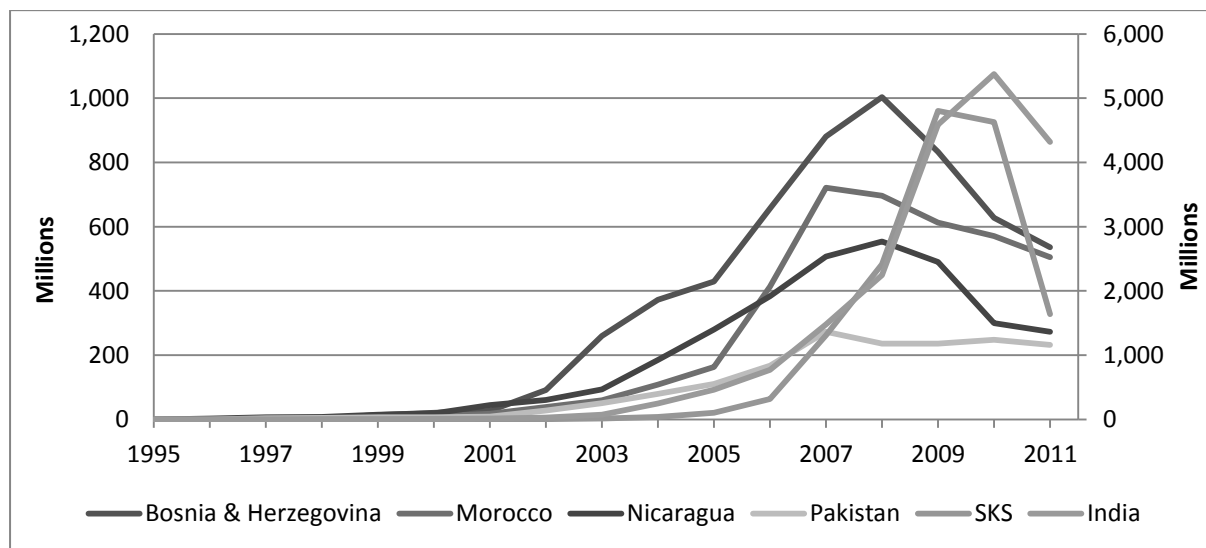
Narayan Murthy's (Infosys Founder) Catarman Fund got 1.5 percent stake in SKS on January 2010 at Rs. 300 per share which was half the price of the other private equity sales by SKS during same time. Murthy was also named chairperson of a new advisory board of SKS, putting the name of one of the most respected investors in India behind SKS and bolstering the company's credentials leading into the IPO (Chanchani 2010).

There seems to be some ambiguous situations in terms of governance and investors.

4.7. Crises around the world:

The World has already faced similar crises in past. Figure 4-6 shows the gross loan portfolio of microloans in the following countries: Bosnia and Herzegovina, Morocco, Nicaragua, Pakistan, SKS and India. Reason for comparing SKS with these countries is that these countries have already faced similar crisis and are widely discussed. The figure also shows the onset of crisis by diamond shaped marker. This figure clearly shows the growth of the loan portfolio and its decline post crisis. India's Gross Loan Portfolio is shown on secondary axis (as India has a huge gross loan portfolio in absolute dollar terms).

Figure 4-6: Gross Loan Portfolio (USD)



Source: Author's calculation using mixmarket.org

The crisis that hit Indian microfinance sector was widely discussed by academicians, government and practitioners all across the globe. When we say crisis, it always means repayment problems and mass defaults. The microfinance industry throughout world witnessed crises of varied magnitude during the past 10 years, however all of them inevitably

pointing towards repayment issues. Table 4-2: International Microfinance Crises summarizes the major crises that microfinance sector has faced.

Table 4-2: International Microfinance Crises

SL No.	Crisis	Onset of Crisis	Reasons and Impact
1	Bolivia	1999	One of earliest microfinance’s known crisis. There was a mission drift and new business of consumer lending was started causing indebtedness (Rhyne, 2001). Many borrowers were taking multiple loans from different sources at the same time (Vogelgesang, 2003)
2	Morocco	2007	Since 1999, Government tried to push microfinance sector. Government and local banks were committed for its growth. Commercial banks launched two MFIs with 85% funding. From 2003 to 2007, MFIs had loan portfolio increased by 11 times and client outreach grew by 4 times. In the case of Morocco, unprecedented growth overstretched MFI capacity. This translated into lenient credit policies, obsolete management information systems (MIS), lack of internal controls, and substandard governance. Government has proposed to control multiple lending and avoiding over-indebtedness. (Reille, 2009).
3	Bosnia and Herzegovina	2009	58% of clients were holding more than one active credit contract, with more than 32% of clients holding three or more active credit contracts (Maurer & Pytkowska 2010). MFIs adopted growth at any cost, senior managers were over-paid. Over-indebtedness of clients is the major reason for crisis

SL No.	Crisis	Onset of Crisis	Reasons and Impact
			(Ausberg et. al 2012)
4	India-Kolar	2009	Karnataka has about 5% of India's population and 12.6% borrowers in Microfinance; this shows the outreach of microloans. Muslim clerics urged all the borrowers not to repay the loans and this became widespread. It was not limited to Kolar but it spread to Ramanagaram, Mysore and Sidlaghatta. The underlying reasons for the crisis have been found to be multiple lending by MFIs operating in the area (AKMI, 2010)
5	Nicaragua	2009	As reported by La Prensa (2010), more than 100,000 clients have stopped receiving credit. The industry served some 324,000 clients before the crisis, while today it serves an estimated 225,000. More than half of the total portfolio was wiped out due to defaults (Bastiaensen, 2013). multiple borrowing as one of the explanatory variables of default (De Franco, 2010).
6	Pakistan	2009	The expansion was very rapid and staffs were overburdened with work. One of the borrowers in Tehsil Murdike sought local politician's help for his repayment problem which triggered a greater crisis. All borrowers had a sense of bailout and mass default started. Multiple borrowing and deterioration of incentive to maintain good repayment record to access to progressive loans (Burki and Shah 2009)
7	Nigeria	2010	Nigeria launched the Microfinance policy framework in 2005. It established hundreds of Microfinance banks (MFB) across the

SL No.	Crisis	Onset of Crisis	Reasons and Impact
			country. Due to lack of liquidity, investments in capital markets and abuse by insiders have been cause of crisis. 224 out of 820 MFBS have been closed down (Microfinancefocus, 2011).

Source: Author's analysis adapted from various sources

4.8. The Andhra Pradesh Crisis:

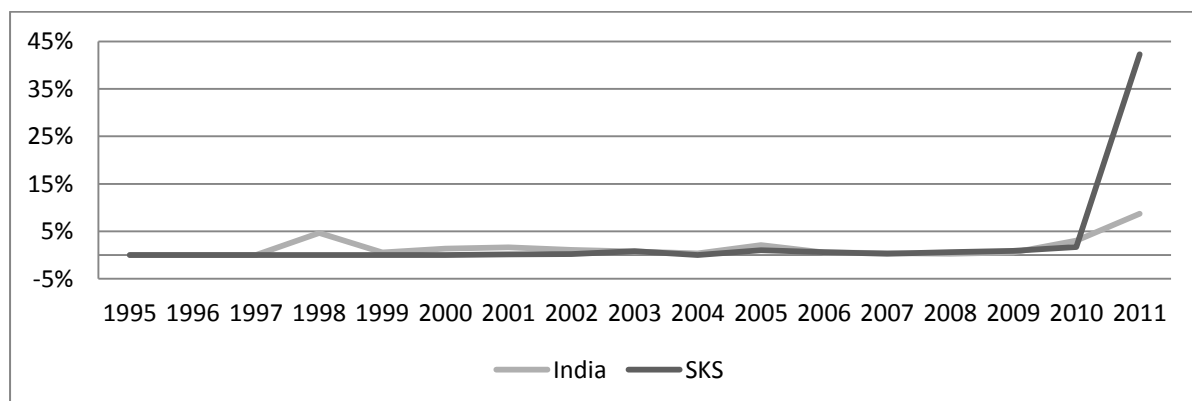
Andhra accounted for 27.93% of country's borrowers and 7.28% of country's population (Srinivasan, 2009, pp.39). Andhra Pradesh had 36.4% share in Self Help Group (SHG) linkage program (Srinivasan, 2009, pp.25). So this makes Andhra a big stakeholder for microfinance sector. Many MFIs including SKS had concentrated their operations in Andhra making them vulnerable to concentration risk. The country's growth story was clearly visible in Andhra Pradesh and borrowers were getting good services as Andhra was having presence of many MFIs. Andhra Pradesh was topping the Microfinance Penetration Index (MPI) with score of 3.64 and Microfinance Poverty Penetration Index (MPPI) with score of 6.35 in 2010 (Srinivasan, 2011, pp.16). MPI is computed by dividing the Share of the State in microfinance clients with share of population. MPPI is derived by dividing the share of the state in microfinance clients by share of the state in population of Poor. This implies that microfinance had high penetration in Andhra Pradesh. High levels of penetration are also a cause for concern as they indicate that the debt levels could exceed the repayment capacity of the poor households (Srinivasan, 2009). Andhra Pradesh had 9.63 loan accounts per household (Srinivasan, 2010, pp.4). A Minister in the government of AP admitted on 3rd December 2010 that 75 suicide cases had come to the notice of AP government by that date (FullHyd.com, 2010). Microfinance Focus (2010) has reported that there have been 54 suicides by microfinance borrowers in the State of Andhra Pradesh alone during . A study

(Ashta, et al, 2011) on microfinance and suicide has two important conclusions. First, the suicides among Microfinance customers in Andhra Pradesh do not seem to be any greater than the average suicide rate in India and second the cross-sectional state-wise data in India also seems to suggest a strong link between suicides and microfinance and an even stronger link between the bank SHG model and suicide rates. Thus, the measures to protect people apply as much to banks as to MFIs.

The Government intervened in MFIs operations. It issued an ordinance restricting MFIs recovery and lending operations. Ordinance put controls on client acquisition, extent of loan, terms of repayment, places at which customers could meet for transactions. There were arrests of few staff members who ventured into customer habitat subduing any opposition to this ordinance. There was also stern warning from regulators that directors of NBFCs may also face arrest (State Government of Andhra Pradesh, 2010).

This affected the recoveries drastically. Figure 4-7 shows the write off ratio of SKS and India. This ordinance was affecting the recovery rates as Government had indirectly supported defaults. People got away legally from paying their debts.

Figure 4-7: Write off ratios of SKS and India



Source: Author's calculation using mixmarket.org

Impact: Some MFIs such as Star MicroFin Society, a small NGO-MFI, faced 0% repayment rate in urban operation areas and 2% in rural areas, as compared to 100% before the MFI Ordinance. The impact was not limited to Andhra Pradesh, but it spread to whole of India and all MFIs were facing the pressure. Poor borrowers had to go back to informal borrowing. Banks started to feel the heat as SHG repayments were low and there was a possibility of default from MFIs. With Rs. 75 billion at stake, banks rolled out a corporate debt restructuring (CDR) plan for large MFIs. MFIs like Spandana, Share, Asmita, Trident and Future Financial Services availed this restructuring plan to the amount of Rs. 70 Billion. SKS and BASIX were the two MFIs who did not opt for this plan. In this CDR plan, MFIs had to repay the loans in seven years and pay interest rate of 12 per cent. The CDR was not really helping in any sense as the underlying loans were delinquent and borrowers were supported by government not to repay, so this was just a slowing of death for microfinance institutions. Large MFIs were opting out for CDRs or moving out of Andhra Pradesh for survival, but small MFIs have shut down their operations. SKS had to shut down 78 branches and cut 1200 jobs in Andhra Pradesh. Table 4-3 summarises the effects of AP crisis e.g. disbursement was reduced by 67% and staff declined by 30% affecting the whole of Andhra region.

All the series of crisis pushed India's microfinance sector's global rank from 14th to 22nd in respect of regulation initiatives (Puhazhendhi, 2012, pp121). However this also pushed for more regulatory initiatives by government after Malegam committee report proposed setting up different category of NBFC-MFI specifically for Priority Sector Lending, margin cap of 12%, interest rate cap of 26% and numerous other measures which are beyond scope of this paper.

Table 4-3: Andhra Pradesh Crisis effects

AP based MFIs	2001	2012	Decline (%)
No. of Branch	6,426	5,227	19
No. of Staff	55,512	39,067	30
Active Clients (Million)	16	12	25
Loan Portfolio (₹ million)	1,39,430	79,120	43
Disbursement(₹ million)	1,91,800	62,900	67
PAR 60(%)	30	31	
Total Assets(₹ million)	1,35,210	91,730	32
Net Owned Fund (NoF) (₹ million)	31,490	25,380	19
Yield (%)	22	10	
Operating Expense (%)	10	6	
Operational Self Sufficiency-OSS (%)	111	55	
Return on Asset (RoA)-(%)	2	-8	
Return on Equity (RoE)-(%)	2	-35	

Source: Adapted from *The Bharat Microfinance Quick Report 2012: Microfinance - Growing Against All Odds* by Sa-Dhan (2012). New Delhi.

Reason for Crisis: Over-Indebtedness

There can be multiple reasons for default like borrowers who strategically default or run into unsustainable loans and wait for a bailout. The most primary reason for default among the microfinance borrowers is their inability to repay. This means that rational borrowers find

themselves in a situation where the household expenses go beyond the income. This indeed is defined as Over-Indebtedness.

Over-indebtedness or debt trap is seen as the cause of microfinance fiasco. In some countries, microcredit caused over-indebtedness among some borrowers while in other countries they are on the verge of getting trapped in over-indebtedness.

This subject has been well-researched now. A borrower is said to be overly indebted if he finds it difficult to repay. Many have tried to define and measure over-indebtedness of an individual. Kappel (2010) has defined indebtedness as the ratio of total monthly instalments by total net monthly income:

Indebtedness =

$$\frac{\text{Total Monthly installments on household debt}}{\text{Total monthly gross income of household} - \text{Total monthly expenses of the household}} \quad \text{Equation 11}$$

Indebtedness is converted to over-indebtedness as the Indebtedness ratio increases. Many researchers have assigned a threshold value, beyond which the condition of over-indebtedness is assumed. E.g. 100% as defined by Maurer/Pytkowska (2010). This means that borrowers are not able to meet their ends, 100% Indebtedness ratio means that family is left with no surplus income to meet their exigencies.

Parameters to find the over-indebtedness can be quantitative like defined above or qualitative i.e. perceived difficulty in repaying the loans. Whatever may be the definition, but over-indebtedness can be said to occur if the borrower is continuously facing difficulty in repaying loan and making high sacrifices to meet loan obligation (Schicks 2010). It does not include borrowers who deliberately run into high debts or wait for bail-out option. Schicks has described the sacrifice-based indebtedness, so in general borrowers reduce their food intake, education, increase work, etc.

If a borrower has taken loan for income generating process and expects the payoff after six months, he may have to sacrifice food or some spending to repay the loan for first six months. The borrower can also opt for another loan from MFIs competitor to make ends meet. But this condition can also be called as over-indebtedness.

So it is not necessary a default condition, but more of a pre-default condition. If this is captured early enough, it can help avoid default. This becomes very important when we are talking about whole set of borrowers.

This arouses the need to analyse the portfolio of MFIs. Rosenberg (2009) arrived at some measures for portfolio repayments like on-time collection rate, current collection rate, cumulative collection rate, and portfolio-at-risk (PAR). The PAR is the most suitable measure. This is an international standard for measuring loan delinquencies. An aged PAR can provide feedback immediately. It cannot, however, provide an assessment for loan losses.

From above discussion, it is clear that regulators and market participants have to rely only on repayment statistics i.e. by analysing PAR, etc. for getting information on default situation. But PAR does not come without any limitations. Due to rapid growth of loan portfolio of any MFI the PAR will be masked and appear as low. Globally MFIs recorded PAR30, between two and three percent (Median) between 2005 and 2007 (The MiX, 2009). This changed at the end of 2008, when growth slowed and many MFIs, largely irrespective of size and type, were confronted with severe portfolio quality problems (CGAP, 2009). Even if they are good indicators they cannot be good for MFI to assess its portfolio quality. If we would like to get an insight into geography it might be difficult as the situation will soon spin out of control without any restrictive measures.

But this parameter cannot give an insight into over-indebtedness. The whole set of defining and measuring indebtedness is a complex process. Regulators and MFIs cannot gauge the indebtedness quickly.

So there arises a need of some early warning index. There has been an interesting study of creating an Over-Indebtedness early warning Index (OID Index) by Kappel et al. (2010). This index can give an early warning about over-indebtedness. Many variables were considered in this study and a few were shortlisted as per their significance e.g. Supervision as one of the parameter was considered, but was not used in the index construction as there was not enough evidence on the MFIs portfolio quality. Table 4-4 shows the variables used in constructing OID index:

Table 4-4: Variables used in OID index

1	Remittances (in USD) per capita	Macro-level indicator
2	Market penetration	Industry level indicator
3	Growth rate of total loan portfolio	Industry level indicator
4	Quality and use of credit information system	Industry level indicator
5	Perceived commercial bank involvement	Industry level indicator
6	Perceived levels and trends in competition	Industry level indicator
7	Perceived investment flows	Industry level indicator
8	MFI liquidity	Industry level indicator
9	Average loan balance per borrower	Firm Level indicator

10	Loan requirements and lending methodology	Firm Level indicator
11	Productivity (borrowers per staff member)	Firm Level indicator
12	Growth and market targets	Firm Level indicator
13	Multiple lending	Firm Level indicator
14	Consumer lending	Firm Level indicator

Source: Adapted from Over-Indebtedness and Microfinance – Constructing an Early Warning Index by Kappel et al. (2010). Center for Microfinance, University of Zurich

All these variables are assigned equal weights with three variables having higher weights are: “Quality and use of credit information system”, “Loan requirements and lending methodology” and “Multiple lending”. This was applied for thirteen countries using six colour-coded categories. 1 to 10: dark green (overall score below 3.5), light green (score from 3.5 to below 5.0), yellow (score from 5.0 to below 5.5), orange (score from 5.5 to below 6.0), light red (score from 6.0 to below 7.5) and dark red (score at and above 7.5). Higher the score, higher the level of early warning signals for over-indebtedness. This can be used as a warning signal and regulators can make a move to avoid the crisis. Since this is an ordinal scale, comparing countries remain difficult. This index is not without any drawbacks as data is a major issue for its success. The other drawback is that a country with higher index can remain stable without any crisis and country with lower index may be struck by crisis. Further research may help to build this index in a robust way. In this case, house-hold level indicator is not included which is the main pointer of over-indebtedness and will remain a challenge in terms of data collection. This modified indicator is a sure shot way of identifying the over-indebtedness. Moreover, this index can also be a guide for the stakeholders and policy makers. Further research in this area should open a whole new avenue for addressing microfinance default issues.

4.9. Conclusions:

SKS was continuously cutting costs and loan officers were taking up more loans as compared to other counterparts in the world. Some argued that SKS loan officers should not be taking up such a high number of the loans. Looking at the methods for meeting and time saving techniques loan officers were indeed able to do it in an effective way. Moreover this argument fails to consider the high population density of India as it ranks 24th out of 212 countries in 2010 in the population density. So in India this was a very feasible situation. Additionally SKS did not have their loans officers' salary pegged to size of loan portfolio or repayment rates like Compartamos Banco. So loan officers pushing unnecessary loans to borrowers seem not very strong argument. A for profit company will strongly desire that their borrowers succeed in their entrepreneurial endeavours in order that the company continue with business, make profits making the company look better to investors (Shaffer, 2012).

Another contention against SKS for its fall is that SKS was charging a higher rate of interest. But looking at the costs and other MFIs across the world, the interest rates charged by SKS is not high. SKS was charging 24.55 percent from January, 2011 reducing it from 26.69 percent. This rate is not high if we try to compare the interest rates in other parts of the world or with the rates at which alternate financing is available to these borrowers. Moreover, the median interest rates for India were 24.06 percent (as per mixmarket.org).

The blame that SKS adopted coercive practices for loan recovery by the Andhra Pradesh government and the subsequent promulgation of the ordinance also seems to be far-fetched.

On the surface, Andhra Pradesh government's action is seen as the reason for the fall of SKS; but it could be only seen as a catalyst in the process of crisis. Our analyses discussed above digging deeper into all the aspects relating to the crisis have shown that the major reason is

the over-indebtedness of the borrowers. Over-indebtedness can neither be tracked nor can we have early warning signals for it. SKS was reaching many underserved areas which were followed by other MFIs as well. These areas already had local money lenders. This was a trap for poor borrowers who were exposed to many options. Multiple lenders started targeting the same borrowers. The development of predatory lending between MFIs pushed down loans to their borrowers which were not required by them. Borrowers were not able to keep up with the number of loans and started to fall in the debt trap. Government's intervention in MFIs' operation and support to borrowers for not repaying the loans was the biggest hurdle.

The reason for SKS fall was not only Government intervention, but also the overall sector growth and lack of smart regulatory watch dogs. There is a natural push for maximizing the profits when we speak about the private investors, so with robust regulations there can be consistent monitoring, helping the sector to have a more controlled growth.

4.10. References

- AKMI (Association of Karnataka Microfinance Institutions). 2010. Karnataka Microfinance Report. Available at <http://indiamicrofinance.com/karnataka-microfinance-report-akmi.html>
- Akula, V. (2008). Business Basics at the Base of the Pyramid. *Harvard Business Review*, June, pp. 53-57
- Akula, V. (2010). *A Fistful of Rice: My Unexpected Quest to End Poverty Through Profitability*. Boston, MA: Harvard Business Review Press.
- Armendáriz, B., & Szafarz, A. (2011). On mission drift in microfinance institutions. *The handbook of microfinance*, 341, 366.
- Ashta, A., Khan, S., & Otto, P. E. (2011). Does Microfinance Cause or Reduce Suicides. Policy Recommendations for Reducing Borrower Stress. Policy Recommendations for Reducing Borrower Stress (March 3, 2011).
- Augsburg, B., De Haas, R., Harmgart, H., & Meghir, C. (2012). Microfinance at the margin: experimental evidence from Bosnia and Herzegovina. Available at SSRN 2021005.
- Bastiaensen, J., Marchetti, P., Mendoza, R., & Pérez, F. (2013). After the Nicaraguan Non-Payment Crisis: Alternatives to Microfinance Narcissism. *Development and Change*, 44(4), 861-885.
- Bhatnagar, S., Dewan, A., Moreno, M. and Kanungo, P. (2002). Empowerment Case Studies: Swayam Krishi Sangam. Retrieved from http://siteresources.worldbank.org/INTEMPowerment/Resources/14661_SKS-web.pdf
- Burki, H. B., & Shah, M. (2007). The dynamics of microfinance expansion in Lahore. Pakistan Microfinance Network, Islamabad and ShoreBank International Ltd. Islamabad, Pakistan.
- CGAP (2009) .The Impact of the Financial Crisis on Microfinance Institutions and Their Clients, results from CGAP's 2009 Opinion Survey. Brief. Washington, DC: CGAP
- Chakrabarti, R. & Shamika, R. (2011). At the crossroads: microfinance in India. *ICRA Bulletin: Money & Finance*, Forthcoming. Pp 125-148

- Chanchani, M. A. (2010). Narayana Murthy's Catamaran Invests Rs 28Cr In SKS. *VCCircle*. Retrieved from <http://www.vccircle.com/500/news/narayana-murthys-catamaran-invests-rs-28cr-in-sks>
- Chen, G., Rasmussen, S., Reille, X., & Rozas, D. (2010). Indian Microfinance Goes Public: The SKS Initial Public Offering. *Focus Note*, 65.
- De Franco, M. (2010). Determinantes de la cartera mala en el mercado de las microfinanzas en Nicaragua. Borrador para discussion ['Determinants of Bad Portfolio in the Nicaraguan Microfinance Market. Draft for Discussion']. Managua: ASOMIF
- FullHyd.com (2010). *Bill to replace MFI ordinance soon*. Retrieved from <http://news.fullhyderabad.com/hyderabad-news/bill-to-replace-mfi-ordinance-in-andhra-pradesh-soon-2752.html>
- Huda, K. Lamhauge, N. & de Montesquiou, A. (2009). SKS Ultra Poor Pilot Mid-Term Evaluation: Summary Findings. Washington, D.C., CGAP.
- Kappel, V. Annette, K. & Laura, L. (2010). Over-Indebtedness and Microfinance – Constructing an Early Warning Index. Center for Microfinance, University of Zurich
- Kumar, Vikash, and Daniel Rozas. (2010). SKS Microfinance Road to IPO—An inside story. *Microfinance Focus*, 12 May. Retrieved from <http://www.microfinancerefocus.com/news/2010/05/17/exclusive-sks-microfinance-journey-to-ipo-an-inside-story/>
- La Prensa (2010). 67 mil microcréditos menos. Retrieved from <http://www.laprensa.com.ni/2010/12/20/nacionales/46902>
- Lewis, J. C. (2008). Microloan sharks. *Stanford Social Innovation Review*, Vol 6, No. 3, pp54-59.
- Lieberman, I. W., Anderson, A., Grafe, Z., Campbell, B., & Kopf, D. (2008). Microfinance and capital markets: the initial listing/public offering of four leading institutions. *Council of Microfinance Equity Funds (Hrsg.)*.

- Maurer, K. and J. Pytkowska (2011). Indebtedness of microfinance clients in Bosnia and Herzegovina. Results from a comprehensive field study, European Fund for South-east Europe (EFSE) Development Facility, mimeo
- Maurer, K., & Pytkowska, J. (2010). Indebtedness of Microcredit Clients in Bosnia and Herzegovina, Results from a comprehensive field study. European Fund for Southeast Europe (EFSE).
- Microfinance Focus (2010). *Exclusive: 54 microfinance-related suicides in AP, says SERP Report*. Retrieved from <http://www.microfinancetransparency.com/evidence/PDF/12.25%20MF%20focus%20article%20suicides.pdf>
- Microfinancefocus (2011). *6 microfinance crises that the sector does not want to remember*. Retrieved from <http://www.microfinancefocus.com/6-microfinance-crises-that-the-sector-does-not-want-to-remember/>
- Mohan, L. & Potnis D. (2010). Catalytic Innovation in Microfinance for Inclusive Growth: Insights from SKS Microfinance. *Journal of Asia-Pacific Business*, 11:218–239, 2010
- Puhazhendhi, V. (2012). *Microfinance India State of Sector Report 2012*. New Delhi, Sage Publications
- Reille, X. (2009). *The Rise, Fall, and Recovery of the Microfinance Sector in Morocco*. CGAP Retrieved from <https://openknowledge.worldbank.org/bitstream/handle/10986/9486/567250BRI0CGAP1nance1Sector1Morocco.pdf?sequence=1>
- Rosenberg, R. (1999). Measuring Microcredit Delinquency: ratios can be harmful to your health. *Occasional Paper No. 3*. CGAP-Consultative Group to Assist the Poorest, Washington.
- Rosenberg, R. (2007). CGAP Reflections on the Compartamos Initial Public Offering. *Focus note*, 42.
- Rhyne, E. (2001). *Crisis in Bolivian Microfinance*. Retrieved from http://www.accion.org/file_download.asp?f=2
- Sa-Dhan, (2012). *The Bharat Microfinance Quick Report 2012: Microfinance - Growing Against All Odds*, New Delhi.

- Schicks, J. (2011). Over-Indebtedness of Microborrowers in Ghana: An empirical study from a customer protection perspective. *Washington, DC: Center for Financial Inclusion, November.*
- Shaffer, B. (2012). Charging to Teach a Man How To Fish: Why Is That A Bad Idea? A Case For the For-Profit Microfinance Institutes.
- SKS Draft Red Herring Prospectus, 25 March 2010
- Srinivasan N (2009). *Microfinance India State of Sector Report 2009*, New Delhi, Sage Publications
- Srinivasan N (2010). *Microfinance India State of Sector Report 2010*, New Delhi, Sage Publications
- Srinivasan N (2011). *Microfinance India State of Sector Report 2011*, New Delhi, Sage Publications
- Sriram, M. S. (2010). Commercialisation of Microfinance in India: A Discussion on the Emperor's Apparel. Indian Institute of Management.
- State government of Andhra Pradesh (2010). An Ordinance to protect the women Self Help Groups from exploitation by the Micro Finance Institutions in the State of Andhra Pradesh and for the matters connected therewith or incidental thereto. State government of Andhra Pradesh
- Swanson, B. (2007). The Role of International Capital Markets in Microfinance. Paper presented at a symposium on Credit Markets for the Poor, Columbia, University Business School.
- The Economics Times. (2010). *Allianz takes Indian made micro-cover to the world.* Retrieved from http://articles.economictimes.indiatimes.com/2010-08-10/news/27615554_1_bajaj-allianz-insurance-product-premium-income
- The Hindu. (2008). *Airtel, SKS Microfinance tie up to offer package.* Retrieved from <http://www.hindu.com/2008/07/18/stories/2008071853700500.htm>
- The MiX. (2009). The MicroBanking Bulletin, Issue No. 18. Washington, DC: The MiX

- Thorat, Y.S.P. (2006). Microfinance in India: Sectoral issues and challenges. Report commissioned by the National Bank for Agriculture and Rural Development: Towards a Sustainable Microfinance Outreach in India - Experience and Perspectives. Retrieved from http://www.microfinancegateway.org/gm/document-1.9.../39678_file_22.pdf
- Vogelgesang, U. (2003). Microfinance in times of crisis: the effects of competition, rising indebtedness, and economic crisis on repayment behavior. *World Development*, 31(12), 2085-2114.

5. Securitization of Microloans – An Indian Perspective of an innovation in Microfinance Industry

“Securitization is a ‘financing vehicle for all seasons’ that should no longer be thought of as a ‘bogeyman’ – Andy Haldane, Bank of England

5.1. Chapter Summary:

Though securitization of micro-loans started in 2009, it has been growing in size and numbers. It is an innovative way of supporting microfinance which has come under pressure for want of capital. With priority sector lending norms remaining unchanged and direct lending to microfinance institutions seen as risky by banks, securitization is seen as a viable option to banks. This chapter discusses the securitization deals in Indian market.

5.2. Introduction:

Microfinance in India started to pick up in the 1990s, though it has been in place for many centuries. Nobel Laureate Professor Mohammed Yunus made Microfinance famous by his Grameen bank concept. His concept of lending to poor without any collateral, hitherto considered as impossible by many, was in fact a great success. Although he started off with his own funds, but the demand was too huge for his funds to sustain. He had to convince Central Bank of Bangladesh to fund his project.

The demand of microfinance is too huge to be financed by donor funds alone. Large unmet demand of microfinance is a matter of concern for Government of India. According to CRISIL (2009), Rs. 1.2 trillion is demanded by 120 million households in India. Currently Microfinance Institutions (MFIs) in India have been able to cover 27million borrowers by end of March, 2012 (Sa-Dhan, 2012). After having learned lessons from Grameen bank experience, government, researchers and microfinance industry is mulling on improving the depth and width of the outreach of microfinance. By depth, we mean how poor people are served, and by width of outreach we mean how many various regions and people across geographies are benefitting from microfinance. As per the poverty audit commissioned by Small Industries Development Bank of India (SIDBI), 5 MFIs out of 8 make loans to non-poor (Srinivasan, 2009, pp2-3). This is because of higher cost of smaller loans and hence the tendency of skipping poor from lending mechanism. Achieving depth remains thus a challenge to all practitioners of Microfinance. It is easier to spread the limited donor funds across non-poor than having a high cost lending on smaller loans.

Sriram (2010) observed that development of MFIs goes through three distinct waves. Wave 1 was primarily donor fund driven activities. Wave 2 kicked off the development of for-profit commercial organizations. The wave 3 is when mainstream commercial institutions like Private Equity (PE) fund and commercial banks started looking at microfinance as an

interesting business. Though MFIs begins with a philanthropy cause with donor funds, they eventually emerge as commercial organizations with social responsibility. This is because at some point of stage in MFIs operation, donors expect MFIs to be operationally self-sufficient and grow on their own. This forces MFIs to search for commercial capital. Since MFIs cannot accept deposits like banks, their fund raising capability is inherently limited. As per Swanson (2007), most of the estimated 10,000 existing MFIs are not deposit-taking institutions and are unlikely to become so given the cost and complexity of complying with regulations. Accepting the deposits and lending out remains mainly a job of commercial bank and this handicaps MFIs in terms of raising capital and re-distributing it.

Government of India (GOI) always had poverty eradication as one of its policy planks since independence. Their continued thrust on poverty alleviation has helped microfinance sector to grow faster. Typically MFIs have been financed by conventional method, that is, MFIs apply for loans from banks at commercial interest rate and lend it to their clients at higher rate. In India, RBI has laid down priority sector lending (PSL) norms for banks. In this PSL norm, banks are required to lend 40% of their loan portfolio to PSL sector Lending to MFI is also designated as PSL (RBI, 2011b). Since many banks found it unprofitable to lend directly to the poor due to various reasons like trouble in setting up branches in inaccessible areas and information asymmetry, lending to MFI was seen as a good option. Barring mass default events as reported in recent time in India⁸, this sector has seen a very low rate of default across world. Banks saw them as a safe investment. Due to donor fund limitation, MFIs found borrowing from commercial banks as a good option, as under PSL they get interest rate subvention which improved their margins. So the commercial engagement was a win-win situation for banks and MFIs. This arrangement has changed post the failure of several MFIs in recent time.

⁸ Andhra Pradesh, Eastern Maharashtra and Northern Karnataka where mass defaults occurred

As per mixmarket.org data India's microloans borrowers were increasing at compounded annual growth rate (CAGR) of 70% while its gross loan portfolio CAGR was 85% during period of 2004-13.

Andhra accounted for 27.93% of country's borrowers and 7.28% of country's population (Srinivasan, 2009, pp.39). Andhra Pradesh had 36.4% share in SHG linkage program (Srinivasan, 2009, pp.25). The country's growth story was clearly visible in Andhra Pradesh. Borrowers were having good services as Andhra was having presence of many MFIs. Andhra Pradesh was topping the Microfinance Penetration Index (MPI) with score of 3.64 and Microfinance Poverty Penetration Index (MPPI) with score of 6.35 in 2010 (Srinivasan, 2011, pp.16). MPI is computed by dividing the Share of the State in microfinance clients with share of population. MPPI is derived by dividing the share of the state in microfinance clients by share of the state in population of Poor. This implies that microfinance had high penetration in Andhra Pradesh. High levels of penetration are also a cause for concern as they indicate that the debt levels could exceed the repayment capacity of the poor households (Srinivasan, 2009). Andhra Pradesh had 9.63 loan accounts per household (Srinivasan, 2010, pp.4). Microfinance in Andhra Pradesh was not used primarily to facilitate productive investment but, rather, to pay back existing loans, cover healthcare expenditures and meet immediate consumption needs (Taylor, 2011). A bubble was brewing in Indian microfinance, as the logic of competitive provisioning had led to a gross oversaturation of the market (Rozas 2009). This is what precisely happened later the media was carrying stories of harassment of borrowers and public humiliation leading to suicides. More than 40 cases of suicides attributed to over-indebtedness from MFI (Sriram, 2012). In October, 2010, the government of Andhra Pradesh promulgated an ordinance against MFIs. Ordinance made it mandatory for MFIs to register in each district, collect repayments only from specified locations; it also imposed restrictions on recovery agents (State Government of Andhra

Pradesh, 2010). The effect of ordinance was immediate on recoveries and MFIs were soon facing liquidity problems. The borrowers used this ordinance to default and loans started becoming delinquent. MFIs were handicapped due to this ordinance and were struggling to sustain their businesses.

5.3. Methods of Funding:

Equity: This is one of the principal sources of funding whereby a MFI mobilized resources from primary market through initial public offerings (IPOs). In fact, such method of funding became popular amongst the MFIs with the success of IPO of the SKS, which was oversubscribed by 13 times in a price band of Rs. 850-985 per share.

Besides taking direct recourse to equity market, MFIs can approach Private Equity (PE) as well. One of the major PE investments was done by International Finance Corporation (IFC) investment to the tune of Rs.160 million to Bandhan Financial Service. There have been many capital market deals prior to October 2010 (before AP crisis). According to Srinivasan (2010, 2011), the equity deals have been steadily growing till 2009-10. With the crisis in October 2010 in Andhra, PE showed little interest in the MFIs (see Table 1).

Table 5-1: Private Equity deals in India

	Million \$	No. of Deals
2007-08	52	3
2008-09	178	11
2009-10	209	29
2010-11	75	7
2011-12	69	4

Source: Adapted from *Microfinance India State of Sector Report 2012*, by Puhazhendhi (2012). New Delhi, Sage Publications

But there are a few PE deals post this crisis like Incofin's investment in Hope Micro-credit Finance. This shows the commercial interest in microfinance sector by investors. Many social investing funds have been setup like DiaVikas Capital (a subsidiary of Opportunity International Australia) to fund various MFIs in India. So the commercial engagements are helping MFIs to grow. Some research papers state MFIs are drifting away from their mission as they are growing and getting mature (Ditcher, Harper, 2007). Mission drift occurs when MFIs move away from serving poor clients in pursuit commercial viability (Cull, et al, 2007). However there are also some counter research like (Downey, Conroy, 2010) showing that not for profit MFIs have superior financial performance than for-profit MFIs. Another paper states that profit motives help MFIs to become more efficient and tap newer markets (Rhyne, 1998). Post AP crisis, GOI has stepped in to allay the fears among investors by setting up its own equity fund, known as India Microfinance Equity Fund. This has been setup by GOI along with Small Industrial Development Bank (SIDBI) during union budget of 2011-12. The purpose of this fund is support smaller MFIs to achieve growth and efficiency in their operations (SIDBI, 2012). Though small in size (about Rs. 1 Billion), it shows government's interest in microfinance sector development through equity funding.

Non-Convertible Debenture (NCD) is another way that MFIs have found to finance. In this avenue there have been many deals and MFIs have been able to secure funding for their short term requirements. NCDs have to be rated by a Securities and Exchange Board of India (SEBI)-approved credit rating agency and should carry a minimum rating of P-2 or equivalent. Some of the major deals are like Ujjivan Financial services raised Rs. 230million (Contify, 2011) and Sahayta Microfinance raised Rs. 195Million (Microfinance Focus, 2011).

External Commercial Borrowings (ECB) is one more route wherein for-profit MFIs could tap the non-resident lender's fund for minimum maturity of three years. However, there are some conditions laid down by RBI (2011a) such as MFIs should have been operating in the

field for at least 3 years and has been working with bank authorized to deal in foreign exchange. The limit for ECB is \$ 10 Million for a year.

Commercial Papers (CP) is unsecured, short-term debt instrument issued by an organization. SKS raised \$4.8 Million through this method as reported by Microcapital.org (2009). CPs are used to finance short-term liabilities. Maturities on commercial paper rarely range any longer than 270 days. The debt is usually issued at a discount, reflecting prevailing market interest rates. CPs have to be rated by SEBI approved rating agency. Since CPs are not backed by any collateral, institutions with strong ratings are able to raise money through CPs.

5.4. Securitization: new saga in MFIs funding

Conventional method of MFI lending is when MFIs lend to borrowers and keep these loans on their balance sheet. MFIs own these loans and retain its credit risk of the loans. If the loans are transferred to other client/trust along with the future cash flows, then these loans can be taken off from MFIs balance sheet. One way of doing this is by setting up Special Purpose Vehicle (SPV) and transferring these loans to it. Then SPV collects the interest on these loans and pays out to investors. This is Securitization, one of the techniques which can help microfinance sector to capitalize its institutions.

Securitization is pooling all cash flow generating assets, structuring them into tranches and selling particular tranche to investors as per their risk appetite. Typically any kind of cash receivables can be securitized to issue a transfer certificate after which the cash flow is transferred to the investor.

Securitization examples are found in 18th century. In 1793, the Holland Land Company issued two structured notes to purchase millions of acres in Western New York. In 1794, the purchase and development of property in the newly-designated capital city of Washington

D.C. was financed by mortgage-backed bonds underwritten by Dutch merchants (Frehen et al. 2013). In order to make this American Dream accessible to more people, the US government sought ways to increase liquidity in the mortgage market through securitization (Austin & Kaplan, 2014).

In microfinance context, securitization is an asset backed transaction, wherein microloans receivables are pooled and repackaged to sell them to investors (banks or funds). In this way investors are funding the micro borrowers of MFIs who remain to be servicer of these loans.

World's First Microfinance securitization deal happened in 2006 when The Bangladesh Rural Advancement Committee (BRAC) received 12.6 billion Bangladesh Taka (USD \$180 million) in financing over six years, through a microcredit securitization structured by RSA Capital, Citigroup, the Netherlands Development Finance Company (FMO), and KfW Entwicklungsbank (KfW). The one billion Bangladesh Taka (USD \$15 million) was disbursed to BRAC every 6 months, with a maturity of 1 year (Microcapital, 2006).

Securitization has been a source of debate and has raised a lot of doubts about its viability for successful implementation, especially after credit crisis. Securitization was blamed for the world economy debacle and seen as an evil financial innovation. Originally banks used to lend and hold them on their balance sheets. Later they started to distribute it to other investors. This way they could off load some loans and acquire newer ones. But this turned into a system, where many banks started to disburse loans just to securitize; this is called as Originate to Distribute (OTD) model which was criticized heavily. Banks were actively looking for clients to whom they could lend. After that they would securitize and sell it to some investors. This triggered predatory lending wherein people were offered many sorts of attractive schemes so that they could borrow money (in many cases even if not needed). Many thought that by use of this OTD model banks were giving out loans to not so credit worthy people. Opposing views state that banks have reputation at stake and cannot offload

risky loans from their balance sheets. A paper by Bank for International Settlement (BIS, 2011) had argued that securitization can work provided there are certain changes made to the framework. It concluded that securitization of prime mortgages is soundly functioning market and should not be excessively penalized. The OTD model per se cannot be blamed for having induced reckless risk-taking (BIS 2011). Dodd-Frank Act has been laid down to tackle the issue of OTD and moral hazard, and required Originators of the loans to have “Skin-in-game”. This meant that originators of the loans were asked to maintain 5% of their securitized portfolio in their balance sheet. Originators will have more due diligence as bad loans will affect their balance sheet as well. By retaining these loans on their balance sheet, Dodd Frank act does a better job of addressing problem of OTD model (Thompson, 2011). Securitization can work provided there are certain changes in loan production processes, improving transparency and monitoring at both security and financial system levels (Riddiough 2010). Keys *et al* (2008) concluded that market forces were better in mitigating moral hazards than stricter regulations.

There have been many classical reasons for development of the securitization. Though there is a controversy surrounding securitization, there are certain advantages of the whole system. Kalani (2009) states that securitization increases MFI size and capital available for funding, it also concludes that it increases the average amount lent to borrowers along with the reduction in the portfolio at risk.

There have been several papers written on Commercial Microfinance and Securitization, but research papers combining these two are rare. This paper is unique in terms of combination of Commercial Microfinance and Securitization.

Bystrom (2008) explains microfinance collateralized debt obligation (CDO) by taking a hypothetical example and building the implications from it. The paper uses assumption laid down by Consultative Group for Assisting Poor (CGAP) regarding the costs incurred by

MFIs and creates a hypothetical portfolio of MFIs in multiple countries. It concludes that growth of micro-credit supply can speed up by the use of collateralized debt obligation. The microfinance CDO can be tailor made to provide various risk return profile for different risk appetite and investment mandates. By retaining the most risky tranche the originator of the microfinance CDO can get high risk adjusted return and take care of asymmetric information problem in any securitization deal.

As discussed earlier, MFIs do have restrictions on capital building as they are not allowed to accept deposits and even if they were allowed to accept deposits, there is a huge risk of moral hazard. MFIs are large in number and regulating them for accepting deposits will be a daunting task for any regulatory authority. So MFIs will naturally explore alternate avenues for raising capital. Securitization involves only MFIs and investors to raise capital, so this makes it easier for any MFI to adopt this route of financing. Unlike other areas where there are restrictions from regulators inhibiting their usage. This is good from the point view of investors and originators of loans.

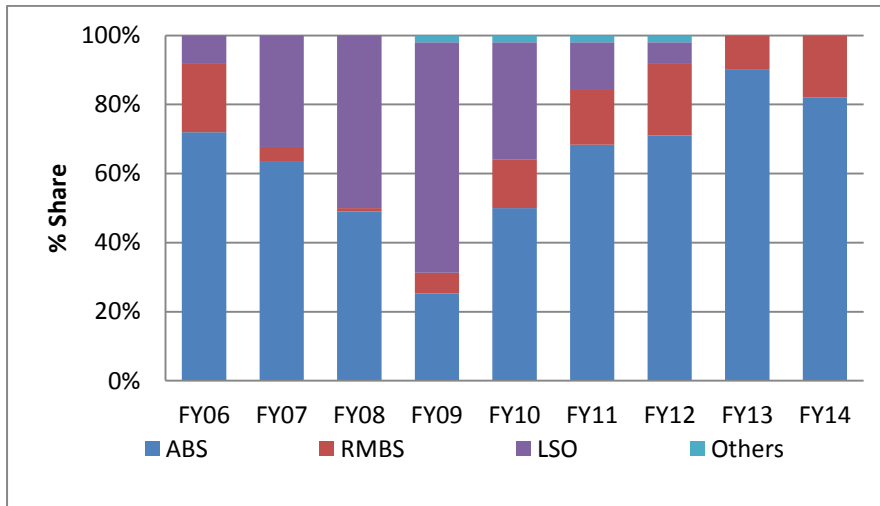
Table 5-2 shows few of the securitization deals in India. This data has been compiled from various sources like Institute of Finance and Management Research (IFMR) website or Indian Credit Ratings Agency (ICRA) ratings releases of various structures. This table shows the name of the deal, originator MFIs, SPV involved in finalizing the deal, size of the structure, number of loans involved in building up the corpus and tranche details in terms of number and investors.

Securitization Market status in India:

Even if Securitization is a new concept to Microfinance, it not new to India, it started as far as 1992 when Citi bank securitized its auto-loans. It was deal between Citi bank and GIC Mutual fund sizing Rs.160Mn.

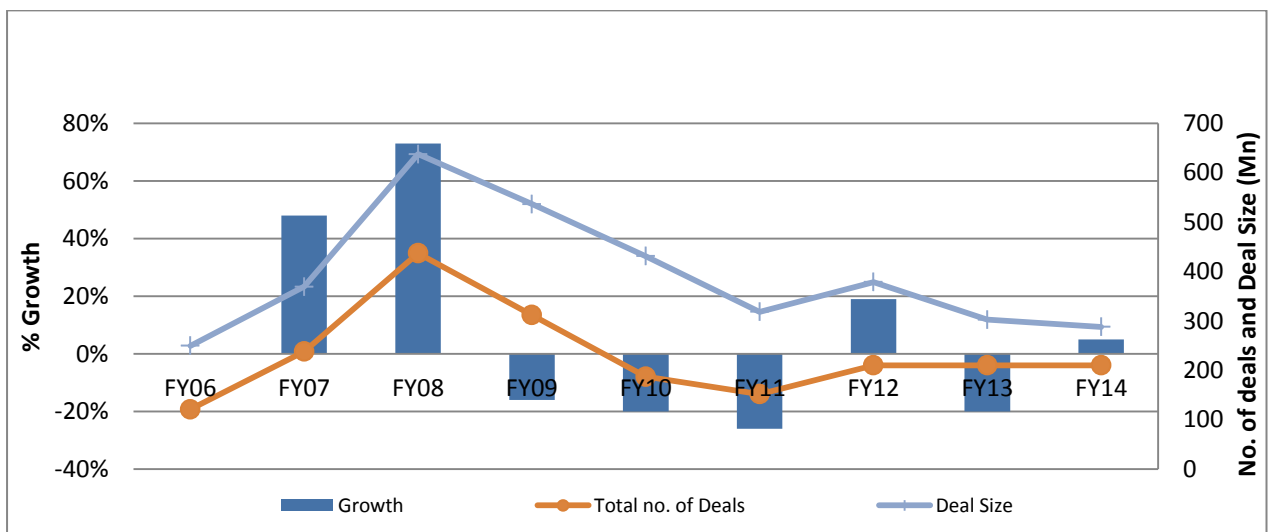
After early phase in 1992 there was a growth era from 2001 to 2008 after which Indian securitization market was hit by global credit crisis. Figure 5-1 shows the breakup of Securitization market by its segment. We see that ABS had taken a hit during 2008 crisis, but it started to pick up later. Microfinance loans are categorized under ABS segment.

Figure 5-1: Securitization market in India



Source: ICRA Estimates

Figure 5-2: Securitization Deals in India



Source: ICRA Estimates

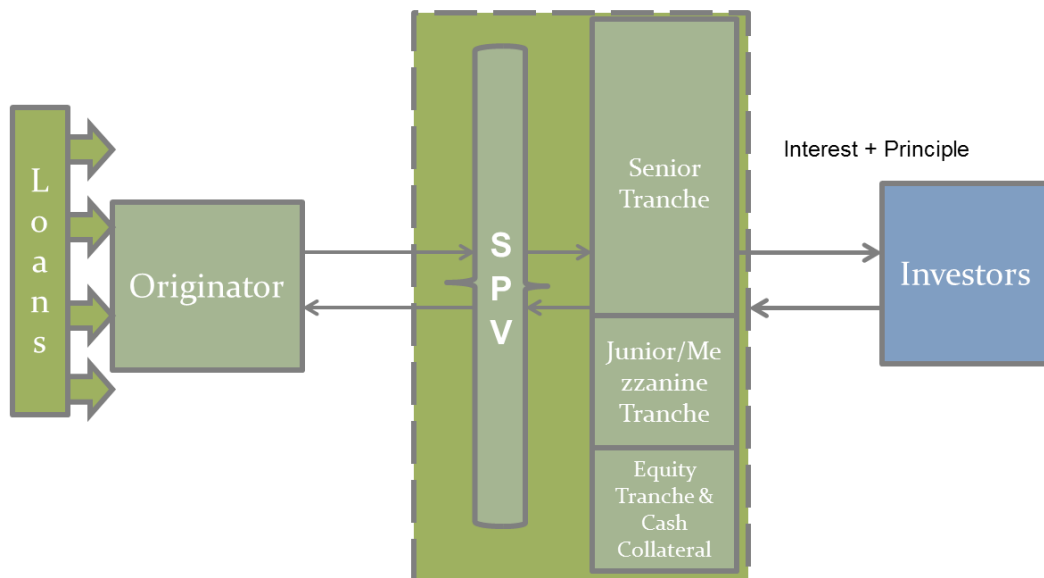
Figure 5-2 shows initial growth phases if securitization market was as high as 73% in FY2008 which went for a toss after credit crisis and was in negative phase for couple of years before posting a growth of 15% in FY2012. However FY12 looked promising as there is a

growth in this sector by about 15%. ABS added Microfinance as new asset class in 2009 and since then share of microloan securitization has been rising and now it stands at 5% in FY2014 as compared to -20% in FY2013. This clearly shows the renewed interest of the market participants to securitize the microloans.

5.5. Securitization structure:

Securitization structure can be a CDO (Collateralized Debt Obligation), CLO (Collateralized Loan Obligation), CMO (Collateralized Mortgage Obligation), CBO (Collateralized Bond Obligation). All these are debt instruments backed by pool of assets. The CDO concept applies to the broader spectrum of these instruments. In terms of Micro-loans, CLO is more relevant wherein all the loans are clubbed together.

Figure 5-3: Securitization structure



Source: Author's diagram

Table 5-2: Summary of a few Microfinance deals in India

Sl no.	Name	Originator	SPV	Size (INR)	No. Of Microloans	Tranches	Remarks
1	Delta Pioneer IFMR Capital 2010	Janalakshmi Financial Services	IFMR Capital	250 million	35,560	AA and Unrated	Unrated held by IFMR
2	KRIOS PIONEER IFMR CAPITAL 2011	Ujjivan Financial Services	IFMR Capital	401 million	45,954	(89.5%)A1 and (10/5%)sub- ordinate Junior	Unrated held by IFMR
3	Beta IFMR CAPITAL 2011	Grama Vidiyal	IFMR Capital	108 million	11,304	84% senior tranche rated A1 & 16% subordinated junior tranche rated A3	Unrated held by IFMR
4	Aether IFMR Capital 2011	Grameen Financial Services Private Limited (Grameen Koota)	IFMR Capital	239 million	23,108	A- rated tranche and IFMR Capital invested in the	Grameen Koota, provides cash collateral of 10%

						subordinated	of the pool
						ICRA BB+	principal. Avendus capital invested in 84% of loan receivables
5	Mosec 7	Asirvad Microfinance Private Limited, Disha Microfin Pvt. Ltd, Mimoza Enterprises Finance Pvt. Ltd., Satin Creditcare Network Limited , Suryoday Micro Finance Pvt. Limited, SV Creditline Private Limited and Utkarsh Micro Finance Private Limited	IFMR Capital	511 million	49,881	85% senior tranche rated A1-LBBB+ (SO) and Series A2-Unrated	senior tranche has been subscribed by a Bank and HNI's and Junior Tranche by IFMR Capital. originators and servicers, provides cash collateral as first loss

The originator is the one who clubs all the assets with future payoff into a pool which is typically called Asset Backed Securities (ABS). The originator want to offload these loans from their balance-sheet for various reasons like freeing up regulatory capital requirements, arbitrage, etc. In Microfinance context MFIs are originators and investors are Banks or Mutual Funds. Third party called as Special Purpose Vehicle (SPV) are created by any NBFCs or banks to assists MFIs to create a structure. SPV is a legal entity created solely for the purpose of a securitization deal like e.g. Beta IFMR Capital 2011 was created for securitizing the loans from Gram Vidiyal amounting to Rs.108Mn. Once this structured product is matured, the SPV ceases to exist. Though SPV may be created by originator, it will have its own balance sheet like any other company and run separately without any shared management or legal ties with originator. Hence it is also called bankruptcy remote model, even if originator goes bankrupt SPV will continue with the usual servicing of the structure. When initiating a CLO, the originator transfers all loans to SPV at their principal value. All the coupon payments received by originator will now go to SPV. SPV now pools all the assets and sells them off in smaller pieces as notes to investors also called as Pass Through Certificates (PTCs).

Coupon and Principal Payments to Investors:

SPV issues CLO notes against the principal into various tranches like Senior, Sub-Ordinate and Equity tranche. The payments are made to as per the seniority of the tranches e.g. Senior tranches are paid first and then rest as per seniority. If there is no default, all tranches are paid, but if there is any default by the borrowers, then interest is paid first to Senior, then to Sub-ordinate and then to Equity if there is any amount left.

Ratings Agency:

The most important role is played by Ratings Agency. These are backed by Government as they study these deals and give ratings. This helps the market to study the strength of the

structure. There are periodic reviews done by these agencies in which they understand the repayments, analyse the credit risk and revise the ratings if required. There are many ratings agency like ICRA (formerly Investment Information and Credit Rating Agency of India Limited) and associate of Moody's Investors services, Fitch, Credit Rating Information Services of India Limited (CRISIL), CARE, etc.

All the pooled assets are distributed into tranches and the ratings agency continuously analyse them to give the ratings. E.g Senior tranche may get AAA(SO), Junior tranche or subordinate gets BBB(SO) and equity tranche may be left unrated. These ratings are from *ICRA Limited*. There are many ratings agencies who are specializing in Microfinance structured products.

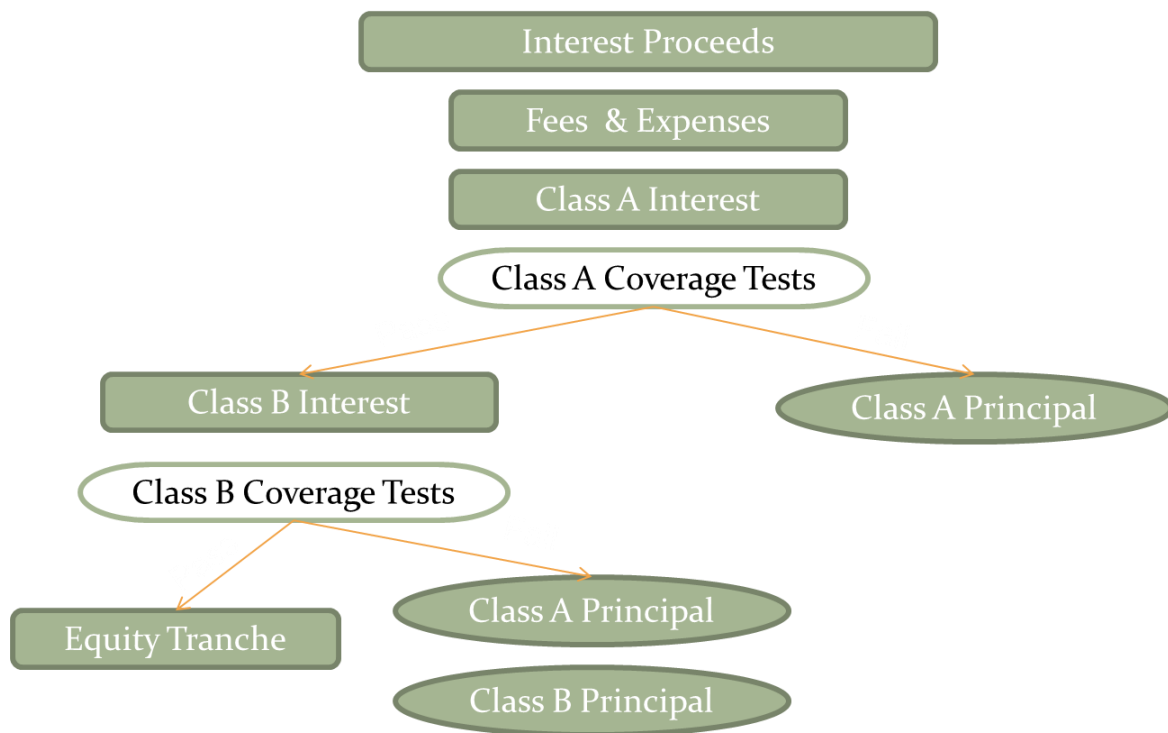
Since junior tranches absorb the credit risk, the return on these are higher than senior. In the current scenario the banks can opt for Senior tranches which will help them to meet priority sector lending norms, rest can be bought by microfinance funds or other funds looking for higher returns.

Since there is a credit risk involved in this structure some credit enhancements is also provided with the structure. These enhancements ensure that the credit risk doesnot wipe out the coupons or principal. In the above example of Beta IFMR Capital 2011, the equity tranche is retained by IFMR Capital and there is a stipulated 10% cash collateral from MFI kept as guarantee, this will help to absorb some default risk and protect the Senior investors from losses. The interest payments are paid in seniority, if the losses exceeds those of the tranche, then entire tranche is wiped out and losses are carried forward to next senior levels. The payments happen by the way of "waterfall" mechanism, which is discussed in next section.

“Waterfall” Mechanism:

Waterfall mechanism is the method of paying senior tranches first and others subsequently. To check whether cash flow is sufficient to pay all tranches, certain tests called coverage tests are run on the structure. For every coupon payment coverage test is run to check cash flows on every tranche, if the test results fail for any tranche then interest proceeds are used to pay the principal of all tranches until coverage tests are met. One important point here is that administrative fees are most senior to all tranches and first payment is made to satisfy this. The Figure 5-4 explains the coverage tests methods for all tranches.

Figure 5-4: "Waterfall" mechanism



Source: Author’s diagram

Coverage test:

There are two types of coverage tests namely Overcollateralization test (OC Test) and Interest coverage tests (IC Test).

Interest coverage tests (IC Test)

This coverage test checks whether a particular tranche is able to give out its interest payments to the investors. If IC test fails the interest payments from Junior tranches are diverted to pay senior ones till the IC test is met. The value of IC ratio must be above some threshold value. IC ratio is mentioned as follows:

$$\text{IC Ratio}_{\text{tranche}} = \frac{\text{Interest due on the collateral portfolio}}{\text{Interest to that tranche} + \text{Interest to all tranches senior}} \quad \text{Equation 12}$$

Overcollateralization test

Overcollateralization test checks whether the securitization structure is robust. Here when we say robust we means that principal value of the deal is atleast some percentage of the underlying structure. This is a kind of credit enhancement by which the deal gets higher credit rating from ratings agency if the OC ratio is high. OC ratio is given by the following:

$$\text{OC Ratio}_{\text{tranche}} = \frac{\text{Principal value of collateral portfolio}}{\text{Principal for tranche} + \text{Principal for all tranches senior to it}} \quad \text{Equation 13}$$

If the OC ratio falls below a particular threshold level, it mean OC test has failed. In this case the cash flows from junior tranches are diverted to pay off the senior tranches till the test is met.

5.6. Securitization of micro loans in India:

Though first securitization deal in India was done in as early as 1990, micro-loan securitization took a substantial time to materialize. It was only in 2009 that Equitas Microfinance (MFI based in Chennai) securitized its micro loan portfolio with the help of IFMR Capital (Chennai based NBFC) to launch India's first rated securitization deal. Since then there have been multiple micro-loan securitization deals. This deal was classified as single originator deal like IFMR Capital Pioneer-I wherein only one MFI was involved; in

this case Equitas Microfinance's loans were securitized into various tranches. The size of the deal was Rs. 157 Million; this was divided into two tranches A1 and A2 with principal amounting to 80% and 20% respectively. The CRISIL acted as rating agency and had rated its top tranche (A1) as AA (SO) and mezzanine tranche (A2) as BBB (SO). CRISIL explains these ratings for A1 tranche as high degree of safety in timely servicing of its financial obligations, depicting low credit risk. And A2 tranche is having moderate degree of safety and bears moderate credit risk. In this structure, there is a stipulated cash collateral of 11.7% of principal. This cash collateral act as internal credit enhancement giving stability to the structure, the first loss is taken up by this collateral and hence there is no rating given for this. This first-loss guarantee protects the upper tranches. If the default losses are 11.7% the cash collateral is used for the defaults and cash flows to Series A2 and Series A1 continue. If the default exceeds 11.7% then default is absorbed by Series A2 tranche protecting the most senior tranche. This way the Series A1 is protected till Series A2 principle is not defaulted.

Other type of securitization is where there are many originators (MFIs) whose micro-loans are securitized. These are called Multi-originator Securitization deals like IFMR Capital MOSEC I wherein IFMR clubs micro-loans from many MFIs. Because of MOSEC (Multi-Originator Securitisation) type of deals many small MFIs have been able to get access to this new financing.

Table 5-4 shows example of IFMR MOSEC I structure in which Asirvad Microfinance Pvt Ltd, Sahayata Microfinance Pvt Ltd, Satin Creditcare Network Ltd, and Sonata Finance Pvt Ltd are contributing to the pool of assets. The first loss guarantee is given by these four MFIs in terms of cash collateral and second loss guarantee is given by IFMR capital by investing in junior tranche. This means that if there is any default it is absorbed by all the MFIs involved and second default is absorbed by IFMR capital.

Table 5-3: IFMR Capital Pioneer Trust I

PTC	Yield terms	Principal (Rs. Mn)	% Principal	Ratings
Series A1	Fixed	125.4	80%	AA(SO)
Series A2	Residual	31.3	20%	BBB(SO)
Cash Collateral	-	18.3	11.70%	unrated

Source: Adapted from *Review of Ratings report* by CRISIL (2009) retrieved from <http://www.crisil.com/Ratings/RatingRationale/RationaleDocs/emfiplptc1009rr.pdf?param=1>

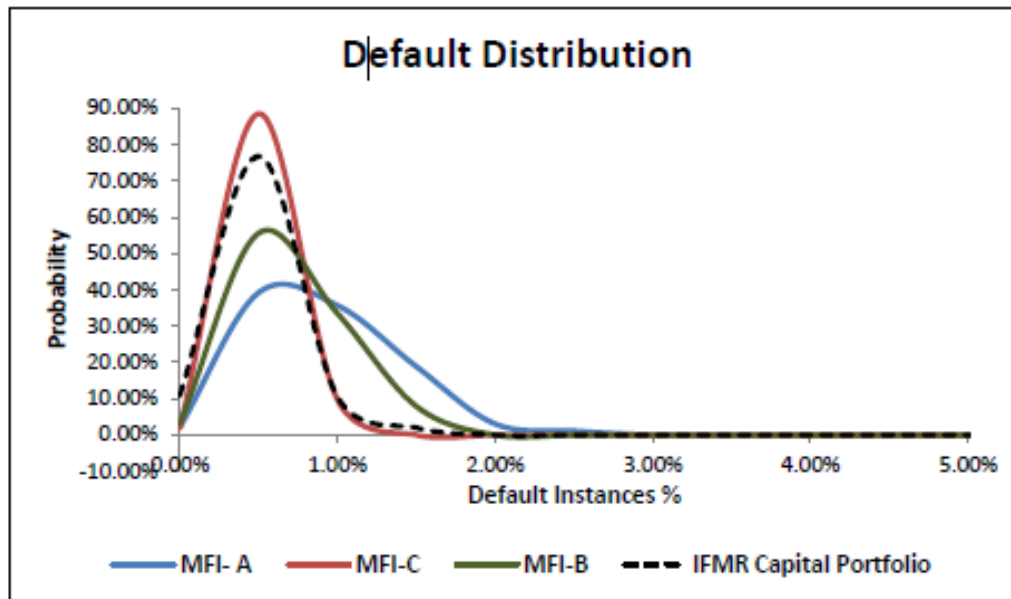
Table 5-4: IFMR Capital MOSEC I

PTC	Yield terms	Principal (Rs. Mn)	% Principal	Ratings
Series A1	Fixed	233.3	76%	AA(so)
Series A2	Residual	75.2	24%	unrated
Cash Collateral	-	41.3	13%	unrated

Source: Adapted from *Review of Ratings report* by CRISIL (2009) retrieved from <http://www.crisil.com/Ratings/RatingRationale/RationaleDocs/emfiplptc1009rr.pdf?param=1>

This multi-originator structure has also helped investors to reduce the risk by diversifying the loan portfolio across various geographical areas, servicers and originators. In *Securitization of Microfinance* by Sahasaranaman (n.d.) mentioned that MOSEC resulted in diversification hence default distribution of IFMR Capital portfolio of various securitized pools has thin tail (low probability of high defaults) as shown in Figure 5.1. This implies that multi-originator structure may have loans from various states and probability of default in one state affecting other may be low. Hence this will help the investors protect their investments.

Figure 5-5: Comparison of regular MFI portfolio with securitized portfolio from IFMR



Source: Adapted from *Securitization in Microfinance* by Sahasranaman, Anand (nd.). Retrieved from http://www.vinodkothari.com/Session%204_Securitisation%20in%20Micro%20Finance%20sector_Mr.%20Anand%20Sahasranaman_IFMR.pdf.

5.6. Risks of Securitization

After the discussion on the Securitization deals in details, there is a need to discuss the inherent risks associated with the Securitization. This is important even if there are Credit Enhancement, Over-Collateralization and First loss protection from Originators.

Credit Risk: Credit risk remains the most important risk for any bank/investor. There are many modeling techniques which are used by banks for modeling credit risk, but models are based on historical events which are limited in case of Microfinance industry and moreover no model can predict event risk like mass defaults. Only relief that Securitization structure gets is overcollateralization and first loss guarantee which is limited. There is an information asymmetry problem which is difficult to be addressed. India's first credit bureau High Mark Credit Information for microfinance sectors was launched in 2011. The purpose of credit bureau is to collect information of all borrowers. Currently it has 80 million loan records and profiles of 45million customers (Puhazhendhi, 2012, pp.8). Equifax is another credit bureau. RBI has made it mandatory for NBFC-MFIs to register to at least one bureau. In long run

these bureaus can build credit histories and get integrated to main financial system. But currently information on borrowers still remains a challenge to gauge the level of risk.

Prepayment Risk: All the loans taken by borrower can be paid off early. This means that all the future cash flows of securitized structure are paid off before maturity and so the securitization structure will collapse. The regulation in India does not permit any prepayment penalty for prepayments. This is not a major risk in microfinance as the economic status of the borrower is low (Pratnik, nd).

Commingling Risk: This risk occurs because servicer handles all transactions related to recovery. So there is a possibility that the funds received as recoveries may not be distributed to investors in case of bankruptcy. Microfinance Securitization is more prone to this risk as MFIs are small and Management Information Systems (MIS) is not in place to monitor the loan recoveries. This risk can be minimized by reducing the time of collection and distribution to investors, but it is difficult and locations of MFIs make it even more difficult. This risk is exacerbated due to lack of back strategy for loan servicing. For other asset classes in developed countries there are back up ready for reducing this risk. But in case of microfinance in India, it is difficult to achieve in this near future.

Political Risk: This risk occurs due to political intervention. Porteus (2009) points out that credit markets are fragile, both because they risk political meddling, and because borrowers themselves exhibit systematic vulnerabilities which compromise their decision making. In the Andhra Pradesh, government had intervened in the operations of MFIs hurting their business; this type of political risk will always remain with the securitization. AP type crisis will always remain in discussion for the microfinance industry.

Legal Risk: This risk is due to nature of the structure. Even if the Structure boasts of bankruptcy remote model, but borrowers are from rural areas and if originator/servicer goes

bankrupt, there is inclination of default by the borrowers as they are more connected to the original servicer and may oppose servicer replacements.

“In several countries including India it has been noticed that the microfinance borrowers fail to understand the migration of the servicer from the originator to the third party and mostly stop repaying loans” (Pratnik, nd).

5.7. Benefits of Securitization in Microfinance context

There are multiple benefits of Securitization to investors and originators (primarily MFIs). Most significant benefit is freeing up regulatory minimum capital. Originators have to maintain minimum capital-to-risk weighted assets ratio. In microfinance context, banks lend to MFIs who in turn lend to their clients. It is mandatory for both the organizations to maintain this minimum ratio. However the securitization can provide the capital relief to the industry and free-up capital.

Availability of funds throughout period is also an important benefit. It is because typically MFIs receive the funds from banks around last quarter of financial year as during this period banks are trying to fulfill their priority sector lending targets. By securitization, timing of the income is changed and MFIs do not have cash flows only during end of financial year.

The higher tranche is always protected by stipulated cash collateral and junior tranches; this is of much interest to banks that have started to avoid funding to MFIs. If banks buy the senior tranche, they will have credit protection from any default arising from lower tranches. This can help banks to monitor the loan performances in a much better way. We analyze two scenarios first banks lend directly to poor or MFIs and other scenario where they buy Senior tranche notes from a MOSEC (Multi-Originator) securitized structure. Now consider a case where there are some defaults or delays occurring due to any reason. In the first scenario, banks are taking the bad loans on their balance sheet. There was no early trigger mechanism for banks to have foreseen this circumstance. This situation can easily spin out of control and

bank will be left with nothing much to control. In the second scenario, Bank has invested in MOSEC Senior tranche which has diversified loan portfolio through various geographies. The default is taken up by lower tranches protecting the bank's investment in Senior Tranche. The losses absorbed by lower tranches will give an early warning to banks on deteriorating loans. The banks can put in more efforts to avoid further escalation of defaults by monitoring MFIs and analysing the situation closely.

5.8. Conclusions:

To address the supply side constraint, MFIs have to be innovative. Chapter 4 discussed about the funding from capital market. MFIs may never be accepting deposits in near future, so their funding will remain inherently limited. So MFIs will always have to find newer avenues of financing. One such innovation is securitization of micro loans, this being easier than other methods of raising capital, will become more popular.

In the current scenario wherein the MFIs are not able to get funding from banks to lend to poor, GOI has stepped in to allay the fears by setting up microfinance fund, but this will not solve the supply side problems. This fund is of meager amount and moreover even if the current situation improves the supply deficit will stay. The banks tend to take the route of securitization for satisfying the PSL requirements. This innovative financing can help both banks as well as MFIs which are reeling under pressure from lack of funds. In this situation banks can buy *Senior tranche* which is protected by *over-collateralization* and first loss guarantee by *junior tranches* (mainly equity tranche and cash collateral). The stipulated cash collateral absorbs the first loss and second loss is absorbed by the holders of equity tranche. All these will help to the gain confidence in banks that due diligence is taken care of. This is an important lesson learnt from credit crisis in which Originators lent just to securitize (OTD model) causing loan screening lapses. Now RBI has put a condition of "skin in game" wherein Originators cannot just get away with poor quality loans as they need to keep certain

amount of loans on their balance sheet. Of course these measures will not help banks in the event of recurrence of AP crisis. The AP crisis has led to loss of Rs. 60 to 70 bn (Srinivasan, 2011, pp.56). Though there has been a regulation that RBI is the sole regulator for Microfinance Industry, risk of AP type of crisis still remains unchanged.

Unless Government assures that the AP kind of crisis is not repeated and such type of moral hazard situation does not arise, no one will have confidence in Microfinance Industry. Investing in top tranches can protect the capital only to the extent that losses do not exceed junior tranches, but whole loans can go delinquent after mass defaults.

RBI's new guidelines (RBI, 2012) have been supportive to microfinance securitization in many ways. These guidelines have Minimum Holding Period (MHP) as criteria for Originating organizations. In this originators can securitize loans only after these have been held by them for a minimum period in their books (based on maturity and repayment frequency) ensuring that loans are not given out only for the purpose of securitization. Other criterion is Minimum Risk Retention (MRR) which ensures that originators continue their stake in the securitized structure. MHP and MRR are established to help boost securitization and safeguard the investors. Microfinance Securitization is definitely an innovation to stay. It is still in a very nascent stage and RBI is doing its job of protecting the microfinance industry from credit crisis like situation which happened in other parts of world.

5.9.References:

- Austin,S. Kaplan, C. (2014). Securitisation: A brief history and the road ahead. Retrieved from <http://whoswholegal.com/news/features/article/31673/securitisation-brief-history-road-ahead>
- BIS (2011). *Securitization is not that evil after all*. Bank for International Settlements. Retrieved from <http://www.bis.org>
- Bystrom, Hans (2008). *The Microfinance Collateralized Debt Obligation: A Modern Robin Hood?*, World Development, Vol 36, pp 2109-2126
- Chakraborty, Digal (2013). *Securitization in India: A Strategic Tool for Competitiveness*, Indian Journal of Applied Research, Vol 3, Issue 3, pp 304-307
- Contify (2011). *Ujjivan Financial Services raises Rs 230 mln via issue of non-convertible debentures*. Retrieved from <http://contify.com/story/ujjivan-financial-services-raises-rs-230-mln-via-issue-of-non-convertible-debentures-2011-07-04>.
- CRISIL (2009). *India's Top 50 Microfinance Institutions*. Retrieved from http://www.crisil.com/pdf/ratings/CRISIL-ratings_india-top-50-mfis.pdf.
- CRISIL (2009). *Review of Ratings report*. Retrieved from <http://www.crisil.com/Ratings/RatingRationale/RationaleDocs/emfiplptc1009rr.pdf?param=1>
- Cull, R., & Morduch, J. (2007). Financial performance and outreach: a global analysis of leading microbanks. *The Economic Journal*, 117(517), F107-F133.
- Dichter, T. W., & Harper, M. (Eds.). (2007). *What's wrong with microfinance?* Rugby,, UK: Practical Action Publishing.
- Downey, C. (2010). *Microfinance: The Impact of Nonprofit and For-Profit Status on Financial Performance and Outreach*. Academy of Economics and Finance Retrieved from <http://www.econ-jobs.com/research/35795-Microfinance--The-Impact-of-Non>

profit-and-For-Profit-Status-on-Financial-Performance-and-Outreach.pdf

- Frehen, R., Goetzmann, W. N., & Rouwenhorst, K. G. (2013). Dutch Securities for American Land Speculation in the Late-Eighteenth Century. In *Housing and Mortgage Markets in Historical Perspective* (pp. 287-304). University of Chicago Press.
- Kalani (2009). *Making Benevolence Profitable: Assessing the Role and Impact of Securitization in the Microfinance Sector*. Retrieved from <https://www.amherst.edu/media/view/190195/original/Kalani09MakingBenevolenceProfitable.pdf>.
- Keys, B. J., Mukherjee, T., Seru, A., & Vig, V. (2009). Financial regulation and securitization: Evidence from subprime loans. *Journal of Monetary Economics*, 56(5), 700-720.
- MCRIL (2010). *MCRIL Microfinance Review, 2010*. Retrieved from <http://www.m-cril.com/BackEnd/ModulesFiles/Publication/M-CRIL-Microfinance-Review-Nov-2010.pdf>.
- Microcapital.org. (2009). *MICROCAPITAL STORY: Indian SKS Microfinance Issues Bonds and Commercial Notes, and Announces a \$963.6m Borrowing Plan to Finance Rapid Growth*. Retrieved from <http://www.microcapital.org/microcapital-story-indian-sks-microfinance-issues-bonds-and-commercial-notes-and-announces-a-9636m-borrowing-plan-to-finance-rapid-growth>
- Microfinance Focus (2011). *Sahayata Microfinance raises INR 195 MN through NCDs*. Retrieved from <http://www.microfinancefocus.com/sahayata-microfinance-raises-inr-195-mn-through-ncds>.
- Porteus, David (2009). Consumer Protection in Credit Markets," Policy Focus Note 1, Financial Access Initiative. Retrieved from www.nancialaccess.org.
- Puhazhendhi V (2012). *Microfinance India State of Sector Report 2012*, New Delhi, Sage Publications

- Ray, Prantik (nd.) *Issues in Microfinance Securitization in India---Need for Proper Risk Assessment*. Retrieved from <http://www.wbiconpro.com/315-Prantik.pdf>.
- RBI (2011a). A.P. (DIR Series) Circular No. 59, External Commercial Borrowings (ECB) for Micro Finance Institutions (MFIs) and Non-Government Organisations (NGOs) - engaged in micro finance activities under Automatic Route. Retrieved from <http://rbidocs.rbi.org.in/rdocs/notification/PDFs/59APDMFI191211.pdf>.
- RBI (2011b). *Priority Sector Lending*. Retrieved from <http://rbidocs.rbi.org.in/rdocs/PublicationReport/Pdfs/73748.pdf>.
- RBI (2012). *Revisions to the guidelines on securitization transactions*. Retrieved from <http://rbidocs.rbi.org.in/rdocs/notifications/PDFs/FIGUSE070512.pdf>.
- Rhyne, E. (1998). The yin and yang of microfinance: Reaching the poor and sustainability. *MicroBanking Bulletin*, 2(1), pp. 6-8.
- Riddiough T (2010). *Can Securitization Work? Economic, Structural and Policy Considerations*. The Journal of Portfolio Management Vol. 37, No. 5: pp. 24-38
- Rozas, D. (2009). Is There a Microfinance Bubble in South India? *Microfinance Focus*. Retrieved from <http://www.microfinancefocus.com/2009/11/10/is-there-a-microfinance-bubble-in-south-india/>
- Sa-Dhan, (2012). *The Bharat Microfinance Quick Report 2012: Microfinance - Growing Against All Odds*, New Delhi.
- Sahasranaman, Anand (nd.). *Securitization in Microfinance*. Retrieved from http://www.vinodkothari.com/Session%204_Securitisatation%20in%20Micro%20Finance%20sector_Mr.%20Anand%20Sahasranaman_IFMR.pdf.
- SIDBI (2012), *Annual Report 2011-2012- Addressing gaps in MSME ecosystem*. Retrieved from [http://www.sidbi.com/sites/default/files/financials/SIDBI%](http://www.sidbi.com/sites/default/files/financials/SIDBI%20Annual%20Report%202011-2012.pdf)

- Srinivasan N (2009). *Microfinance India State of Sector Report 2009*, New Delhi, Sage Publications
- Srinivasan N (2010). *Microfinance India State of Sector Report 2010*, New Delhi, Sage Publications
- Srinivasan N (2011). *Microfinance India State of Sector Report 2011*, New Delhi, Sage Publications
- Sriram M.S. (2010), *Commercialisation of Microfinance in India: A Discussion on the Emperor's Apparel*, Indian Institute of Management, Ahemdabad
- Sriram M.S. (2012). *The AP Microfinance Crisis 2010: Discipline or Death?*, Vikalpa, Vol 37, No.4, pp.113-127
- State government of Andhra Pradesh (2010). *An Ordinance to protect the women Self Help Groups from exploitation by the Micro Finance Institutions in the State of Andhra Pradesh and for the matters connected therewith or incidental thereto*. State government of Andhra Pradesh
- Swanson, Brad (2007). *The Role of International Capital Markets in Microfinance*, 2007, Paper presented at a symposium on Credit Markets for the Poor, Columbia, University Business School.
- Taylor, Marcus (2011). *Freedom from Poverty is Not for Free': Rural Development and the Microfinance Crisis in Andhra Pradesh, India*, Journal of Agrarian Change, Vol 11, No.4, pp484-504
- Thompson, Eric (2011). *Dodd-Frank and Basel III's Skin in the Game Divergence and Why it is Good for the International Banking System*, 2 Global Bus. L. Rev. pp 159-174 (2012) Retrieved from <http://engagedscholarship.csuohio.edu/gblr/vol2/iss2/4>

6. Alternative ways of managing supply side in microfinance: Study of RRBs, Cooperative societies, Chit Funds and informal lenders

"...We need more thinking on the credit front. While the financial system should do more for the credit needs of farmers, we need to raise some questions. What do farmers need – a lower rate of interest or reliable access to credit at reasonable rates? Is our existing institutional framework adequate for meeting the requirements of our farmers who are a diverse lot? Do we need to create new institutional structures such as SHGs, micro finance institutions, etc, to provide improved and reliable access to credit? Or do we need to bring in Moneylenders under some form of regulation? It is necessary that we find answers to these questions in the near future."

- Ex Prime Minister of India, Dr. Manmohan Singh

6.1. Chapter Summary:

Ideation of Microfinance happened when formal finance failed to make a dent in poverty. But this self-proclaimed panacea for poverty, 'microfinance', has also failed in many instances questioning the feasibility of microfinance institutions. Though microfinance is a recent phenomenon in India, there have been many institutions created with the mission of helping poor and alleviating poverty. We look at some of these institutional mechanisms that Indian government tried for poverty reduction. Decades of these efforts on poverty reduction has not succeeded well, and informal finance still exists and continues as a major source of support for poor. We would closely look at the aspects which can be adopted widely, hence helping the overall poverty reduction efforts.

6.2. Introduction:

Since independence, India has been fighting poverty and has been commissioning various programmes to eradicate poverty. Every five year plan, planning commission of India had a mandate of poverty eradication as a major thrust area. Fifth Five year plan had removal of poverty and self-reliance as one of its objective (Planning Commission, 1974), Sixth Five year plan had increase in national income with decrease in poverty and unemployment (India, Planning Commission, 1981), Tenth Five year plan planned reduction of poverty ratio by 5 percentage points (Planning Commission India, 2007).

Poor people have been getting financial help from various sources which can be categorized into formal, semi-formal and informal financing methods. *Informal finance* is defined as contracts or agreements conducted without reference or recourse to the legal system to exchange cash in the present for promises of cash in the future (Schreiner, 2001). Intuitively, we have money lenders, friends, relative, etc. *Formal finance* includes commercial banks which are majorly governed by Government policies for any commercial entity. *Semi-formal*

finance does not come under government's financial system but they are recognized by governments like Cooperative banks, chit funds, MFIs, etc.

Government of India promoted various types of institutions like cooperative societies, regional rural banks, microfinance institutions, etc. to tackle troubles like poor infrastructure, sparse population, small transaction sizes and monsoon based agricultural sector. The government moved from centralized model to decentralized model – such as cooperatives and groups, which had inherent advantages in serving the poor (Johnson et al., 2006). In this chapter we look at the other forms of microfinance which were initiated by Government long before Microfinance was formally initiated, and also touch upon recent developments like post offices acting as banks and business correspondent model.

6.3. Primitive framework for poverty reduction

6.3.1 Primary Agricultural Cooperative Credit Societies (PACs)

In the early 1900s, the first public sector credit societies were established as PACs. PACs are specialized rural credit institutions based in individual villages or groups of villages.

Cooperative Society Act of 1904 was enacted to enable formation of "agricultural credit cooperatives" in villages in India under Government sponsorship during British rule. Since then, various acts kept the improvements in cooperative societies. The Administrative Reforms act in 1919 transferred the responsibility from Government to individual Provinces. PACs are short-term co-operative credit institutions and are part of a three-tier rural credit cooperative system with PACs at the village level, federated into District Central Cooperative Banks (DCCBs) at the district level, and State Cooperative Banks at the state level. PACs are members of the DCCB which, in turn, are members of the State Cooperative Bank.

6.3.2 Land Development Banks (LDB)

Shortly thereafter, Land Mortgage Banks Act in 1930, the state land mortgage banks were founded, which later became the LDBs. LDBs are cooperative institutions that lend primarily for long-term purposes. In some states, the land development banks lend to farmers through branches of the central land development bank (the unitary system). In other states, primary land development banks are independent credit societies and are federated at the state level. In 1935, formal recognition of the importance of agricultural lending was recognized with the establishment of the Reserve Bank of India, with a separate agricultural credit department. After independence, the All-India Rural Investment Survey found that only 7.2% of farmers' cash borrowing in 1951-52 was from the formal sector. The objective of the bank is to provide long term credit to cultivators against the mortgage of their lands.

6.3.3 Credit Unions/Credit cooperative societies

Credit unions are defined by Berthoud & Hinton (1989) as being co-operative societies that offer loans to their members out of the pool of savings that are built up by the members themselves. Credit unions are nothing but cooperative societies. Credit Unions are defined as

‘constituted as democratic organisations, controlled by their members based on the principle of one member, one vote’ (Barron, 1992).

Rochdale Society of Equitable Pioneers was the first successful cooperative institution setup in 1844 (Fairbairn, 1994).

Although India inherited a basic network of credit cooperatives from the colonial era as early as 1900, the Reserve Bank of India's (RBI) first decennial All-India Debt and Investment Survey in 1951 found that 93% of rural households relied on informal finance (Table 6-2).

This finding inspired a strong political commitment to establishing formal sector alternatives to the curb, which was popularly viewed as being exploitative and even “evil” (RBI, 1954).

The All India Rural Credit Survey Committee (AIRCSC) after examining the whole issue of

rural credit concluded that ‘there was no alternative to the co-operative form in the villages for the promotion of agriculture credit and development (RBI, 1954). Hence, throughout the 1950s and 1960s, the government actively promoted the expansion of cooperatives ‘to provide a positive institutional alternative to the moneylender, something which will compete with him, remove him from the forefront, and put him in his place’ (RBI, 1954, p. 481–482)–or more generally, to enhance the availability of agricultural credit and alleviate rural poverty. In 1958, the National Development Council (NDC) adopted a Resolution on National Policy on Co-operatives. The Government of India has since provided massive financial, technical and administrative support to co-operatives both directly and indirectly through State governments (Dwivedi, 1996 p. 13-14). (Singh, 2000 p. 343) Cooperatives were considered to be better as compared to other institutions as they involved local people and mobilising resources. All these advantages should have helped co-operatives in improving their competitive position as a business organisation vis-à-vis their competitors. However, RBI (1969) stated that cooperatives had short comings and there was a need for them to be strengthened.

6.3.4 Regional Rural Banks (RRBs)

RBI (1969) stated that there were certain black spots indicating short comings in the co-operative credit and added by and large big farmers alone were benefited by co-operatives and small farmers were completely left out of the purview of the co-operatives. The original objective of the RRBs was to bring progress with social justice to the rural poor, who were generally denied access to financial services from rural cooperatives as well as commercial banks (Machiraju, 1999). Puhazhendi & Jayaraman (1999) state that the purpose of setting up of the RRBs all over the country in 1975 was with the view to provide low cost banking facilities to the weaker sections of the society. RRB was supposed to ‘combine the local feel and familiarity with rural problems, which the cooperatives possess, and the degree of

business organization, ability to mobilise deposits, access to central money market and modernised outlook, which the commercial banks have' (Narasimham Committee, 1975, p.23). The Indian government's rationale was to fulfil a "social banking" purpose that commercial banks driven by profitability alone would not consider (Pande, 2007).

The Banking Commission-1972 recommended establishing an alternative institution for rural credit and ultimately Government of India established RRBs. Initially five RRBs were instituted in 1975 in five states in Haryana, West Bengal, Rajasthan, with one each and two in Uttar Pradesh, which were sponsored by different commercial banks with the view to provide low cost banking facilities to the weaker sections of the society (Puhazhendi & Jayaraman, 1999). RRBs are jointly owned by the Government of India, the concerned State government and sponsor banks, with the issued capital shared in the proportion of 50 percent, 15 percent and 35 percent, respectively.

6.4. Phases of Reforms and Mission Drift

The stated rationale for the first set of bank nationalization was to make credit available to weaker sections of the society, remove them from the clutches of money lenders and to increase banking access. In the mid-1970s, India's rural financial system went through another expansionary stage with the establishment of regional rural banks (RRBs) at the district level, farmers' service societies at the village level, and further growth of nonbanking finance companies. Even though the number of bank branches tripled during 1969–79, the government considered rural access to be too low at 37,000 people per rural bank branch; therefore, in 1980 another seven commercial banks were nationalized to extend their outreach in rural areas (AFC, 1988, Nagarajan & Meyer, 2000, p. 172).

Though the RRBs were intended to be low-cost institutions, a land mark court ruling in the year 1993 granted the staff of RRBs equal pay and perquisites as were available to the staff of commercial banks. This 'added to the bank's already escalating costs' (Bhatt & Thorat, p.13)

and questions about improving their efficiency through restructuring began to be asked. RRBs underwent various reforms since its inception and have been subjected to many efforts by government to revamp its RRB operations and to make them financially viable.

Narasimhan Committee Report (1991) came out with various options for rehabilitation of RRBs including expansion of investments avenues. In 1996, investment policies for RRBs were made at par with commercial banks and in 2000 non-resident account deposits were also allowed (RBI, 2013). Between the year 2000 and 2004, loans disbursed by RRBs more than doubled reflecting the efforts taken by the banks to improve credit flow to the rural sector (Misra, 2006). Misra also stated that though this growth in credit when seen in isolation gives an impression of the impressive strides made by RRBs in disbursing credit, they account for a very small proportion (around 3 per cent) of the total assets of the Indian banking sector, despite their significant branch network. The Credit-Deposit (C-D) ratio of RRBs at all-India level has come down from 123 per cent during 1981 to as low as 43 per cent by the triennium ending 2000 as cited in Shah (2007). The C-D ratio has never crossed 70% mark till 2012-13. The decline in C-D ratio of RRBs is mainly due to diversion of substantial portion of their resources in investments instead of lending in rural areas (Shah, 2007). Misra (2006) analysed the RRBs from 1994-2003 and found that investments contribute positively to the financial performance of the profit making RRBs. Besides these issues Shivamaggi (2000) states that RRBs in India face the lack of staff motivation and specialization despite local recruitment of staff.

Second phase of reforms were from 2004-2010. In this phase amalgamation of RRBs with same sponsor banks were initiated. Amalgamation of RRBs started from September, 2005. This was an initiative by Government of India (GOI) to amalgamate 145 out of 196 RRBs. The Vyas Committee recommended the amalgamation of RRBs into State level institutions as it felt that the process of amalgamation would lead to significant reduction in cost of

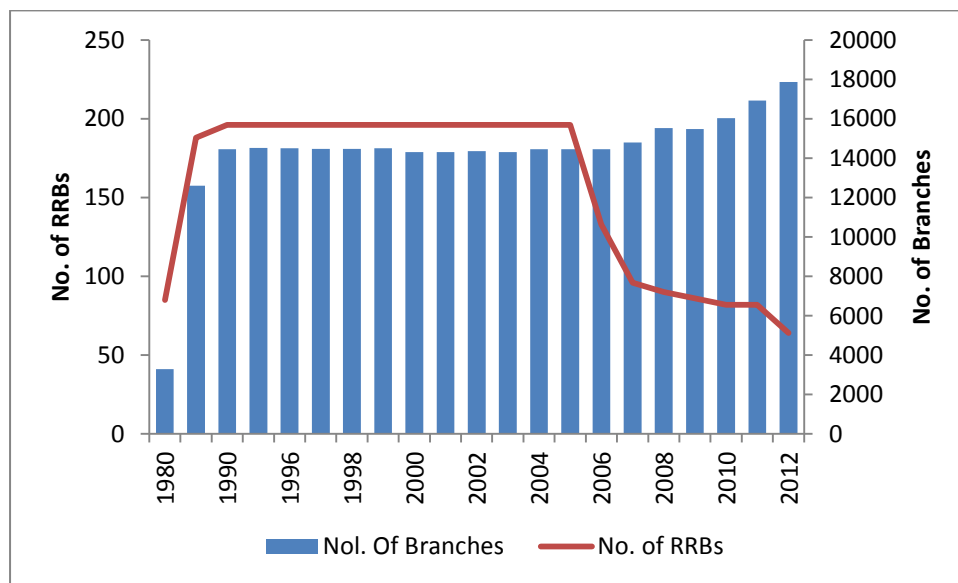
administration and economies of scale (RBI, 2004). Kumar (2008) has argued against the amalgamation of RRBs stating that it was hurting rural credit and built case for de-amalgamation of RRBs. RRBs were permitted to undertake insurance business, accept Foreign Currency Non Resident deposits and were also allowed to participate in consortium lending with sponsor banks (RBI, 2013). The government tried to help the RRBs with their goal, but the RRBs have proven to be financially unsustainable and inefficient in loan delivery (Bhatt & Thorat, 2001). Vyas Committee (2004) states that income from investments was about 52% of total income whereas income from loan advances was 37% of total income. The very purpose of RRB is defeated by this.

The **third phase** of reforms is from 2010 onwards. The branch licensing policy was liberalized which allowed RRBs to open branches in Tier 3 to Tier 6 centres (with population of up to 49,999 as per 2001 Census) without prior approval from the Reserve Bank, subject to certain conditions (RBI, 2010). This policy was further liberalized in August, 2012 to also include Tier 2 centres (RBI, 2012). The second phase of consolidation commenced from October, 2012 with amalgamation of RRBs across sponsor banks within a State.

This was directly reversing the government's objective of RRBs to increase the outreach to the rural poor. The government's reforms were actually made to make RRBs financial viable, and making them commercial. If government allowed the RRBs to invest like commercial banks, they will be improving their financial earnings, but there seems to be no reason for them to serve rural poor as the margins are less and it is risky to lend to poor. Many RRBs are actually achieving better results financially by moving away from their mission of serving the poor—either by putting their money into investments and lending to non-poor clients (Mosley, 1996; Rosenberg, 1999). The latter is partly evidenced by a gradual increase in the average loan size and the continued bias against women borrowers (Ghosh, 1998; Kaladhar, 1997). This clearly showed the mission drifts for RRBs.

As a result, the dependence of the rural poor on informal credit continues to be significant (Machiraju, 1999; World Bank, 1997). Figure 6-1 shows that number of branches of RRBs was only increasing despite the amalgamation that started in 2012. This shows that government initiatives were increasing the branches, but was not serving the purpose of RRBs.

Figure 6-1: Analysis of count of RRBs



Source: Author’s calculation using Reports on Trend and Progress of Banking in India and NABARD Table 6-1 shows the performance of RRBs, this confirms that all the government initiatives were making RRBs financially profitable, but as we have seen that RRBs were gradually losing their mission.

6.5. Chit Funds

Chit Fund is an Indian concept of Rotating Savings and Credit Associations (ROSCAs). ROSCAs are famous throughout the world. Indian version of ROSCAs dates to the ancient times when rice was pooled among village women on a rotational basis (Krishnan, 1959; Nayar, 1973; Radhakrishnan, 1975). As per Simcox (1894) origin of chit funds can be tracked 1000 years ago, known as the ‘Malabar Kuri’ system existed from ancient Dravidian times.

A more general description has been provided by Shirley Ardener as an association formed upon a core of participants who agree to make regular contributions to a fund which is given, in whole or in part, to each contributor in a rotation (Ardener, 1964). ROSCAS provide goods or benefits that are missing or under-provided in the community and are one of the most common informal financial systems found in the developing world (Ardener, 1964; Geertz, 1962)

Table 6-1: Performance of RRBs

	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13(P)
No of RRBs	133	96	90	86	82	82	82	64
No of branches	14489	14563	14790	15524	15475	16024	16914	17867
Net profit (cr)	617	625	1027	1335	1884	1785	1886	2384
Profit/loss making RRBs	111/22	81/15	82/8	80/6	79/3	75/7	79/3	63/1
Deposits (cr)	71329	83144	99093	120189	145035	166232	186336	211457
Loans & Advances (cr)	38520	47326	57568	65609	79157	94715	113035	133098
CD ratio (%)	55.7	58.3	59.5	56.4	57.6	59.51	63.3	66.13
Share of Current and Saving Accounts (CASA) in deposits (%)	59.14	61.21	59.63	58.35	57.9	60.35	58.51	57
Share of PSA in total	81	82.2	82.9	83.4	82.2	83.5	80	86
Share of agri adv to total (%)	54.2	56.6	56.3	55.1	54.8	55.7	53	63
Gross NPA (%)	7.3	6.55	6.1	4.2	3.72	3.75	5.03	5.65
Net NPA %		3.46	3.36	1.81	1.62	2.05	2.98	3.4

Source: Reports of NABARD and RBI

Economic studies of ROSCAs have stressed the role of informal credit markets in regional economic development, often in comparison with regulated markets (Chu, 1995).

A chit fund can have various chit schemes running for a specified value and duration.

Table 6-2: The Share of Rural India Debt by Source

	1951	1961	1971	1981	1991	2002
<i>Institutional Agencies</i>	7.2	14.8	29.2	61.2	64	57.1
Government	3.3	5.3	6.7	4	5.7	2.3
Co-op. Society/bank	3.1	9.1	20.1	28.6	18.6	27.3
Commercial bank incl. RRBs	0.8	0.4	2.2	28	29	24.5
Insurance	--	--	0.1	0.3	0.5	0.3
Provident Fund	--	--	0.1	0.3	0.9	0.3
Others institutional agencies*	--	--	--	--	9.3	2.4
<i>Non-Institutional Agencies</i>	92.8	85.2	70.8	38.8	36	42.9
Landlord	1.5	0.9	8.6	4	4	1
Agricultural Moneylender	24.9	45.9	23.1	8.6	6.3	10
Professional Moneylender	44.8	14.9	13.8	8.3	9.4	19.6
Traders and Commission Agents	5.5	7.7	8.7	3.4	7.1	2.6
Relatives and Friends	14.2	6.8	13.8	9	6.7	7.1
Others	1.9	8.9	2.8	4.9	2.5	2.6
<i>Total</i>	100	100	100	100	100	100

*: includes financial corporation/institution, financial company and other institutional agencies.

Note: Percentage share of different credit agencies to the outstanding cash dues of the households as on 30th June.

-- denotes not available.

Source: All India Rural Credit Survey (1954); All India Debt and Investment Survey, Various Issues.

These schemes have a specific number of members who contribute a certain amount regularly to the 'pot'. Every month this 'pot' is auctioned and highest bidder wins the 'pot' for that month. The prized subscriber wins the sum of money equal to chit value less the discount and

the fixed fee to the foreman/promoter. This means that subscriber pays upfront interest rate (discount) which is distributed among rest of members as 'dividend' and in the subsequent month; the required contribution is brought down by the amount of dividend. There can be many variations to this method depending on the type of chit fund. The discount paid by the winner is like an interest on any loan paid up front.

The chit fund works on principle of accepting deposits and disbursing the credit. In this mechanism there are no surplus funds to be loaned out except when foreman mixes chit business and money lending operations. Hence the capital requirement of chit fund is less.

There are about 30000 chit operators in whole of India through their District & State Associations having a turnover of nearly 30,000 crores per annum, but do not represent the unregistered sector, which is almost 100 times the size of our industry (All India Association of Chit Funds (AIACF), 2012). A number of chit funds in India are registered as companies, partnerships, and sole proprietorships under the All-India Chit Funds Act 1982 or the state acts (Rutherford & Arora, 1997). The state's rationale for regulating them is to increase the security of the members' contributions and to reduce the incidence of defaults. As such, organizers are required to have licenses and make security deposits with the Register of Chit Funds; the cost of collecting the pot (i.e., the de facto interest rate) is capped at 30% of the size of the pot; and chit funds are limited to a maximum of 60 months (Ghate et al., 1992, p. 197). The chit fund comes with a limitation of non-availability to all; chit pot is awarded to only one person at a time which makes it difficult for it become widely available.

Nidhi Companies/Mutual Benefit Societies.

In addition to chit funds, Nidhi companies or mutual benefit societies are also an important part of the nonbanking world of financial intermediation, especially in south India. Incorporated under the Companies Act 1956, Nidhis mobilize savings from their members and extend loans that are collateralized with jewellery and real estate (Nayar, 1992, pp. 197–

199). When non-members wish to make a deposit or borrow from a Nidhi, they take a share of the Nidhi. Over the years, the state has made repeated efforts to regulate these mutual benefit societies; and an Expert Group on Nidhis constituted by the Department of Company Affairs has recommended a host of additional regulations to professionalize their operations (PIB, 2002).

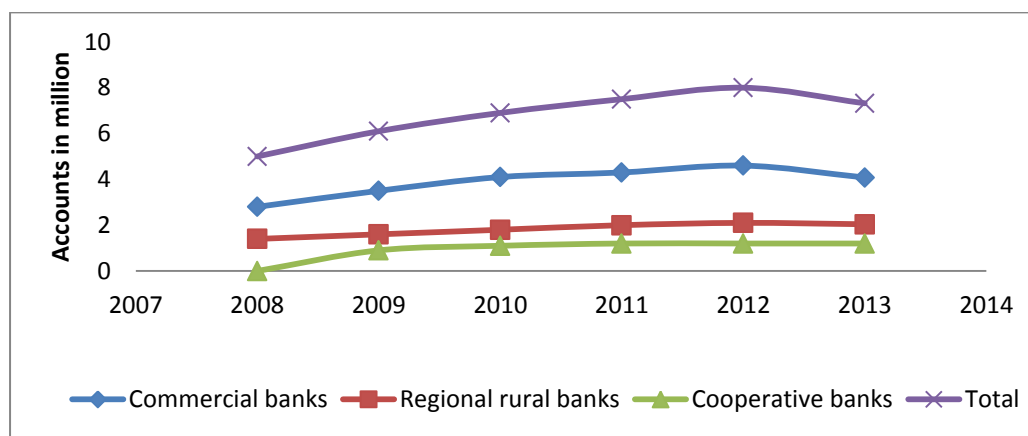
6.7 Existence of informal finance:

Banerjee and Duflo (2007) document that 95 percent of all borrowers living below \$2 a day in Hyderabad, India access informal sources even when banks are present. A Rural Finance Access Survey 2003, conducted by the World Bank and National Council of Applied Economic Research (NCAER), revealed that 79 per cent of the rural households had no access to credit from formal sources (Basu, 2005).

In case of Thailand, Siamwalla et al (1990) find that approximately 75 per cent of those active in the credit market used the informal sector, even after the rapid government-sponsored expansion of rural credit via the BAAC (Bank for Agriculture and Agricultural Cooperatives). Figure 6-2 shows that despite such a push from government for formal sector, SHGs did not increase the number of savings accounts held with banks. This clearly shows that the efforts were not yielding results.

There are many evidences of borrowers who have been borrowing from both formal and informal sectors. There are many borrowers who simultaneously borrow from formal and informal sectors (Kochar, 1997) in rural north India. Bell et al. (1997) report similar participation in both sectors in their study of the north Indian state of Punjab. Das-Gupta et al. (1989) provide evidence from Delhi, India where 70 percent of all borrowers get credit from both sectors at the same time. There seems to be much interest from borrowers to go for informal finance even after the presence of formal finance options.

Figure 6-2: Number of SHGs holding Savings Accounts 2008-2013



Source: Author's calculation adapted from *Microfinance India State of Sector Report 2012* by Puhazhendhi (2012)

However, we have that percentage of non-institutional lenders going down from 92.8 in 1951 to 42.9 in 2002. (Refer Table 6-2).

But in more recent times it has increased from 36% to 42.9% from 1991 to 2002. A state wise analysis shows that 15 out of 20 major states have shown increase in the borrowing from informal sources (refer Table 6-3). The detailed state-wise and year wise distribution is attached in appendix 8.4 to 8.8.

Lot of literature study argues that Microfinance can adopt many things from informal finance (Ardener & Burman, 1995; Bouman 1995; Burkett, 1988; Caskey, 1994; Christen 1989; Graham 1992; Von Pischke 1992). A study of credit rationing in rural India confirms that this is due to the combination of limited access to formal credit and continuing high demand for such credit (Swain, 2002). Informal finance offers flexibility and convenience (Sanderatne, 2003). Adding custom tailored financial products (Baydas, et al., 1995), and low transaction costs (Kochar, 1997; Udry, 1990) make it indispensable. Roe (1979) and Timberg & Aiyar (1980) held the view that informal credit markets provided valuable services that were not adequately met by modern financial corporations.

Table 6-3: Share of Institutional and Non-Institutional Agencies in outstanding cash debt of Major States in Rural Areas

Major States	Institutional				Non-Institutional			
	1971 (26 th)	1981 (37 th)	1991 (48 th)	2002 (59 th)	1971 (26 th)	1981 (37 th)	1991 (48 th)	2002 (59 th)
Andhra Pradesh	14	41	34	27	86	59	66	73
Assam	35	31	66	58	65	69	34	42
Bihar	11	47	73	37	89	53	27	63
Gujarat	47	70	75	67	53	30	25	33
Haryana	26	76	73	50	74	24	27	50
Himachal Pradesh	24	75	62	74	76	25	38	26
Jammu & Kashmir	20	44	76	73	80	56	24	27
Karnataka	30	78	78	67	70	22	22	33
Kerala	44	79	92	81	56	21	8	19
Madhya Pradesh	32	66	73	59	68	34	27	41
Maharashtra	67	86	82	85	33	14	18	15
Orissa	30	81	80	74	70	19	20	26
Punjab	36	74	79	56	64	26	21	44
Rajasthan	9	41	40	34	91	59	60	66
Tamil Nadu	22	44	58	47	78	56	42	53
Uttar Pradesh	23	55	69	56	77	45	31	44
West Bengal	31	66	82	68	69	34	18	32
All India	29	61	64	57	71	39	36	43
Source: All India Debt and Investment Survey, NSS 59 th Round, Report No. 501.								

Bouman (1999) asserted that informal credit markets responded quickly to short term financing opportunities, and allowed low income people access to service, not available to them elsewhere. Siamwalla et al (1990) concluded that only the injection of funds into rural areas will not lower the interest rates or drive out informal lenders out of business.

Nayar (1992) describes four major types of informal finance in India and identifies their strengths. It is argued that informal finance is often conducted more efficiently than formal finance in terms of loan processing, the ability to make small and short term loans, and effective loan recovery.

Meyer & Nagarajan (1992) call “benign neglect” to be followed for informal finance because any effort to regulate informal finance will only add cost to government and do no good to poor. A large economics literature has also argued that informal institutions have a comparative advantage in monitoring (the peer monitoring view as in Stiglitz (1990) and Arnott & Stiglitz (1991)) and enforcement capacity. Pawnbrokers, village corner shops, grocery shops etc. offer quick loans. The coexistence of formal and informal finance has not received as much attention as recent theoretical work on microfinance (Banerjee et al., 1994, Ghatak & Guinnane, 1999).

Table 6-4: Summary of Informal Financing

Interpersonal lending – loans extended among friends, relatives, neighbours or colleagues	Financial authorities do not interfere with casual, interest free lending
Trade Credit	Trade credit, forward sales
Moneylenders, loan sharks – loans from professional and non-professional money brokers, typically at high interest rates	Mahajan and Chettiar bankers – Some are registered as finance companies, trusts, banks and partnership firms
Rotating Savings and credit organizations	Chit funds – registered as finance companies,

(ROSCAs) – indigenously organized savings and credit groups	partnership and sole proprietorship.
Pawnshops – extend collateralized loans with interest	Legal if licensed
Indigenous banks, money houses, finance companies – mobilizes savings and extend collateralized loans	Deal with short term credit (hundis) combined with trade for financing trade – committees have made efforts to formalize them
Social organizations, mutual benefit funds – registered entities that are supposed to serve lower income populations	Nidhi companies, mutual benefit societies, permanent funds (mainly Tamil Nadu) – committees have recommended that they be regulated more stringently

Report of the Technical Group to Review Legislations on Money Lending (RBI, 2006) states reasons for dependence on money lenders:

- Limited outreach of formal credit institutions
- Banks do not like to deal with marginal farmers
- Moneylenders do business at “doorstep” and respect privacy
- They lend for consumption purposes without hesitation
- Inadequate and delayed credit from formal sector

6.8 Conclusions:

Government had pursued many initiatives for helping poor like launching new programmes, institutions, etc. Indian government also helped this institution in their goals but in turn they made them to drift from their mission of helping poor. Microfinance was brought in to help poor because the formal finance had not achieved the expectation from government. But

Microfinance was also termed as failure after AP crisis hit the sector. After discussing many forms of alternative ways of financing, we have seen that dependence of informal sector has not been removed. 100 years of government efforts has not put an end to informal financing. Government needs to introspect as to why money lenders, chit funds, pawn brokers and other informal finance continue to exist. Tsai (2005) state that RRBs have not performed, banks have been saddled with soft loans to priority sectors and cooperatives have been slave to political patronage. The existence of informal sector could be because of various reasons, and might provide pointers to how any organization strive to help the poor organize themselves. Money lenders are available 24/7 and the transaction remains private. In addition they have flexibility in terms of loan amount, term and repayment. Poor is willing to pay very high interest for this. RRBs, Cooperatives and MFIs should try to emulate the best practices of informal finance

Microfinance should set up their offices in similar locations where pawn shops are set and should be serving on weekends and evenings when most of the borrowers are likely to visit (Schreiner, 2001). These initiatives though difficult can make miracles to the poor and free them from clutches of exorbitant interest rates of money lenders.

6.9 References:

- Agricultural Finance Corporation (AFC). (1988). Agricultural credit review: Role and effectiveness of lending institutions (Vol. V). Bombay: AFC
- AIACF (2012). Letter to Chief Economic advisor. retrieved from <http://www.aiacf.com/node/3090>
- Ardener, S. (1964). The Comparative Study of Rotating Credit Associations. *The Journal of the Royal Anthropological Institute of Great Britain and Ireland* 94 (2), 201-229.
- Ardener, S., & Burman, S. (1995). Money-go-rounds: the importance of rotating savings and credit associations for women.
- Arnott, R., & Stiglitz, J. E. (1991). Moral hazard and nonmarket institutions: Dysfunctional crowding out of peer monitoring?. *The American Economic Review*, 179-190.
- Banerjee, A. V., & Duflo, E. (2007). The economic lives of the poor. *The journal of economic perspectives: a journal of the American Economic Association*, 21(1), 141.
- Banerjee, A. V., Besley, T., & Guinnane, T. W. (1994). The neighbor's keeper: the design of a credit cooperative with theory and a test. *The Quarterly Journal of Economics*, 491-515.
- Barron, D. N. (1992). Credit Unions: Density-Dependent Evolution, Pages 137 – 160
- Basu, P. (2005). A Financial System for India's Poor, *Economic and Political Weekly*, 4008-4012.
- Baydas, M. M., Bahloul, Z. & Adams, D. W. (1995). Informal Finance in Egypt: "Banks" within Banks, *World Development*, 23(4), 651-61.
- Bell, Clive, T.N. Srinivasan, and Christopher Udry, (1997). Rationing, spillover, and interlinking in credit markets: the case of rural Punjab, *Oxford Economic Papers*, 49:557-585.
- Berthoud, R. and Hinton, T. (1989). *Credit Unions in the United Kingdom*. Policy Studies Institute, London.
- Bhatt, N & Y.S. P Thorat. (2001). India's Rural Banks: The institutional dimension of reforms, *Journal of Microfinance*, v3 (1).
- Bouman, F. J. A., Bastiaansen, R., Van Den Bogaard, H., Gerner, H., Hospes, O., & Kormelink, J. G. (1989). Small, short, and unsecured: Informal rural finance in India.

New York: Oxford University Press Reserve Bank of India (RBI). (1954). All-India credit survey. Bombay: RBI

- Bouman, F. J. (1995). Rotating and accumulating savings and credit associations: A development perspective. *World development*, 23(3), 371-384.
- Burkett, P. (1988). Informal finance in developing countries: Lessons for the development of formal financial intermediaries. *Journal of Economic Development*, 13(2), 81-109.
- Caskey, J. P. (1994). *Fringe banking: Check-cashing outlets, pawnshops, and the poor*. Russell Sage Foundation.
- Christen, R. (1989). What microenterprise credit programs can learn from the moneylenders.
- Chu, J.J. (1995). Taiwan: A new regional centre in the making. In: K. Cao (Ed.), *The Changing Capital Markets of East Asia* (pp.170-201), New York, Routledge
- Das-Gupta, A., C.P.S. Nayar & Associates. (1989). *Urban Informal Credit Markets in India*. New Delhi: National Institute of Public Finance and Policy
- Dwivedi, R.C. (1996). Role of Co-operatives in Rural Economy, *Indian Journal of Agricultural Economics*, 51(4), pp. 712-727
- Fairbairn B. (1994), *The Meaning of Rochdale: The Rochdale Pioneers and the Cooperative Principles*, Centre for the Study of Co-operatives, University of Saskatchewan, Canada
- Geertz, C. (1962). The Rotating Credit Association: A "Middle Rung" in Development. *Economic Development and Cultural Change* 10 (3), 241.
- Ghate, P., Das-Gupta, A., Lamberte, M., Poapongsakorn, N., Prabowo, D., Rahman, A., & Srinivasan, T. N. (1992). *Informal finance: Some findings from Asia*. Manila: Asian Development Bank, Oxford University Press.
- Ghosh, D. K. (1998). Biases in IRDP: Experiences at the grassroots level. In S. Sau (Ed.), *Rural development: Theories and experiences*. New Delhi: Allied Publishers.
- Graham, D. H. (1992). Informal rural finance in Niger: lessons for building formal institutions. In *Informal finance in low-income countries*. (pp. 71-83). Westview Press.
- India. Planning Commission. (1981). *Sixth Five Year Plan 1980-85: A Framework*. Government of India, Planning Commission.

- Kaladhar, K. (1997). Microfinance in India: Design, structure and governance. *Economic and Political Weekly* (October 18), 2687–2706.
- Kochar, Anjini (1997), “An empirical investigation of rationing constraints in rural credit markets in India”, *Journal of Development Economics*, 53:339-371
- Krishnan, V. (1959). *Indigenous Banking in South India*. Bombay State Co-operative Union.
- Kumar, V. A. (2008). Case for De-amalgamation of regional rural Banks. *Economic and Political Weekly*, 60-68.
- Machiraju, H. R. (1999). *Indian financial system*. New Delhi: Vikas Publishing.
- Meyer, R. L. and G. Nagarajan. (1992) ‘An Assessment of the Role of Informal Finance in the Development Process’, in G. H. Peters and B. F. Stanton (eds.), *Sustainable Agricultural Development: The Role of International Cooperation*, Dartmouth
- Misra, B.S. (2006): 'The Performance of Regional Rural Banks in India: Has Past Anything to Suggest for Future?', *RBI Occasional Papers*, Vol.27, Nos.1 and 2.
- Mosley, P. (1996). *India: The regional rural banks*. In D. Hulme & P. Mosley (Eds.), *Finance against poverty*. London: Routledge Press
- Narasimhan Committee. (1975). *Working group on rural banks*, Government of India.
- Narasimhan Committee. (1991). *Report of the Committee on the Financial System*, Government of India.
- Nayar, C. P. S. (1992). Strengths of informal financial institutions: Examples from India. In D. W. Adams & D. A. Fitchett (Eds.), *Informal finance in low income countries* (pp. 199–200). Boulder: Westview.
- Nayar, C. S. (1973). *Chit Finance: An exploratory study on the working of chit funds*. Vora.
- Pande, Rohini (2007). “Rural Credit” in *The Oxford Companion to Economics in India*. Ed. Kaushik Basu. Oxford: Oxford University Press, 2007.
- Planning Commission India. (2007). *Tenth Five Year Plan, 2002-2007*. 3V. India, Planning Commission.
- Planning Commission. (1974). *Fifth Five Year Plan*. *Government of India, New Delhi*. *Political Weekly*, September 10, pp.4008-4012
- Press Information Bureau (PIB). (2002). Government of India. Expert group on Nihdis recommends continuation of regulatory measures. Available:

<<http://pib.nic.in/archieve/lreleng/1yr2002/rmar2002/22032002/r220320022.html>>,
March 22.

- Puhazhendhi V (2012). *Microfinance India State of Sector Report 2012*, New Delhi, Sage Publications
- Puhazhendi, v., Jayaraman, B., (1999), Increasing women's participation and employment generation among rural poor – An approach through informal groups. *National bank News Review*, 15(4) : 55-62
- Radhakrishnan, S., & Simha, S. L. N. (1975). *Chit Funds and Finance Corporations*.
- RBI (2004): 'Report of the Advisory Committee on Flow of Credit to Agriculture and Related Activities from the Banking System' (Chairman: V S Vyas) Reserve Bank of India, Mumbai
- RBI (2013), Conference of Principal Code Compliance Officers (PCCOs) of Regional Rural Banks (RRBs), (speech, Mumbai, July 15, 2013), [Online]. Available at http://www.rbi.org.in/scripts/BS_SpeechesView.aspx?Id=820 [Accessed on 9Jan, 2014]
- RBI, (1954), Report of the All India Rural Credit Survey Committee, p.24.
- RBI, (1969), Report of the All India Rural Credit Survey Committee, p.411.
- RBI (2006), Report of the Technical Group to Review Legislations on Money Lending, (Chairman: S. C. Gupta), Mumbai: Reserve Bank of India, May.
- RBI, (2010), *Relaxation in Branch Licensing Policy - Tier 2 Centres*, RPCD.CO.RRB.BC.No.28/03.05.90-A/2011-12
- RBI, (2012), *Section 23 of the Banking Regulation Act, 1949- Relaxations in Branch Licensing Policy*, RPCD.CO.RRB.BL.BC.No. 19/03.05.90/2012-13
- Roe, A (1979): "Some Theory Concerning the Role and Failings of Financial Intermediation in LDC" *World Bank Staff working Paper*. No. 338
- Rosenberg, R. (1999). A note on portfolio quality measurement in India's Regional Rural Banks. Technical Note, CGAP. Washington, DC: World Bank
- Rutherford, S., & Arora, S. S. (1997). *City savers*. New Delhi: Department for International Development
- Sanderatne, N. (2003). Informal Finance in Transition, *Sri Lanka Economic Journal*, 4(2), 31-57.
- Schreiner, M. (2001). Informal finance and the design of microfinance. *Development in practice-oxford*, 11(5), 637-639.

- Shah, D. (2007). Rural Credit Delivery System in Maharashtra: Some Emerging Issues.
- Shivamaggi, H.B. (2000), 'Reforms in Rural Banking: Need for Bolder approach', *Economic and Political Weekly*, Vol. XXXV, No. 20, pp. 1714-1718.
- Siamwalla, Ammar, Chirmak Pinthong, Nipon Poapongsakorn, Ploenpit Satsanguan, Prayong Nettayarak, Wanrak Mingmaneeakin and Yuavares Tubpun. (1990). "The Thai Rural Credit System: Public Subsidies, Private Information, and Segmented Markets." *World Bank Economic Review* 4(3):271–295.
- Simcox, E. J. (2010). *Primitive civilizations: or, Outlines of the history of ownership in archaic communities* (Vol. 1). Cambridge University Press.
- Singh (2000) —Challenges for Co-operatives in the New Millennium and Strategies for Coping with Them, *The Co-operator*, 32(8).
- Stiglitz, Joseph E., 1990, Peer Monitoring and Credit Markets, *World Bank Economic Review* 1990 (3), 351-366.
- Swain, R. B. (2002). Credit rationing in rural India. *Journal of Economic Development*, 27(2), 1–20.
- Timberg, Thomas.A and Aiyar.C.V (1984): "Informal Credit Markets in India" *Economic Development and Cultural Change*, Vol33, No 1 (Oct), pp 43-59
- Udry, C. (1990). Credit Markets in Northern Nigeria: Credit as Insurance in a Rural Economy, *World Bank Economic Review*, 4(3), 251-69.
- Von Pischke, J. D. (1992). ROSCAs: State-of-the-art financial intermediation. *Informal finance in low-income countries*, 325-336.
- World Bank (1997). India: Rural women's development and empowerment project. South Asia Country Department II, Report No. 16031-IN, Population and Human Resources Operations Division, Washington, DC: World Bank.

7. Conclusions

“The key to ending extreme poverty is to enable the poorest of the poor to get their foot on the ladder of development . . . the poorest of the poor are stuck beneath it. They lack the minimum amount of capital necessary to get a foothold, and therefore need a boost up to the first rung.”

—Jeffrey Sachs American economist and director of the Earth Institute at Columbia University

7.1 Review of research objectives:

Understanding the poverty and microfinance relationship is complicated. In lines of the inquiry into various areas that arose from discussion:

1. To understand the characteristics of Indian MFIs like profitability, interest rates, size, etc.
2. To gain understanding of other methods of microfinance funding other than borrowing from banks/donors and then lending it to poor.
3. Understanding any financial innovations in microfinance sector.
4. Understanding the conventional methods of microfinance like Credit unions, Regional rural banks, etc. and practices adopted by these institutions.

Each of these objective were conceptualised to examine different layers within the same system, all making an equal contribution to the thesis. The analyses of these objectives are discussed in next section.

7.2 Empirical findings from the research:

This thesis touched upon centuries of poverty theory and almost 60 years of microfinance research.

This thesis studies research done by many practitioners and academicians, and analyse various data to arrive at the following insights.

Chapter one is mainly concerned with the basic foundational concepts in microfinance. Though Yunus popularized microfinance concept through his Grameen Bank, it was in existence since 1700 when an Irish man setup a bank to help poor, by lending money to poor who were not under the commercial bank purview. In terms of Indian side of microfinance story, non-institutional lenders contributed about 93% of complete lending in 1951 which dipped to 36% in 1991 and moved up to 43% in 2002. The initiatives by Indian Government

were working fine barring 2002 figure. Interestingly, before 2002, there were numerous initiatives like IRDP, SGSY, RRBs, Credit cooperative societies, etc., and it started with formal microfinance after that. This is completely paradoxical to the research literature which states that the government initiatives were not efficient hence microfinance was launched. The analysis of delivery models of microfinance shows that there was constant increase in borrower base in Bank-SHG model and MFI model, showing that there is a constant increase in microfinance activities. MFIs have an important place in microfinance activities in India. The analysis shows that microfinance sector started with donor funds but gradually they were expected to be self-sufficient after a few years of its operation. Hence MFIs started exploring capital raising methods and that's how commercial microfinance was born. Innovative financing methods like raising money from capital markets as done by SKS or using structured finance approach of securitizing loans emerged in the sector.

Without understanding poverty concepts, this thesis is incomplete. That's what *chapter two* analyses, where poverty theories and its relation with microfinance are examined. We have looked at seven approaches to poverty and conclude that access to credit is important element in economic stability of an individual. If there is a discussion about poverty, it is important to understand the measurement of poverty. None of the poverty measures work accurately and it is important for any practitioner or researcher to study multiple measures before arriving at any conclusion. For example, head count index for India is reducing implying that number of poor people below poverty line is reducing during the last decade. However, the Gini coefficient of India for the last decade is showing an increase implying that the inequality has increased. Poverty has been studied for centuries and there is an exhaustive literature on it. Understanding various aspects of poverty is essential foundation for microfinance sector.

Chapter three is concerned about India's MFIs' characteristics. M-CRIL has developed an index CRILEX to study Indian MFIS. There has been a substantial dip, almost 22%, post AP

crisis pointing to the deep rooted trouble of one Indian state. In comparison with the peer countries, India stands with the highest GLP of about \$4.2bn and 96 per cent of female borrowers. 60 per cent of this \$4.2bn is divided among six MFIs which mean that larger players hold the grip of the microfinance sector. Cost is an important component of any organization and is a major driver for its sustainability and profits. Indian MFIs have advantage of India's population density and this is how they are minimizing the cost per loan or per borrower. Indian MFIs costs are at significantly lower levels than its peers. If any MFI is profitable it does not mean it is for-profit, but it can mean that it does not distribute its profit to shareholders but prefer reinvesting in its activities. The positive picture that cost figures have given does not stay the same in case of profitability. AP crisis have seriously crippled the Indian MFIs profitability as shown by negative ROE and ROA. So, despite having good control over cost, it is not able to generate profits. This can be mainly attributed to write-offs on account of the AP crisis. The same view is bolstered by negative profit margins.

Despite these drawbacks, OSS has been high for most of MFIs, and around 73 per cent MFIs are self-sufficient. PAR for India has been on the rise, but it is still at 20 per cent. Interest rates charged by MFIs are higher than the prime lending rate in any country. But the spread between them is narrower than its peer contradicting the theory that Indian MFIs are not charging usurious rates. Even though they have reduced the rates from 2010 after AP crisis, they were already below their peers.

Chapter four discusses the AP crisis in depth, along with analysing SKS fiasco by comparing it with cases of crisis across the world. SKS has been under discussion for multiple reasons like raising money from capital markets, reporting 87% CAGR in its annual report 2010-11. Its IPO was oversubscribed by 13.69 times supporting the investors' enthusiasm in commercial form of microfinance. SKS was innovative in its methods and well ahead of its

peers in monitoring and processing of loans. It was better in controlling costs and efficient in delivering. SKS was also involved in non-profit or social mandates which were not governed by profit motives. The question that comes up after looking at this is how AP crisis hit SKS functionality so badly that it had to write down 45% of its loan book. AP crisis, widely discussed by academia and practitioners, had affected not only MFIs operating in AP but across India. The AP government ordinance had put restriction on MFIs operations, putting them in a situation where there were restrictions on repayment collections. This triggered delinquency in loans as people were not repaying the money borrowed.

We analyse a number of crisis all across world involving microfinance organizations. These crisis points to one common theme, wherein the borrowers were under debt from multiple lenders leading to a debt trap. A point came where this was not sustainable and whole system collapsed causing widespread defaults in so called historic low default rate industry. This phenomenon of over-indebtedness means the family expenses goes beyond its income. This is caused because poor buy from multiple lenders to meet their expenses and pay off old loans; this is not a sustainable model. Parameters like PAR, collection rate, etc. are lagging indicators and cannot help if a country/region is going towards over-indebtedness. This index was developed for 13 countries and consists of 14 leading indicators that can potentially signal a growing risk for over-indebtedness in any given microfinance market. Over-Indebtedness early warning Index (OID Index) developed by Kappel et al. (2010) can potentially signal a growing risk for over-indebtedness in any given microfinance market, but unless the data for each household is collected, it is difficult to predict the over-indebtedness.

SKS' capital raising method through capital markets was an innovative technique. Similarly, securitization of microloans is also an innovation in microfinance industry as discussed in *chapter five*. The restrictions on MFIs for not accepting deposits and higher cost of raising capital pushed securitization to come into force. Also MFIs receive loans from banks under

priority sector lending which happens only at the end of financial year. So MFIs do not have funds to disburse throughout the year. Securitization is an asset backed transaction, wherein microloans receivables are pooled and repackaged to sell them to investors (banks/funds/investors).

Securitization involves selling loans from MFIs to Special Purpose Vehicle (SPV) which is setup for this purpose. SPV then in turn repackages these loans along with receivable into various tranches (Senior, Mezzanine, Junior, Equity, etc.). These tranches are sold to the various investors depending on their risk appetite. In this way investors are funding the micro borrowers of MFIs who remain to be the servicer of these loans. SPV ceases to exist when the principal and interest is paid to the investors. The senior tranches are protected by junior tranches and first loss guarantee is taken up by originator by maintaining cash collateral. RBI also has put conditions on originators to retain certain amount of loans on their balance sheet. This condition is adopted from popular term 'skin in the game' in Dodd-Frank Act⁹. The structure of securitization has early warnings in built. If there are losses to cash collateral or junior tranches, it will give signal to monitor closely the performances of the loans. The funds/investors can get an early warning about the portfolio deterioration. The securitization has created a link between MFIs and private investors in capital market helping even rural MFIs to tap the funding.

The thesis has discussed MFIs, innovations in MFIs, but its roots are in earlier ways of supporting poor, *chapter six* discusses the alternative form of microfinance. The new age microfinance was considered to be panacea for poverty alleviation, before all the crisis and discussion around their mission drifts. Historically, government initiatives and microfinance helped to eradicate poverty by reducing money lenders' involvement in this sector. They

⁹ This act was designed to prevent the recurrence of events that caused the 2008 financial crisis. The Dodd-Frank Wall Street Reform and Consumer Protection Act, commonly referred to as simply "Dodd-Frank",

were partially successful, but all the efforts could not remove money lenders from the system. This calls for a deeper analysis of alternative ways of microfinance and understand the historical changes of these initiatives. Many of the government's five year plans had poverty eradication as one of its motives. It started even before this with Primary Agricultural Cooperative Credit Societies (PACS) during 1900s. Around 1930, Land Development Banks (LDB) was established. It is quasi-commercial type that provides services such as accepting deposits, making business loans, and offering basic investment products. The main objective of the LDB is to promote the development of land, agriculture and increase the agricultural production. A co-operative is generally viewed as an autonomous association of persons united voluntarily to meet their common social and economic needs and/or objectives. Thus, a co-operative is a socio-economic organisation that is expected to have its members' interest truly at heart. After India attained Independence in August 1947, co-operatives assumed greater significance as an instrument of socio-economic development and became an integral part of India's Five Year Plans. The All India Rural Credit Survey Committee Report, 1954 recommended an integrated approach to cooperative credit and emphasised the need for viable credit co-operative societies by enlarging their area of operation, encouraging rural savings, and diversifying their business. 1950s and 1960s found tremendous push for cooperative banks. But RBI (1969) stated that cooperatives had short comings and there was a need for them to be strengthened. This led to formation of Regional Rural Banks (RRBs). RRBs also went through various reforms mainly through three phases for improving its functionality. RRBs performance was not impressive all along and government had to float reforms from time to time. The reforms made RRBs similar to any commercial bank and caused mission drift. These reforms raised their profitability power but by transferring resources from rural poor to urban rich (Bose, 2005).

Formal or semi-formal finance is not able to meet the needs and demands of rural finance completely. Even if the demands are met it does not serve its intended purpose because of local factors involved. Despite multi-faceted initiatives of government to reduce dependence on informal finance, contribution of informal finance went up from 36% to 42% from 1991 to 2002 (Table 6.2). This calls for deeper analysis of informal finance. Of 20 states 15 states saw fall in institutional lending. Informal financial institutions rely on relationships and reputation and can more efficiently monitor and enforce repayment from a class of firms than commercial banks and similar formal financial institutions. Informal finance are not strict on reasons for lending, punctual repayment, are available anytime and everywhere in village like shops, etc. There are many things that formal and semi-formal finance can learn from informal lenders.

A definitive claim cannot be made that supply of micro credit is done better by microfinance institution or other formal/semi-formal finance. MFIs in India are no doubt cost effective and have lower rate of interest than peers. But this cannot guarantee a success in poverty alleviation because policies and robust regulations are also important. MFIs or banks should also look at the flexibility provided by informal finance. This research convincing makes a point that there cannot be one solution to poverty, but we should have multiple options open and adopt best practices to make it efficient. Microfinance is a great system for supporting income generating activities of poor and get them out of poverty. We conclude that microfinance provide meaningful support to the poverty alleviation and women empowerment initiatives, it needs support in terms of better and stable regulatory framework, and higher level of easier funding possibilities.

7.3 Recommendations:

The thesis points out some of the recommendation driven towards improving the supply of microfinance in India.

- It might be better for government to avoid focussing on profitability in such cases and focus only on its mission. Like RRBs accepting foreign deposits is not required at all.
- Government needs to emphasize more on the regulations for MFIs accessing capital markets, so that there is no predatory lending or coercive techniques used with the borrowers. RBI or any other apex organization can be the sole regulator and oversee the India's MFIs' working.
- Any innovative proposal needs to be studied thoroughly before implementation. Even if there is a caution on progressing, the government has to inculcate confidence in everyone that Government will do all the things necessary for protecting the investors/bankers/tax payers' money. Andhra kind of crisis will just evaporate the confidence in the sector and the poor will not get the help required.
- Government needs to understand why moneylenders still exists and try to adopt their best practices. They can have RRBs/cooperatives/MFIs open on weekend and have flexible loan structures.

7.4 Limitations of Data and Design:

This research has identified that there is more scope for in depth analysis of microfinance. In terms of quantitative data, we have limited our study to only individual MFIs in India that reported to mix database. Though, there is reference to a few peer countries at country level analysis, this analysis can be completed only when we collect grass root level data from individual MFIs additionally to those reported to mix database.

In terms of qualitative data, the events were unfolding as the research is completed. Microfinance being in nascent stage, lot of developments kept on happening in regulatory front. In terms of securitization of micro-loans, the famous regulatory Dodd-Frank act can be comprehended and can lay down the probable future regulations in securitization in India.

India is still closed country in terms of innovations e.g. revolving securitization structures are yet to be launched in India, but it might be a matter of time. Studying Dodd-Frank act can give a better picture on regulatory front for securitization as a whole.

7.5 Further Research:

This research has identified that there is more scope for deeper understanding of microfinance and people. It calls for an open discussion from practitioners, academia and experts, wherein the open areas are revalidated.

Microfinance in India has gone through lot of reforms and innovations. It has been in troubled waters after Andhra crisis. Competition amongst MFIs is benefitting borrowers, as they are offered competitive rates, flexibility and various products. But disadvantage of this is MFIs going towards predatory lending or borrowers borrowing from multiple MFIs. One of the major reasons for the crisis was over-indebtedness; we cannot predict level of indebtedness unless we have household data for financial resources and shocks in the families. This is where the functioning of credit bureau will help in tackling this issue of over-indebtedness. This way there will be a central repository where information is shared on institutional and individual level. In India credit information system (CIS) is still immature even for commercial borrowing.

Finally, it is important not to restrict ourselves to only one type of microfinance successful in some countries. That might not be in best interest of India, which is diverse in culture. It is better to study any form of microfinance to understand its best practices and adopt into mainstream microfinance.

7.6 Policy Implications and Contributions:

Government's initiatives are no doubt with good motive of poverty eradication. But it has failed in the execution and sustaining these initiatives. Government tried helping poor by

launching many initiatives and revamping many which forced them to lose their mission of helping poor. E.g. Government tried to make RRBs financially viable by modifying many rules and allowed them the status of commercial banks. It granted them to accept foreign deposits, setting up branches in tier 2 cities or investments in securities, etc. These kinds of reforms have made RRBs to drift away from their mission.

MFIs in India have been very efficient in managing costs and were able to lend to underserved regions. But AP crisis kind of scenario has wiped out its portfolio and had cascading effect across all MFIs in the country. For this kind of situation partly MFIs and partly government have played part in crisis. In AP, many institutions were targeting same borrowers and this lead them to debt trap. This could have been avoided if there were good policies in place. A good functioning credit bureau could have easily avoided this kind of crisis. AP government was swift in helping poor but AP government's ordinance has also exacerbated the situation by asking the borrowers to default. It costed microfinance sector about Rs. 60-70Bn (Srinivasan, 2011, p.56). Individual state governments enacting rules on an industry that has country-wide repercussions is not a meaningful choice.

MFIs had explored newer avenues of raising capital, but raising money from capital market still remains questionable. SKS's IPO raised many questions and doubts about any MFI going to stock market. A capital market is driven by profits and social mandates might get diluted by this profit motives as rightly stated by Chen et al. (2010)

“excessive commercialisation will tilt the gains heavily toward
investors at the expense of the poor”

SKS and Compartomos IPO have raised concerns about stock market access of MFIs where primary objective of investors in stock market is profits. But government might have a little role to play in this.

Similarly securitization or asset backed transactions also cannot be a mainstream financing tool, but yet a very powerful. They will always assist the main stream finance and can be very successful link between investor and MFI. Securitization is not new to India, but definitely an innovation in Indian microfinance. MFIs can source funds throughout the year unlike banks which lend only at the year end to meet their priority sector lending. This way they can cater to the needs of poor throughout the year. Over few years, there has been an interest from NBFCs, mutual funds, Banks and private equity for securitized micro loans. Their main interest came from investing in top tranche of the securitized deal as it is protected by junior tranches and cash collaterals. The success of securitized deal will depend on the loan quality and monitoring system. A strong regulatory framework is also a key to its success. The government has been treading cautiously in this area as securitization is much advanced form of raising capital and there are many pitfalls which had pulled down the US economy. There are many restrictions put on the securitization so that there are no rash decisions from originators. All said, but the real confidence has to be given by Government that this system will not break down like it happened in AP. This calls for an open discussion about the responsibility of regulating this sector. This can happen only when apex institution like NABARD/RBI becomes the regulators and state level governments cannot pass any act for microfinance sector. Currently Microfinance regulation Bill, 2012 stands rejected by Lok Sabha.

Microfinance is a complete set of financial services given to poor by many formal and informal financial intermediaries. Till date, government has shifted from institutions to institutions and had various initiatives. But none of the initiatives were strong enough to last for long time and could not remove informal lenders from the system. The practitioners will have to be open to adopting things that informal lenders do differently. Microfinance being a big movement for assisting poor, they need to have best practices from across the world.

There are few contributions that this thesis has made especially in terms of highlighting the innovations that happened in recent past in supply side of microfinance.

- MFIs have found innovative ways of connecting poor with rest of world, especially in terms of securitization of microloans. This thesis gives an insight as to how MFIs can get connected to the investor to raise money.
- Accessing capital markets is one of the options that MFIs can cater to for raising money, but it remains a challenge in terms of goal conflicts between investors and MFIs.
- These innovations are sensitive to crisis. Any AP kind of crisis situation will make poor even more vulnerable and decades of efforts will go in vain.

Microfinance though not a panacea of poverty but has definitely made a positive impact on the whole system.

7.7 References:

- Bose, S. (2005). Regional rural banks: the past and the present debate. *Macro Scan*, Retrieved from http://www.macroscan.com/fet/jul05/fet200705RRB_Debate.htm.
- Chen, G., Rasmussen, S., Reille, X., & Rozas, D. (2010). Indian Microfinance Goes Public: The SKS Initial Public Offering. *Focus Note*, 65.
- RBI, (1969). Report of the All India Rural Credit Survey Committee.
- Swaminathan, M. (2005). *Financial liberalization and rural credit in India* (Vol. 2). Tulika Books.

8 Appendix

Appendix 8.1

Categories	Domestic commercial banks / Foreign banks with 20 and above branches	Foreign banks with less than 20 branches
Total Priority Sector	40 percent of Adjusted Net Bank Credit [ANBC defined in sub paragraph (iii) below] or credit equivalent amount of Off-Balance Sheet Exposure, whichever is higher.	32 percent of ANBC or credit equivalent amount of Off-Balance Sheet Exposure, whichever is higher.
Total agriculture	18 percent of ANBC or credit equivalent amount of Off-Balance Sheet Exposure, whichever is higher. Of this, indirect lending in excess of 4.5% of ANBC or credit equivalent amount of Off-Balance Sheet Exposure, whichever is higher, will not be reckoned for computing achievement under 18 percent target. However, all agricultural loans under the categories 'direct' and 'indirect' will be reckoned in computing achievement under the overall priority sector target of 40 percent of ANBC or credit equivalent amount of Off-Balance Sheet Exposure, whichever is higher.	No specific target. Forms part of total priority sector target.
Micro & Small Enterprises (MSE)	(i) Advances to micro and small enterprises sector will be reckoned in computing	No specific target. Forms part of total priority sector

achievement under the overall priority sector target.

target of 40 percent of ANBC or credit

equivalent amount of Off-Balance Sheet

Exposure, whichever is higher.

(ii) 40 percent of total advances to micro and

small enterprises sector should go to Micro

(manufacturing) enterprises having investment

in plant and machinery up to ` 5 lakh and micro

(service) enterprises having investment in

equipment up to ` 2 lakh;

(ii) 20 percent of total advances to micro and

small enterprises sector should go to Micro

(manufacturing) enterprises with investment in

plant and machinery above ` 5 lakh and up to `

25 lakh, and micro (service) enterprises with

investment in equipment above ` 2 lakh and up

to ` 10 lakh

Export Credit

Export credit is not a separate category. Export No specific target. Forms

credit to eligible activities under agriculture part of total priority sector

and MSE will be reckoned for priority sector target.

lending under respective categories.

Advances to

10 percent of ANBC or credit equivalent amount of Off-Balance Sheet Exposure,

No specific target in the

Weaker Sections

whichever is higher.

total priority sector target.

Appendix 8.2

Characteristics	
Capital Requirements	NBFC-MFI shall maintain Net Owned Funds (NOF) at Rs. 5 Crore
Foreign Investments	Foreign investment by way of equity is permitted in NBFC-MFIs subject to a minimum investment of US\$ 500,000
Deposits	Only Mutual benefit MFIs can accept savings from their members
Borrowings	National Bank for Agriculture and Rural Development, Small Industries Development Bank of India, and Rashtriya Mahila Kosh, commercial banks, regional rural banks, external commercial borrowings (ECB)
Collateral Requirements	All legal forms of MFIs can waive physical collateral requirements from their clients
Capital Adequacy	All new NBFC-MFIs shall maintain a capital adequacy ratio consisting of Tier I and Tier II Capital which shall not be less than 15 per

	<p>cent of its aggregate risk weighted assets.</p> <p>The total of Tier II Capital at any point of time, shall not exceed 100 per cent of Tier I Capital.</p>
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Source: adapted from *Micro-Finance in India*. By Karmarkar (2008). New Delhi, Sage Publications and from Master Circular- Introduction of New Category of NBFCs - 'Non-Banking Financial Company-Micro Finance Institutions' (NBFC-MFIs) - Directions by RBI (2013)

Appendix 8.3
Pre-IPO prices of SKS microfinance

	2011	2010	IPO Book Building	2009_Sep	2009	2008	2007	2006	2005
NAV per equity share (Rs.)	522.3	1,171.00	950.0	157.34	136.82	47.88	26.8	11.19	10.03
Shares	9,50,00,000	9,50,00,000	9,50,00,000	4,83,25,773	4,79,01,027	43,31,652	2,66,43,047	1,39,07,170	20,60,050

Share Prices and Price to Earnings (PE)

	2012	2011	2010	IPO Book Building	2009_Sep	2009	2008	2007	2006
NAV per equity share (Rs.)	118.3	522.3	1,171.00	950.0	157.34	136.82	47.88	26.8	11.19
Calculate PE	-0.63	32.44	35.68	28.95	13.51	7.63	8.66	16.96	1.77

Appendix 8.4

Outstanding Cash Debt of Major States as on June 30, 1962

– Credit Agency Wise (AIDIS 1961-62)

(Per cent)

States	Government	Cooperatives	Commercial Banks	Landlords	Agricultural Moneylenders	Professional Moneylenders	Traders and Commission Agents	Relatives	Others
1. Andhra Pradesh	1.6	7.3	0.6	0.3	64.0	9.9	10.7	2.0	3.6
2. Assam	15.5	8.3	--	0.3	35.5	14.6	6.4	11.9	7.6
3. Bihar	4.2	0.9	--	0.1	74.0	12.1	2.8	3.5	2.3
4. Gujarat	3.3	20.3	0.1	0.1	9.8	8.1	16.0	19.2	23.2
5. Jammu & Kashmir	0.3	9.2	0.2	2.1	7.0	5.4	23.1	19.5	33.2
6. Kerala	4.5	9.1	4.0	3.1	16.2	5.6	5.2	14.7	37.8
7. Madhya Pradesh	4.2	11.4	0.1	0.3	37.7	31.0	9.7	3.0	2.7
8. Madras	2.8	9.3	1.4	0.2	63.7	6.7	6.1	3.0	6.7
9. Maharashtra	18.8	27.5	0.1	0.8	17.6	8.7	3.5	12.4	10.6
10. Mysore	4.1	11.4	0.6	1.1	59.8	1.4	7.0	5.8	8.8
11. Orissa	12.0	14.4	--	1.0	22.4	37.3	3.8	2.8	6.5
12. Punjab	3.6	7.1	--	6.7	48.6	12.8	2.9	10.5	7.8
13. Rajasthan	2.5	2.0	--	0.2	29.2	35.3	15.0	4.7	11.1
14. Uttar Pradesh	3.0	7.8	0.2	0.1	42.5	24.5	5.2	8.0	8.8
15. West Bengal	19.2	4.1	0.1	1.0	31.8	7.4	7.0	12.6	16.9
All India	5.3	9.1	0.4	0.9	45.9	14.9	7.7	6.8	8.9

Source: All India Debt and Investment Survey (AIDIS), 1961-62 (RBI, 1965).

Appendix 8.5

Outstanding Cash Debt of Major States as on June 30, 1972 – Credit Agency Wise

(AIDIS 1971-72)

(Per cent)

States	Government	Cooperatives	Commercial Banks	Money Lenders (Agr. & Prof.)	Landlords & Traders	Relatives & Friends	Others
1. Andhra Pradesh	2.2	9.4	1.9	46.8	23.3	12.6	3.9
2. Assam	23.5	10.6	0.0	19.7	11.6	27.0	7.6
3. Bihar	5.9	4.4	0.4	55.7	19.1	12.6	1.9
4. Gujarat	6.0	37.8	3.0	11.9	21.0	18.1	2.2
5. Jammu & Kashmir	12.7	7.8	0.0	11.5	34.6	32.4	1.0
6. Karnataka	8.4	15.9	5.3	38.8	20.0	9.6	1.9
7. Kerala	4.7	25.3	13.2	16.1	7.6	23.0	9.8
8. Madhya Pradesh	4.0	26.0	1.1	45.8	15.5	5.7	1.9
9. Maharashtra	11.7	54.3	1.3	9.7	8.9	12.6	1.5
10. Orissa	8.9	20.1	0.7	39.1	11.9	13.0	6.3
11. Punjab & Haryana	5.2	24.0	3.1	27.1	24.4	13.7	2.5
12. Rajasthan	3.9	5.0	0.5	49.6	23.6	12.3	5.1
13. Tamil Nadu	5.7	14.6	1.6	44.5	15.9	14.4	3.3
14. Uttar Pradesh	8.4	13.2	1.3	50.3	11.1	12.8	2.9
15. West Bengal	14.7	13.8	1.2	28.1	14.0	25.2	3.2
All India	6.7	20.1	2.2	36.9	17.3	13.8	3.0

Source: All India Debt and Investment Survey, 1971-72 (RBI, 1977).

Appendix 8.6

Outstanding Cash Debt of Major States as on June 30, 1982

– Credit Agency Wise (AIDIS 1981-82)

(Per cent)

States	Government	Cooperatives	Commercial Banks	Insurance	Provident Fund	Landlords	Agriculturist moneylenders	Professional moneylender	Traders	Relatives	Other Sources
1. Andhra Pradesh	2.2	20.0	18.3	0.1	0.0	10.9	14.6	9.7	4.8	7.6	10.5
2. Assam	2.0	6.0	16.0	0.0	6.0	--	2.0	4.0	2.0	34.0	28.0
3. Bihar	9.3	8.3	29.4	0.0	0.0	11.3	18.6	4.9	1.5	11.3	4.4
4. Gujarat	1.9	53.8	14.3	0.0	0.0	2.7	1.1	1.7	6.5	16.4	0.4
5. Haryana	6.2	22.7	46.6	0.3	0.0	2.2	5.2	8.9	0.6	6.3	1.0
6. Himachal Pradesh	6.8	41.6	25.8	0.0	0.0	0.6	4.2	4.2	1.1	13.9	1.4
7. Jammu & Kashmir	4.8	7.6	31.2	0.0	0.0	--	1.2	0.4	27.6	12.8	3.6
8. Kerala	2.4	26.5	48.8	0.4	0.0	2.2	6.1	3.4	0.9	7.3	1.0
9. Madhya Pradesh	5.8	34.0	37.1	0.4	1.4	0.1	0.1	3.6	1.4	11.8	4.1
10. Maharashtra	2.1	32.7	31.2	0.0	0.0	2.5	6.2	15.7	4.6	4.2	0.8
11. Mysore	3.9	54.8	26.8	0.9	0.1	0.8	1.3	1.3	0.7	7.3	2.0
12. Orissa	7.7	46.7	27.5	0.0	0.0	0.9	1.2	1.2	3.5	2.0	4.6
13. Punjab	7.5	21.4	43.8	1.0	0.4	2.8	4.8	4.8	5.0	5.7	2.4
14. Rajasthan	0.6	16.3	23.6	0.3	0.0	4.9	9.5	9.5	4.9	12.3	10.3
15. Tamil Nadu	2.6	27.8	12.9	0.5	0.6	4.7	15.1	15.1	4.2	9.7	8.7
16. Uttar Pradesh	4.9	21.0	29.0	0.0	0.0	2.5	14.3	14.3	2.8	9.2	3.1
17. West Bengal	7.1	23.6	32.4	0.3	2.4	1.0	4.8	4.8	5.4	14.8	3.0
All India	4.0	28.6	28.0	0.3	0.3	4.0	8.6	8.3	3.4	9.0	4.9

Source: All India Debt and Investment Survey, 1981-82 (RBI, 1987).

Appendix 8.7

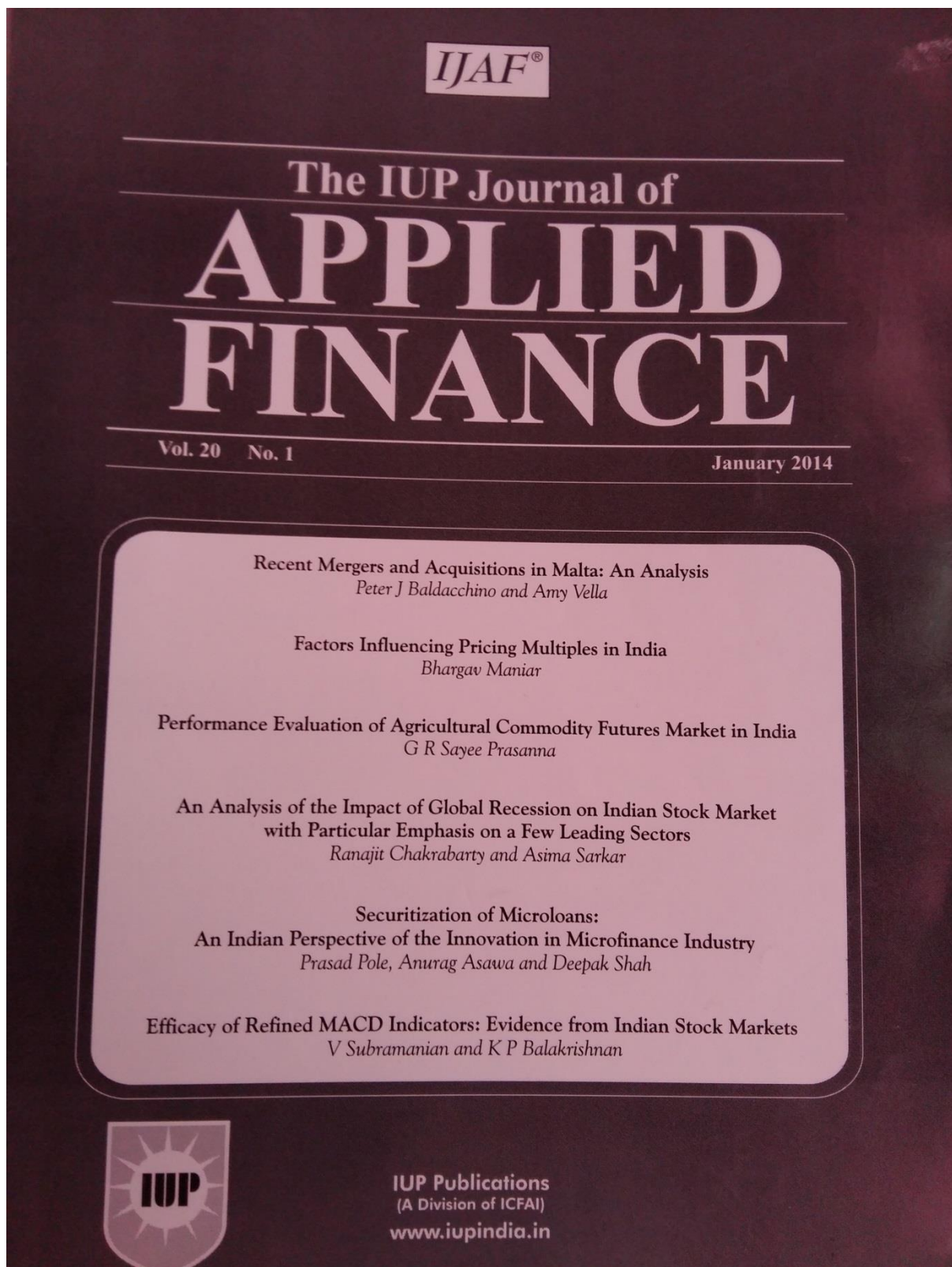
Outstanding Cash Debt of Major States as on June 30, 1992									
– Credit Agency Wise (AIDIS 1991-92) (Per cent)									
State	Government	Cooperatives	Com. Banks	Landlords	Agr. & Prof. Moneylenders	Traders & Com. Agents	Relatives	Others	
1. Andhra Pradesh	2.6	12.4	15.4	15.4	36.0	8.6	1.3	8.3	
2. Assam	5.6	15.5	9.1	0.0	25.8	35.9	4.8	3.3	
3. Bihar	6.9	20.1	36.9	1.8	16.2	3.9	5.4	8.8	
4. Gujrat	5.8	41.4	35.6	0.0	0.2	9.1	6.9	1.0	
5. Haryana	2.4	23.0	43.5	7.8	12.6	4.1	2.1	4.5	
6. Himachal Pradesh	3.9	21.7	32.9	0.4	4.1	30.7	1.6	4.7	
7. Jammu & Kashmir	4.9	9.1	43.0	2.0	2.2	3.1	17.0	18.7	
8. Karnataka	5.0	22.1	42.7	3.3	10.1	4.0	2.7	10.1	
9. Kerala	22.7	45.6	19.1	0.0	2.8	1.6	4.0	4.2	
10. Madhya Pradesh	3.6	21.2	44.5	2.1	22.1	2.1	8.0	3.6	
11. Maharashtra	5.1	45.4	27.2	0.8	6.7	1.1	9.5	4.2	
12. Manipur	9.2	13.1	0.4	0.0	2.3	42.0	31.4	1.6	
13. Meghalaya	67.4	23.2	0.0	0.0	0.0	0.0	9.4	0.0	
14. Nagaland	21.0	7.3	27.0	0.0	3.3	0.0	40.3	1.1	
15. Orissa	7.1	21.5	44.2	0.3	12.6	1.6	3.6	9.1	
16. Punjab	2.5	20.1	55.3	2.0	3.7	6.9	7.9	1.6	
17. Rajasthan	3.9	6.6	25.4	3.1	37.3	14.2	0.5	9.0	
18. Sikkim	25.7	12.2	50.7	0.0	4.2	4.0	1.2	2.0	
19. Tamilnadu	3.3	17.5	32.5	4.2	22.1	9.1	6.3	5.0	
20. Tripura	26.5	12.8	49.9	0.0	1.9	2.6	6.1	0.2	
21. Uttar Pradesh	7.2	14.2	44.8	1.6	15.7	4.3	9.2	3.0	
22. West Bengal	11.8	20.1	41.5	0.1	5.9	3.5	8.6	8.5	
All India	5.7	18.6	29.0	4.0	15.7	7.1	6.7	2.5	

Source: All India Debt and Investment Survey, 1991-92.

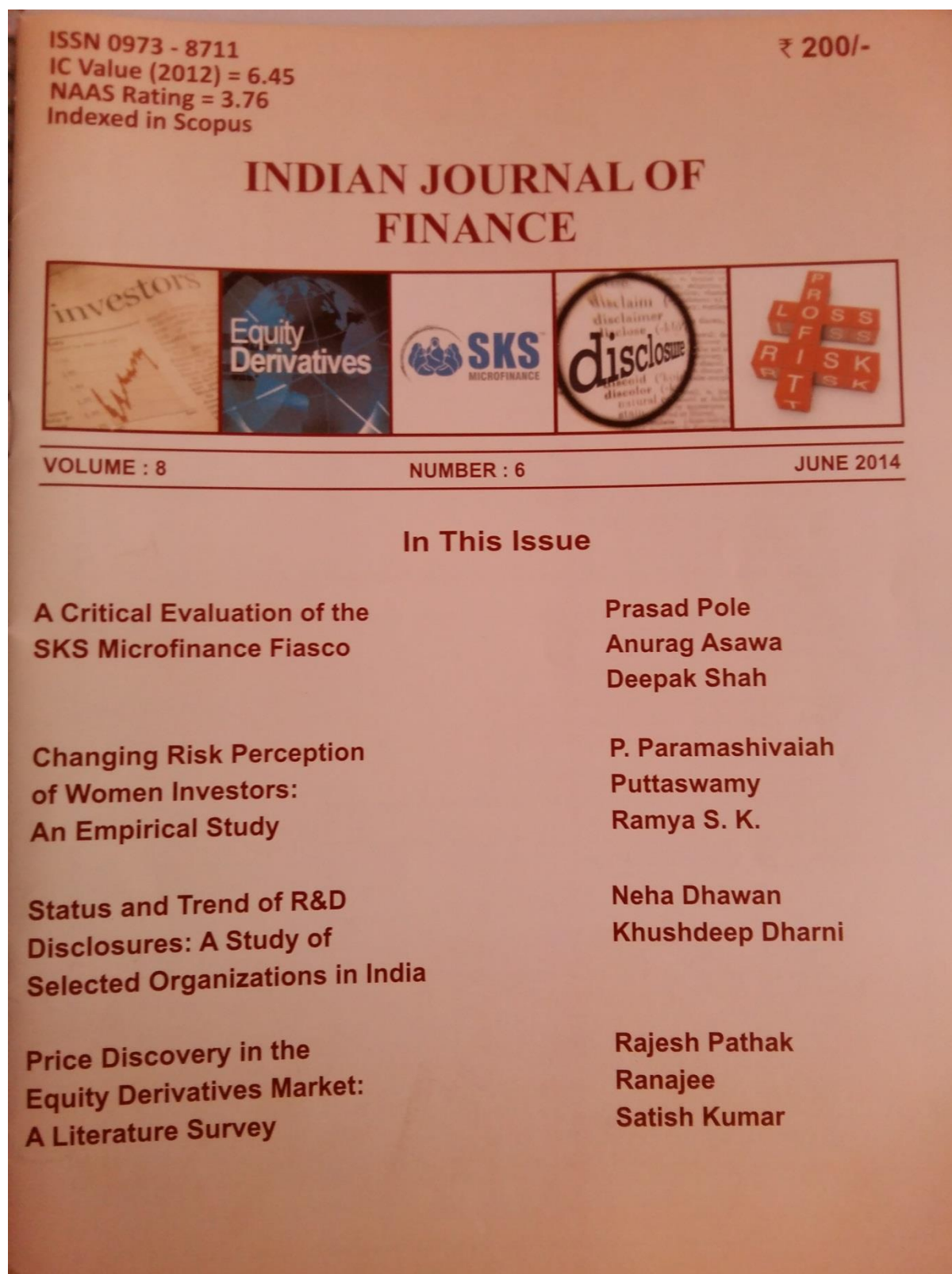
Appendix 8.8

Outstanding Cash Debt of Major States as on June 30, 2002														
– Credit Agency Wise (AIDIS 2001-02) (Per cent)														
States	Government	Coop. Society/ Bank	Commercial Bank	Insurance	Provident Fund	Financial Instn.	Financial Company	Other Institutional Ag.	Landlord	Agriculturist money lender	Professional moneylender	Traders	Relatives and friends	Others
Andhra Pradesh	0.7	11.7	13.3	0.4	0.0	0.0	0.8	0.4	3.3	27.7	29.7	5.0	1.5	5.6
Assam	15.4	5.2	23.0	0.1	7.3	2.2	0.8	3.9	0.2	2.4	23.8	1.4	12.4	1.9
Bihar	2.3	6.2	27.0	0.2	0.0	0.1	0.1	0.6	1.1	18.7	27.8	1.4	7.4	7.1
Chattisgarh	2.5	23.9	56.5	0.1	1.1	0.0	0.9	0.2	1.2	1.4	6.6	1.2	3.5	0.7
Gujarat	2.9	40.1	22.4	0.0	0.1	1.2	0.2	0.5	0.0	0.3	8.0	3.9	20.5	0.0
Haryana	0.4	22.7	25.7	0.0	0.0	1.0	0.0	0.0	1.3	15.0	26.5	1.4	3.0	2.9
Himachal Pradesh	4.5	25.1	40.3	0.0	0.7	0.2	2.3	0.5	0.2	0.2	3.0	0.5	17.6	4.8
Jammu & Kashmir	0.7	11.0	60.9	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	26.5	0.0
Jharkhand	10.5	9.5	46.9	0.0	3.3	0.0	0.1	0.3	0.7	3.5	13.6	0.7	10.7	0.2
Karnataka	1.2	35.3	28.9	0.1	0.0	0.8	0.0	0.3	1.8	9.5	14.0	2.0	5.0	1.0
Kerala	4.8	46.2	23.0	0.5	0.1	5.2	0.2	1.3	0.0	0.1	7.8	0.1	9.1	1.6
Madhya Pradesh	0.9	33.6	23.8	0.1	0.0	0.0	0.1	0.1	0.3	9.8	21.1	3.3	1.8	5.1
Maharashtra	1.0	60.3	20.9	0.8	0.3	0.7	0.3	0.5	0.1	2.4	4.0	0.3	6.6	1.8
Orissa	1.4	29.3	31.8	0.0	1.6	9.5	0.0	0.4	0.1	4.4	18.2	0.1	2.4	0.7
Punjab	1.1	19.0	28.6	0.1	0.0	1.2	6.3	0.2	2.6	16.5	7.8	1.5	13.9	1.4
Rajasthan	0.6	11.8	21.0	0.0	0.0	0.1	0.2	0.0	0.5	16.8	32.1	10.6	4.5	1.7
Tamil Nadu	2.8	23.8	17.2	0.9	0.6	0.1	0.4	0.9	0.6	4.2	42.2	0.6	4.3	1.4
Uttaranchal	1.4	12.2	44.9	0.0	0.0	0.1	0.0	0.0	0.0	1.9	12.8	0.1	25.3	1.3
Uttar Pradesh	2.5	11.7	38.6	0.0	0.1	0.1	0.1	2.8	0.5	9.3	20.2	1.5	9.9	2.7
West Bengal	11.9	14.0	35.6	0.2	2.0	2.7	0.3	0.8	0.4	2.1	10.8	2.9	14.2	2.1
All India	2.3	27.3	24.5	0.3	0.3	1.1	0.6	0.7	1.0	10.0	19.6	2.6	7.1	2.6

Source: All India Debt and Investment Survey, 2001-02.



Appendix 8.10



9. Bibliography:

- Akula, V. (2010). *A Fistful of Rice: My Unexpected Quest to End Poverty Through Profitability*. Boston, MA: Harvard Business Review Press.
- Armendáriz, B., & Szafarz, A. (2011). On mission drift in microfinance institutions. *The handbook of microfinance*, 341, 366.
- Bruinsma, J. (2003). *World agriculture: towards 2015/2030. An FAO perspective*. Earthscan Publications Ltd.
- Diop, A., Hillenkamp, I., Servet, J. M., & Hillenkamp, I. (2007). Poverty versus Inequality in B. Balkenhol (Ed.), *Microfinance and Public Policy: Outreach, Performance and Efficiency* (p.288) New York: Palgrave Macmillan.
- Ellis, F. (1992). *Agricultural Policies in Developing Countries*. Cambridge: Cambridge University Press.
- Harper, M., & Roy, A. K. (2000). *Co-operative success: what makes group enterprise succeed*. Intermediate Technology Publications.
- Karmarkar, K. (2008). *Micro-Finance in India*. New Delhi, Sage Publications.
- Misra, B. S. (2010). *Credit Cooperatives in India: Past, Present and Future*. London: Routledge.
- Nair, T. Tankha, A. (2013). *Microfinance India State of Sector Report 2013*, New Delhi, Sage Publications.
- Nair, T. Tankha, A. (2014). *Inclusive Finance India Report 2014*, New Delhi, Sage Publications
- Prahalad, C. K. (2009). *The fortune at the bottom of the pyramid, revised and updated 5th anniversary edition: Eradicating poverty through profits*. FT Press.
- Puhazhendhi V (2012). *Microfinance India State of Sector Report 2012*, New Delhi, Sage Publications

- Puhazhendhi, V., & Satyasai, K. J. S. (2000). *Microfinance for rural people: an impact evaluation*. National Bank for Agriculture and Rural Development, Department of Economic Analysis and Research.
- Robinson, M. S. (2001). *The microfinance revolution: sustainable finance for the poor* (Vol. 1). World Bank Publications.
- Sen, A. (1993). *Capability and well-being* (pp. 30-53). na.
- Sinclair, H. (2012). *Confessions of a microfinance heretic: How microlending lost its way and betrayed the poor*. Berrett-Koehler Publishers.
- Srinivasan N (2009). *Microfinance India State of Sector Report 2009*, New Delhi, Sage Publications
- Srinivasan N (2010). *Microfinance India State of Sector Report 2010*, New Delhi, Sage Publications
- Srinivasan N (2011). *Microfinance India State of Sector Report 2011*, New Delhi, Sage Publications
- Yunus, M. (2007). *Creating a world without poverty: Social business and the future of capitalism*. PublicAffairs.
- Yunus, M., 1998. *Banker to the Poor: Micro-Lending and the Battle Against World Poverty*. New York: PublicAffairs

