GRADUATE SCHOOL OF ASIA PACIFIC STUDIES

RITSUMEIKAN ASIA PACIFIC UNIVERSITY
BEPPU, JAPAN

Conventional and Islamic Microfinance for Poverty Alleviation in Pakistan: Limits and Prospects

By

MERAJ Muhammad
61112601

Supervised by
Professor Robert AC Salazar

Dissertation submitted
to the
Graduate School of Asia Pacific Studies

In Partial Fulfillment of the Requirements for
The Degree of Doctor of Philosophy

OCTOBER, 2016

Acknowledgement

*In the name of **Allah**, The Benevolent, The Most Merciful*

All praises and glory are for Allah Almighty (Jalle-Jalallaho) who gave me strength, commitment and patience to finish this study. Peace and Blessings of Allah (Subhanahu-Wa-Taala) be upon his last and beloved messenger Hazrat Muhammad Mustafa (Sallalaho Alaihe Wasallam) who showed us the right path of life.

First of all, I would like to thank the Government of Japan and Japanese people in general and Ritsumeikan Asia Pacific University (APU) in particular for their support to fulfil my dreams of higher education. This work could not have been completed without the utmost support of Professor Robert AC Salazar., the Dean of the Graduate School of Asia Pacific Studies, whose supervision and guidance made the tedious process of research easy for me. I am highly indebted to Professor Kim Sangho and Professor Suzuki Yasushi for their support in research work. I am also thankful to my lecture courses supervisors, Professor A. Mani, and Professor J. Progler, who provided me the basic building blocks of Asia Pacific Studies. I sincerely express my gratitude to the staff of Student Office and Academic Office especially Ms. Belinda and Ms. Emiliya for their coordination throughout this journey.

Special thanks to my loving sisters Mrs. Rehana Nasir, Mrs. Aisha Nadeem and Mrs. Rabia Imran, brothers Muhammad Faheem, Muhammad Wasim Ahmed, Muhammad Nadeem Khan, and Muhammad Kashif Rahim, brothers-in-law Jamal Uddin, Shaikh Nasir Jamal, Nadeem Hafeez, and Imran Ghouri, all sisters-in-law, nephews and nieces, Shaikh Faizan Nasir, Mrs. Basra Zain & Mr. Zain Mohiuddin, and Hafiz Shaikh Hassan Nasir, Mrs. Saleha Jamal and Qutub Jamal, Waniya, Haniya and Abdullah, Damil, Faiz, Mifrah and Khuzema, Fatima and Huzefa, Maryam, Yusma, Amna, and a newly born in our family Muhammad Ali Raza Ullah Khan Ghouri. Finally, I am extremely thankful to my mother Tahira Bano who supported me a lot, and my late father Abdul Rahim who gave me the vision of education, and all of my teachers.

To my mother ***TAHIRA BANO***

and

late father ***ABDUL RAHIM***

Table of Contents

List of Tables

List of Figures

Acronyms

ADB	Asian Development Bank
AE	Administrative Expenses
AER	Annual Effective Interest Rate
AKRSP	Aga Khan Rural Support Program
APR	Annualized Percentage Rate
BBC	British Broadcasting Corporation
BC	Before Christ
BISP	Benazir Income Support Program
CAR	Capital Adequacy Ratio
CF	Cost of Funds
CGAP	Consultative Group to Assist the Poor
CIA	Central Intelligence Agency
DEA	Data Envelopment Analysis
DFID	Department for International Division
ECI	Economic Complexity Index
EOBI	Employees Old Age Benefit Institution
ESH	Efficient Structure Hypothesis
ESSI	Employees Social Security Institutions
FE	Fixed Effect Estimation
FRA	Financial Ratios Analysis
FSS	Financial Self-Sufficiency
GDP	Gross Domestic Product
GFC	Global Financial Crisis
GLP	Gross Loan Portfolio
GNI	Gross National Income
HDI	Human Development Index
HHI	Herfindahl-Hirschman index
ICCI	Islamabad Chamber of Commerce and Industry
IFC	International Finance Corporation

IHDI	Inequality adjusted Human Development Index
II	Investment Income
ILF	Irish Loan Fund
IMF	International Monetary Fund
IMFI	Islamic Microfinance Institutions
ISMPs	Islamic Microfinance Service Providers
LL	Loan Loss Rate
LPM	Linear Probability Model
MCGF	Microfinance Credit Guarantee Facility
MDGs	Millennium Development Goals
MFBs	Microfinance Banks
MFCIB	Microfinance Credit Information Bureau
MFIs	Microfinance Institutions
MIX	Microfinance Information Exchange
MPs	Microfinance Practitioners
N.A	No Answer
NEIO	New Empirical Industrial Organization
NGOs	Non-Government Organizations
NPL	Non-Performing Loans
OC	Operating Cost
OER	Operating Expenses Ratio
OLS	Ordinary Least Squares
OSS	Operational Self-Sufficiency
OPP	Orangi Pilot Project
PAR	Portfolio at Risk
PCM	Price Cost Markup
PMN	Pakistan Microfinance Network
PMR	Pakistan Microfinance Review
PPAF	Pakistan Poverty Alleviation Fund
PPP	Purchasing Power Parity
PR	Panzar and Rosse
R&D	Research and Development

RE	Random Effect Estimation
ROA	Returns on Assets
ROE	Returns on Equity
ROSCAs	Rotating Savings and Credit Associations
RPD	Relative Profit Difference
RSPs	Rural Support Programs
SACCOs	Savings and Credit Cooperatives
SAMN	South Asian Microfinance Network
SAP	Social Action Plan
SBP	State Bank of Pakistan
SCP	Structure Conduct Performance
SDG	Sustainable Development Goals
SECP	Securities and Exchange Commission of Pakistan
SMEs	Small and Medium Enterprises
TA	Total Assets
TR	Total Revenue
UN	United Nations
UNCDF	United Nations Capital Development Fund
UNDP	United Nations Development Program
UNHCR	United Nations High Commissioner for Refugees
US	United States
USAID	United States Agency for International Development
USD	United States Dollar
VCP	Vicious Circle of Poverty
WDI	World Development Indicators

Abstract

Microfinance programs are largely focused on income-generation for the poor as well as the creation of social capital. Like many countries in the developing world where poverty is prevalent, Pakistan has adopted microfinance as a major means of poverty alleviation. Microfinance achieved enormous success in Bangladesh and led to the awarding of the Nobel Peace Prize to Muhammad Yunus in 2006 for microfinance projects. However, unlike in Bangladesh where it has succeeded, the viability and usefulness of microfinance for poverty alleviation in Pakistan remain unclear. The main objective of this study is to investigate the limits and prospects of conventional and Islamic microfinance for poverty alleviation in Pakistan. To address this objective, the study undertakes a multipronged analysis. First, it assesses the performance of conventional microfinance in terms of financial sustainability and social outreach. Second, it examines the perceived differences between conventional and Islamic microfinance, based on a sample survey. Third, it proposes a mosque-based Islamic microfinance model to overcome the shortcomings of existing microfinance. Lastly, it tests the successful implementation of Islamic microfinance model through Linear Probability Model (Binary Dependent Model).

The study found that conventional microfinance has some limitations and it has not been able to achieve the "double-bottom line" objectives of financial sustainability and social outreach. The performance evaluation of the microfinance showed that some MFIs are financially sound and efficient but less efficient at social development, while others have social efficiency but lack financial self-sufficiency. A number of cultural and socio-political factors, e.g. domestic violence, terrorism, unfriendly business circumstances, and

strict religiosity, can account for the underserving of conventional microfinance. From the financial performance view, microfinance in Pakistan performed below the par value of microfinance in South Asia. The average for the depth of outreach is 11.97% which shows that on average, the percentage of serving the poorest is around 12% in the gross loan portfolio. The results thus support our hypothesis that conventional microfinance is skewed towards financial commercialization rather than social value creation.

The survey of peoples' perceptions regarding conventional and Islamic microfinance revealed that a majority of people in Pakistan understand the fundamental differences between these two types of microfinance. Also, the respondents expressed disagreement with the overly emphasized claims of conventional microfinance, i.e. empowering the poor (57% disagree), serving the poorest of the poor (94% disagree), and lifting the poor out of the poverty abyss (62% disagree). A majority of respondents (76%) choose Islamic microfinance as a source of potential borrowing in future because it works within the *Shariah* boundaries and charges no interest on loans. Islamic microfinance is considered a better tool for poverty alleviation because of its Welfarist genre as it works within the boundaries of Islamic *Shariah.* In sum, Islamic microfinance is positively perceived by the people of Pakistan. According to peoples' perception, Islamic microfinance could be used effectively in poverty alleviation efforts if it is aligned with modern financial environment.

The study also investigated whether or not Islamic microfinance can be used as a replacement of existing microfinance given the significant concomitant growth of Islamic

banking and finance throughout the world. It proposed a new model of Islamic microfinance based on religious principles with the inclusion of the mosque (the Muslims' prayer place). A mosque-based system integrates financial services with religious practice and addresses a number of existing issues of conventional microfinance. It is elaborated that the Islamic microfinance model can break the vicious circle of poverty with the injection of funds through entrepreneurial loans and consumption loans. Finally, the study tested the probability of successful implementation of Islamic microfinance in Pakistan by using the binary probability model (Probit) after recoding the peoples' responses into dummy variables. The analysis showed some significantly positive probabilities for the implementation of Islamic microfinance in Pakistan for poverty alleviation. Based on these findings, the study provides several recommendations for policy and further research.

CHAPTER 1
INTRODUCTION

"In poverty and other misfortunes of life, true friends are a sure refuge. The young they keep out of mischief; to the old they are a comfort and aid in their weakness, and those in the prime of life they incite to noble deeds" (Aristotle).

1.1 General Background

Poverty is a universal phenomenon that defines material deprivation, income inequality and the lack of available economic resources in the society. In the current era of globalization and technological advancement a number of tools are being used to fight poverty. Microfinance is one such tool that is considered an effective way to eradicate poverty. Its role and significance was universally acknowledged when an economics professor Muhammad Yunus achieved the Nobel Peace Prize in 2006 for his project of providing small loans to rural agricultural farmers in Bangladesh. This particular event triggered a wave among development practitioners to replicate the Grameen bank microfinance model that was initiated by Muhammad Yunus. Beatriz and Jonathan (2005, p. 12) pointed out that the replication of the Grameen model was evident in thirty countries from East Timor to Bosnia, and in thirty states of the United States of America.

The term "microfinance" evolved from microcredits and became popular only in the last four to five decades (Mago, 2013; Helms, 2006; Qudrat-I and Lutfor, 2006; Henry et al, 2003). Initially, it included only microloans but over time it enhanced to the full range of modern financial services. The practice of extending small credit to the poor prevails in various countries. For example, some of the famous small credit groups are '*chit fund'* in

India, '*susus*' in Ghana, *'tandas*' in Mexico, *'arisan*' in Indonesia, '*cheetu*' in Sri Lanka, '*tontines*' in West Africa, '*pasanaku*' in Bolivia (CGAP, 2006 April 14; Mushuku and Mayisa, 2014), 'BeeSee or Committee' in Pakistan and Bangladesh, and '*Chimbadzo*' in Zimbabwe (Mago, 2013). The existing forms of microfinance depend not only on small loans but a range of micro products including micro-loans, micro-savings and recently added micro-insurance (Beatriz and Jonathan, 2005, p.14). The emergence of microfinance in the poverty alleviation toolkit is considered a welcome move in contemporary development strategies (Hiatt and Woodword, 2006; Johnson and Rogaly, 1997, Khandker, 2005).

The concept of microfinance is associated with the concept of poverty alleviation in general. Initially, microfinance was regarded as 'microcredits' only and it was not the part of the formal financial system, but in later stages when finance deeply rooted in the economy, it became necessary for the formal financial system to integrate microfinance with other financial services. The growing involvement of finance in the process of economic growth strengthens its position to capture all spheres of finance including microfinance. The development of microfinance is mainly based on the banking system as it considered a subset of the formal financial system. During the inception of microfinance, its scope was limited to developing countries only but after some successful achievements, its horizon had broadened to developed countries as well. Now, the accessibility of microfinance products is shared not only by poor populations but by various less-poor entrepreneurs as well in different parts of the world.

The main objective of microfinance is to provide financial services to excluded groups of society to fight against poverty. A majority of the world's poor are financially excluded. It is estimated that roughly half of the all adults in the world do not have bank accounts (The Economist, April 20th, 2012). In the West, 89% of adults have bank accounts while in developing countries only 41% of the adult population enjoy banking facilities. The difference is bigger in credit card usage as half of the western world have credit cards while only 7% in the developing world use credit cards (The Economist, ibid). The financial exclusion of the poor is highly prevalent in developing countries than in developed countries. That is why microfinance mainly targets poor countries and it is significant in the developing world. Microfinance creates a bridge between the poor and the financial sector. It's a win-win situation for both because financial inclusion provides more customers to the finance sector while providing the poor some shelter against economic shocks. Financial services safeguard them from exogenous shocks such as catastrophes, accidents, injuries and illness etc., and the microfinance services are utilized to improve the living standard of poor people throughout the world. The initial stance taken by the development banks after the World War-II was quite similar to existing microfinance. The development banks were established to provide financial assistance to poor people for rehabilitation in war-torn economies. Although the objective was quite noble, the lack of financial discipline and a continuous interference by the states deterred the role of development banks. The emergence of microfinance during the mid-1970s was the time when development banks had lost their glitter in poverty alleviation and economic growth. The Grameen bank which launched the microfinance services in Bangladesh in 1976 was undoubtedly considered the first microfinance institution designated to provide

microfinance products to the poor masses of Bangladesh. Over a period of four decades, microfinance intensified its viability and importance in poverty alleviation throughout the world. Nevertheless, microfinance patterns have shifted in the last couple of decades. In its infancy period, the visionary approach of microfinance was mainly focused on borrowers or the buyers of microfinance loans, while in its transitory phase, the focus shifted towards credit providers or the sellers of microfinance loans. At present, the main focus of attention is the working environment or the markets where buyers and sellers of microfinance loans interact with each other. The broader spectrum of microfinance coerces the modern financial system to integrate and reconsider microfinance as an integral part of the formal financial system because microfinance largely covers the poor customers who were otherwise considered as non-customers. The integration of microfinance with the formal financial system enhances its capability to provide financial services to the poor and unbanked customers and allows microfinance to bring the poor customers into the financial net. Such financial inclusion is beneficial for both microfinance and the poor as well. In fact, it is more beneficial to the poor because now they can enjoy financial products at low cost and they are able to solve their financial matters with the help of financial experts through microfinance. The poor face a lot of problems without financial inclusion such as opening bank accounts, getting insurance cover (personal or home), insolvency, and the lack of knowledge about the usage of savings etc. (Breckland Council, 2012).

Pakistan, a neighboring country of Bangladesh, has also initiated the microfinance projects to curb the long standing issues of poverty in the country. In Pakistan, microcredit projects were started during the early 80s by the efforts of late Akhter Hameed Khan.

Initially, small loans were provided in rural areas to support poor farmers as an extension of pre-partition institutional credits of '*Taccavi*' and cooperative societies' loans. The government-administered loans ('Taccavi') were managed by the then provincial governments under the regulations of Land Improvement Loans Act (1883) and Agriculturists' Loan Act (1884)[i]. With the passage of time such kind of loans lost their effectiveness and completely packed-off in 1993-94 (Iqbal, Ahmad and Abbas, 2003). In contrast, loans provided by cooperative societies and banks, fall under the regulation of Cooperative Credit Societies Act (1904) have continued to operate (The Punjab Agriculturists' Loan Act, 1958). The Orangi Pilot project is considered the beginning of modern microfinance in Pakistan. The multidimensional project was launched in the urban periphery of Karachi to cover the main social sectors like health, housing, technology, and education support etc. (Orangi Pilot Project, 1995). After a couple of years, the Aga Khan Foundation had started a similar project in Northern areas of Pakistan to help out poor people through small credits. Despite these efforts, microfinance in Pakistan is not as effective as it supposed to be. Suzuki and Miah (2015, p. 470) noted that "taking into account the magnitude of 45 million poor households, the level of microfinance deepening is still low." This situation is probably because the underprivileged or underserved are not availing of microfinance due to some religious reasons -- an element of interest is strictly forbidden in an Islamic country like Pakistan or because the existing form of microfinance is more oriented towards financial commercialization than poverty alleviation.

Microfinance is considered an effective tool for poverty alleviation and it can be used to break the Vicious Circle of Poverty (VCP) which was initially defined by Regnar

Nurkse in 1953 in his famous 'Balanced growth theory' (Bass, 2009). It explains that poor are poor because of the fact they born poor and societies are poor because they destined to be poor. The 'Vicious Circle of Poverty' (VCP) implies that poverty generates more poverty because the limited abilities of the poor prevent them from generating and saving funds, thus keeping them in a continuous cycle of poverty. The circular flow of low real income leads to low savings and low savings means less capital available for investment. The production possibilities remain low due to low investments that generate low real income. Figure 1.1 shows the cyclic flow of poverty in the VCP.

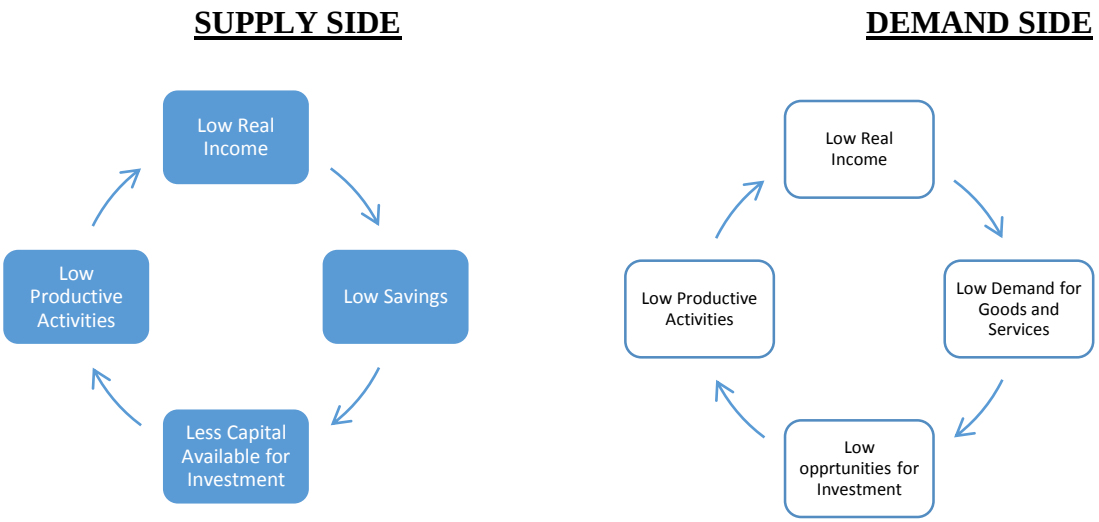


Figure1.1: Vicious Circle of Poverty (Source: Author's representation)

The vicious circle of poverty implies that a majority of poor remain poor due to a cyclic binding between their income and expenditures with the absence of savings.

The funds could be injected in VCP through microfinance to increase the level of savings in poor's lives that could be used to generate extra income and to lift the poor out

of the poverty trap. By injecting funds through microfinance, poverty can be alleviated because an increase in real income has domino effects on each segment of the VCP. With higher real income, the demand for goods and services will be increased so as the opportunities for investment. The production activities will be triggered through a higher level of investment and the rotations of economic growth will be started. However, the insertion of funds in VCP through microfinance demands financial self-sufficiency and social value creation that can be achieved through community capacity building and financial inclusion of poor into financial net. Financial self-sufficiency requires operational and financial efficiency while social value creation can be achieved through an increase in outreach.

1.2 Statement of the Problem

The existing state of microfinance in Pakistan shows that the current outreach of 2.8 million borrowers just covers 7% of potential borrowers (SBP, 2011). It seems that the existing microfinance efforts (hereafter referred to as "conventional microfinance") are not efficient on both financial and social dimensions. This dilemma encourages me to thoroughly investigate whether or not microfinance is efficient on both fronts. Also I try to find out the causal connection between underutilization of conventional microfinance and strict religiosity in Pakistan. It is argued that the people of Pakistan did not avail themselves of conventional microfinance due to some strict religiosity. Conventional microfinance is unpopular due to the element of interest which is completely forbidden in Islamic *Shariah* (Islamic Jurisprudence), and the belief that involvement in interest-bearing transactions is a biggest sin in Islamic culture. It is further argued that the Islamic version of microfinance

can be used as a replacement of existing microfinance in order to expand the outreach of microfinance for poverty alleviation. The possible chances of Islamic microfinance being successfully implemented in Pakistan needs to be explored.

1.3 Research Questions and Hypotheses

The study examines the following research questions:

i) How efficiently has conventional microfinance in Pakistan achieved the goal of financial sustainability?

ii) How efficiently has conventional microfinance in Pakistan achieved the goal of social development in terms of social outreach?

iii) How do the people of Pakistan perceive conventional microfinance and Islamic microfinance?

iv) Can Islamic microfinance be used as a replacement of conventional microfinance in Pakistan?

v) What is the probability of Islamic microfinance being successfully implemented in Pakistan?

The following corresponding hypotheses are thus investigated:

i) Conventional microfinance is skewed towards financial sustainability rather than poverty alleviation in Pakistan;

ii) Conventional microfinance in Pakistan has failed to achieve the double bottom line objectives;

iii) Islamic microfinance is preferred over conventional microfinance in Pakistan due to the country's Muslim majority;

iv) Islamic microfinance can be used as a replacement of existing microfinance to achieve the long-term goals of poverty alleviation in Pakistan;

v) The probability of Islamic microfinance's successful implementation in Pakistan is high.

1.4 Key objectives of the Study

This study investigates the limits and prospects of conventional and Islamic microfinance for poverty alleviation in Pakistan. To address this objective, the study undertakes a multipronged analysis. First, it assesses the performance of conventional microfinance in terms of financial sustainability and social outreach[1]. Second, it examines the perceived differences between conventional and Islamic microfinance, based on a sample survey. Third, it proposes a mosque-based Islamic microfinance model to overcome the shortcomings of existing microfinance. Last, the successful implementation of Islamic microfinance model is tested through Linear Probability Model (Binary Dependent Model).

1.5 Analytical and Methodological Framework

[1] The way of providing credit facilities to the extremely poor and deprived through microfinance (Ambe Shu and Oney, 2014; CGAP, 2007).

The performance evaluation of conventional microfinance is conducted by using financial performance indicators and social performance indicators. The main reason behind the evaluation of both financial and social performance is that microfinance is intended to achieve the double bottom line objectives (Tulchin, n.d.; Brau and Woller, 2004; Lewis, 2008; Gutiérrez-Nieto, Serrano-Cinca, and Molinero, 2009). The double bottom line encompasses the concerns for both social and financial performance (CGAP, 2007). Although microfinance institutions share some common characteristics with traditional banks, they are slightly different from the conventional banking institutions in terms of social services they provide to the society; therefore, it is generally expected that microfinance should perform well on both fronts. Traditionally, financial performance is measured through financial sustainability and financial self-sufficiency, while social performance is measured through social outreach (Yaron, 1994; Dunford, 2002; Navajas, Schreiner, Meyer, Gonz´alez-Vega and Rodr´ıguez, 2000). Although social outreach is measured though proxy variables, no uniform criteria are established yet to determine social performance (Zeller, Sharma, Henry and Lapenu, 2006). 'Data Envelopment Analysis' (DEA) has extensively been applied in the literature to assess the performance of banking institutions. Some of the studies that used DEA for the performance of banking and microfinance institutions are Yeh (1996); Miller and Noulas (1996); Brockett, Charnes, Cooper, Huang, and Sun (1997); Cook, Hababou, and Tuenter (2000); Berger, DeYoung, Genay and Udell (2000); Grigorian and Manole (2002); Manandhar, and Tang (2002); Mercan, Reisman, Yolalan and Emel (2003); Cooper, Seiford, and Zhu. (2004); and more recently, Gutiérrez-Nieto, Serrano-Cinca and Molinero (2009).

This study extends the DEA model to investigate the performance (both financial and social performance) of MFIs in Pakistan for the period 2007 to 2011 with the availability of data. In addition, a financial ratio analysis is also carried out to check the robustness of our empirical findings and to get a financial comparison with other south Asian countries. The dataset is constructed by compiling the data for 354 MFIs located in six countries in South Asia for the period 2003~2011. The dataset comprises the statistics of 13 MFIs from Afghanistan, 74 MFIs from Bangladesh, 178 MFIs from India, 41 from Nepal, 27 MFIs from Pakistan, and 21 from Sri Lanka. The data are collected from 'microfinance information exchange' (MIX) which is a U.S based data service provider. The cross-country comparison of financial performance of conventional microfinance institutions is based on four broad categories of financial performance measures following the guiding principles provided by microfinance information exchange (MIX). The financial performance categories include (i) Serving the poor; (ii) Financial Sustainability; (iii) Efficiency; and (vi) Competition. The financial performance sub-categories are as below;

i). Serving the poor has three financial measures;

a) Depth of Microfinance.

b) Breadth of Microfinance.

c) Quality of Portfolio.

ii). Financial Sustainability has two measures;

a) Returns on Assets (ROA)

b) Returns on Equity (ROE).

iii). Efficiency has three commonly used measures;

a) Operating Expenses Ratio (OER).

b) Operational Self-Sufficiency (OSS), and cost per loan.

c) Capital Adequacy Ratio (CAR).

iv). Competition is measured by

a) The Panzar-and-Rosse Model.

b) The Boone Indicator.

The perceived differences between conventional microfinance and Islamic microfinance are determined through primary survey data. The study also offers a new hypothetical model of Islamic microfinance for poverty alleviation in Pakistan. The last part of this study assessed the feasibility of Islamic microfinance implementation in Pakistan. For this purpose, an empirical investigation is conducted by using the survey data in Linear Probability Model.

1.6 Definitions and Terms

Double Bottom Line — It includes the financial bottom line and a second bottom line that provides the net results of social elements (Tulchin, n.d.; Brau and Woller, 2004; Lewis, 2008; Gutiérrez-Nieto, Serrano-Cinca, and Molinero, 2009). The double bottom line encompasses the concerns for both social and financial performance (CGAP, 2007).

Double Dipping	It refers the ability of the borrowers to borrow from multiple sources (Ahmed, 2002).
Financial Sustainability	It refers the ability to cover the administrative costs and prioritize activities to accomplish the mission (Leon, 2001, p. 7). Financial capacity of the organization to grasp the opportunities and react to unexpected threats while maintaining the general operations of the organization (Bowman, 2011 refer in Sontag-Padilla, Staplefoote, and Gonzalez Morganti, 2012, p.2).
Group Lending	The method of microfinance credits to a group of borrowers rather than a single borrower (CGAP, 2007).
Mission Drift	The behaviour of microfinance institutions regarding lending to relatively well-off borrowers rather than the poorest of the poor (Mersland, and Strøm, 2010; Armendáriz, and Szafarz, 2009; Copestake, 2007).
Shariah	The system of religious laws that Muslims follow (Oxford); the religious laws based on the Quran that Muslims follow (Merriam-Webster); Shariah is nothing more than a consideration and extrapolation of Quran and Sunnah (Kamali, 2008, p. 14; Warner, 2015, p. 6).
Silver Bullet	Something that very quickly and easily solves a serious problem (Merriam-Webster); a bullet made of silver, supposedly the only weapon that could kill a werewolf (Oxford Learners); a magical solution of all problems of poor (Kernani, 2007; Financial Times, 16 December 2010; Holingworth, 2014).
Social Outreach	The way of providing credit facilities to extremely poor and deprived through microfinance (Ambe Shu and Oney, 2014; CGAP, 2007).

Welfarist	The approach which emphasizes on direct poverty alleviation through microfinance, in contrast Institutionalist is the approach which is more focused on institution's stability rather than poverty alleviation (Woller, Dunford, and Woodworth, 1999).

1.7 Significance of the Study

This study has practical implications that make it relatively unique. This research highlights the grey areas of conventional microfinance by evaluating their financial and social performance. This timely effort can be used not only to enhance the social and finance efficiencies of conventional microfinance but also to pave the way for an alternative system of microfinance in the form of Islamic Microfinance. With an efficient microfinance, poverty alleviation efforts will be accelerated in Pakistan. The study explores the possible implementation of Islamic microfinance which is yet to be employed in Pakistan despite having a Muslim-dominated country. It may increase the outreach of microfinance in Pakistan that is currently being underutilized or underserved.

1.8 Outline of the Research

Chapter 1 (Introduction) sets the basic premises of this research which starts with explaining the evolution of microfinance and its shiny period after the award of Nobel Peace Prize 2006 to Muhammad Yunus of Bangladesh. Such a golden period of microfinance had led to its being considered a "silver bullet"[2]in development discourse.

[2] A magical solution for all the problems of the poor (Kernani, 2007; Financial Times, 16 December 2010; Holingworth, 2014).

The effectiveness of microfinance is highly acknowledged throughout the world but the fruitful outcomes couldn't be reaped in Pakistan. It also explains how microfinance can be used to break the VCP for poverty alleviation. The problem statement section defines the underutilization of microfinance in Pakistan; the conventional microfinance covers only 7% of potential borrowers while the Islamic microfinance is yet to be implemented in Pakistan. The research questions and hypotheses are designed to investigate the role of conventional microfinance through the prism of financial and social efficiencies, and the scope of Islamic microfinance as an alternative system of microfinance in Pakistan. The analytical and methodological framework section explains the econometric tools and methods used in this study. The definitions and terms section describes some of the technical terms used in this study. The next three sections clarify the significance of the study, the organization of the dissertation, and the study's scope and limitations respectively. Chapter 2 discusses poverty and poverty alleviation in Pakistan. Section one of this chapter gives an overview of Pakistan from its inception to the current state of economy, section two exhibits the trend of rural and urban poverty, the trend of economic growth and poverty headcount ratio measures, the bifurcation of poverty across provinces, and the measurement of HDI, section three explains the determinants of poverty in Pakistan, and section four highlights the poverty alleviation strategies in Pakistan such as Land Reforms, rural development programs, social development programs, social safety nets and microfinance, and section five defines the current state of microfinance in Pakistan. Chapter 3 covers the existing literature on microfinance and poverty alleviation. Section one discusses the role of conventional microfinance in poverty alleviation while section two defines the poverty alleviation through Islamic microfinance, section three

discusses the previous literature on Islamic microfinance, section four sheds light on applicability of linear probability model, and section five sums up the entire chapter . It is pertinent to note that this chapter first draws the previous studies that favor the positive role of microfinance in poverty alleviation, and then it discusses the studies that show otherwise. Chapter 4 describes the methodological framework of this study and it is divided into four components. The first component shows the methodology used to evaluate the performance of conventional microfinance through efficiency scores that were collected through DEA. Component two defines the performance evaluation of conventional microfinance through Financial Ratios Analysis (FRA). In component three, data projection method is used on primary survey data that were collected through survey questionnaire to get the perceptions of people about conventional and Islamic microfinance in Pakistan. Component four defines the methodology of linear probability model to get the probability of successful implementation of Islamic Microfinance in Pakistan. Chapter 5 shows the empirical results of this study which are presented according to the order of investigation explained in the earlier chapters. The final chapter (Chapter 6) presents the conclusions based on the empirical results, a number of policy recommendations, and hypothetical models for poverty alleviation through microfinance.

1.9 Research Significance, Limitations, and Future Research Directions

This study does not directly evaluate the impacts of microfinance on poverty alleviation but assesses the performance of conventional microfinance and explores the prospects of establishing the Islamic version of microfinance in Pakistan. Inasmuch as

poverty has different faces and different meanings to different people in different circumstances, its estimation and eradication demand an analytical perspective aligned with country-specific characteristics including the sociocultural values. Although a number of countries have continuously been trying for decades to combat poverty through different tools and strategies, the replication of models which are successful in one country does not guarantee the same success in another country. By the same token, the replication of the Grameen bank's model of microfinance doesn't guarantee the same success in Pakistan because of characteristically different socioeconomic conditions. The interest-attached microfinance used by the Grameen bank in Bangladesh could not get the mass-attention in Pakistan where majority of the people strictly adhere to *Shariah principles* which consider interest-attached transactions as a biggest sin. In such a sociocultural setting, proposing a model aligned with Islamic jurisprudence ensures its significance and gains prospect as an important addition in the existing body of knowledge. Furthermore, the model considers an important religious obligation of *Zakat* which is obligatory (*Fardh)* on every Muslim who has at least 88.12 grams (approx.) of gold or 578 grams (approx.) of silver for a year. In Pakistan where almost 95% of the people practice Islam, a model that integrates *Zakat* and uses other charities for entrepreneurial loans enhances its financial sustainability and increases its social outreach. Further research can examine the possible replication of the proposed model in other Muslim countries where the probability of collecting funds through *Zakat* is high. Other studies can also test the model's external validity by having a larger sample. More importantly, anthropological research can shed light on the factors that influence the successful implementation of the proposed model at the micro level.

CHAPTER 2
POVERTY AND POVERTY ALLEVIATION IN PAKISTAN

This chapter briefly introduces the Islamic Republic of Pakistan and discusses the state of poverty and poverty alleviation efforts in the country. It also highlights the context where microfinance efforts for poverty eradication are performed. The socioeconomic condition of Pakistani society is important to understand because it plays an important role in microfinance functioning. The modern microfinance products are designed to cater the needs of poor people according to the characteristics of the society. The current practice of conventional microfinance in Pakistan clearly contradicts the characteristics of Pakistani society that is vastly dominated by Islamic jurisprudence called the *Shariah*.

2.1 Pakistan: An Overview

The Islamic Republic of Pakistan came into existence on August 14, 1947. It is the only country in the world that got its independence in the name of religion (Islam) from the British Rule in formerly colonized India. The partition of the sub-continent took place under the two-nation theory of Mr. Muhammad Ali Jinnah, the founder of Pakistan and popularly known as the *Quaid-e-Azam*. The two-nation theory was the result of constant manhandling of Muslims in British-ruled India by other religious identities specially the Hindus. A separate country for the Muslim majority was the doctrine first proposed by the great poet of the East, Allama Muhammad Iqbal who raised this thought in his speech as the president of All India Muslim League in December, 1930 (Giorgio, 2007). Consequently, it became the root cause for the creation of a new sovereign state, presently known as the Islamic Republic of Pakistan.

Pakistan has a total land area of 310,527 square miles. According to the U.S. Department of State, 95 percent of Pakistan's 174 million population practice Islam and the rest of the five percent have other religions like Sikhism, Hinduism, Christianity, Buddhism etc. (US Department of State, 2010).

Figure2.1: The map of West Pakistan and East Pakistan with India in the middle
Source: Short (2014, December 20)

It is the 6th most populous country in the world where population has recently reached about 184 million (Population Census Organization of Pakistan, July 2013 estimates). In terms of purchasing power parity of 'gross domestic products' (GDP), the World Bank (2014) ranks Pakistan at 23rd in 25 largest economies in the world. It is an agrarian country where agricultural share is more than 20 percent in output and more than 40 percent in employment. Being an agrarian country, the split between rural and urban is 66% to 34% (Nation Masters, 2013). The main export commodity is textile but it has a narrow exports base, limited to a few exporting partners like the United States, China, Afghanistan, Germany and the United Kingdom. The exports of the country are highly concentrated around textile products, cotton, rice and refined petroleum (OEC, 2015). In

terms of production characteristics, Pakistan's rank is 90 according to the Economic Complexity Index (2014 estimates) with -0.752 ECI value (The Atlas of Economic Complexity, 2014). Pakistan has been facing the issues of severe unemployment for decades. The reported figure of unemployment in 2013 was 6.6% but the actual unemployment was much higher than reported. Food inflation is quite mercurial and recently peaked, causing poverty to rise in the country while the balance of payments remained negative due to the instability of domestic currency and a sharp decline in Pak Rupees. Foreign investment is not high due to law-and-order problems and unfriendly business conditions. The country has been suffering from terrorism activities, mainly operated from the Northern areas of Pakistan and the border areas of Afghanistan. To uproot terrorism in Pakistan and Afghanistan, after 9/11, Pakistan became an ally of the US forces in war-on-terror which seriously endangered its own sustainability. The country has faced serious repercussions of that decision such as some brutal terrorist attacks in various parts of the country. Tens of thousands innocent human lives and infrastructure have been destroyed due to internal terrorism activities. The business environment has become drastically affected, discouraging foreign investments. Nevertheless, despite economic deterioration, the inflow of foreign remittances had increased and reached to an average US$1 billion per month. The country's economic growth is significantly low, at 3.5% per year in the last five years. Political destabilization and low level of foreign investments are the main causes of economic slowdown (CIA World Fact Book, 2014).

2.2 Poverty in Pakistan

There are various definitions of poverty as poverty measurement scales are vastly dispersed from marginalization of basic necessities to exclusion of electoral process. However, a frequently used measure is income threshold that specifically describes poverty as the lack of monetary resources to get basic necessities. In addition, the repudiation of resources and opportunities describe poverty which is closely linked to income inequality. As per UNDP estimates, about 80 percent of population in the world lives in countries where income differentials are wider. Only 5 percent of the total income belongs to 40 percent of the poor, while 75 percent of all income belongs to the richest 20 percent in the world (Aslam, 2009). One of the renowned developmental economists Sen (1976) defines poverty as a capabilities shortfall resulting from the deprivation of opportunities. The poor lack resource opportunities that make them unable to participate actively in society (Noland and Whelan, 1996). The stance taken by Townsend (1979: 31) is objectively oriented on relative deprivation. To him, poverty is the level of resourcefulness that makes them excluded from the society, less than the averages, for both individuals and groups of people. Although he objectively sees poverty, he did not deny the frequently debated link between poverty and income inequality. The negative repercussions of social deprivation bring the unequal distribution of resources that often lead to increase social inequality. Orshansky (1969) sees poverty from a policy perspective. In her subjective approach, poverty is like beauty which lies in the eyes of the beholder. To her, no preconceive notion is enough to explain poverty because it is based on value judgment so people can subjectively differ in their measurement of poverty. It seems unnecessary to measure poverty without having some plans for its eradication. In Orshansky's words "There is no particular reason to count

the poor unless you are going to do something about them." Any concept intended to influence public thinking must have some sociopolitical credibility. However, Townsend (1979:38) criticizes her selective approach by asserting that reliance on political acceptance or imagination for socioeconomic measures is not sufficient and must instead rest on verifiable social conditions. Although poverty is a value judgment, it can still be defined objectively. The preceding review allows us to conclude that the narrow and old-age concepts of both absolute and relative poverty do not portray the real picture. The concept of capability deprivation and social exclusion based on inequality and injustice in society is more appropriate to define poverty. Definitely, it is not to say that the definitions of poverty from absolute or relative measures are invalid but the demarcation of sociopolitical rights and wisdom necessary to participate in society is just as essential as the definition of poverty. In Pakistan, the present state of poverty is as high as it was in the early 1990s (Arif and Farooq, 2012). A recent study shows that approximately 37% people live below extreme poverty line, 15% of the households are ultra-poor and 11% are poor (Malik, Chaudhry and Hanif, 2012). In the last decade of the 20th century, the trends of poverty in the country show a gradual increase from 26.8% in 1992-93 to 30.6% in 1998-99. The increase in poverty is accompanied by six percentage point increase in rural poverty and the increasing trend continued till the first couple of years in the 21st century (Arif and Farooq, 2012). The long term trend shows that the agricultural GDP growth per capita during 1999 to 2005 was just 0.3% per annum and the rural poverty rates in 2004-05 were as high as in the 1990s. The social development indicators in Pakistan remained lower than its other counterparts in South Asia. The incidence of poverty is higher in rural than in urban areas due to a number of factors including the backwardness of the rural areas in

Pakistan (ADB, 2002; World Bank, 2005). The proportion of rural poor (living below national poverty line) declined to 18% in 1989 from 33% in 1978 (14 million in constant numbers), but the beginning of the 21st century witnessed a sharp increase in poverty when it jumped to 38 million (39%) in 2002 (Arif and Farooq, 2012). The higher incidence of rural and urban poverty is defined through the headcount ratio as shown in Table 2.1:

Table 2.1: Rural and Urban poverty (in %) (Headcount ratio measure)

Year	Rural	Urban	Overall
1992-3	24.60	28.30	26.80
1996-7	22.60	33.10	29.80
2000-1	20.90	34.70	30.60
2004-5	22.70	39.30	34.50
2005-6	14.90	28.10	23.90
2007-8	13.10	27.00	22.30
2008-9	-	-	29.90

Source: Reproduced from Arif and Farooq (2012)

The growth-employment-poverty nexus shows that higher growth significantly affects the standard of living of the people and reduces poverty. Economic growth plays an important role in poverty eradication (Adams and Page, 2005; Ravallion, 2001). The positive impact of economic growth on poverty is evident as GDP growth significantly decreased from 2.55% in 1998 to 1.98% in 2001, while the poverty headcount ratio had increased from 57.90 to 64.30. The trend shows that higher economic growth is accompanied by poverty reduction until 2005 (see Table-2.2).

Table 2.2: Economic Growth and Poverty Headcount Ratio in Pakistan

Year	GDP growth (annual %)	Poverty headcount ratio at national poverty lines (% of population)
1998	2.55	57.90
2001	1.98	64.30
2004	7.37	51.70
2005	7.67	50.40
2007	4.83	44.10
2010	1.61	36.80
2011	2.75	36.30
2013	4.37	29.50

Source: Author's calculation based on WDI of the World Bank

In contrast, the Kuznets's inverted U-curve hypothesis exhibits that higher growth initially leads to higher inequality among the population (Thornton, 2001). The study by Cheema and Sial (2012) established a significantly positive link between poverty and inequality in Pakistan. Their empirical findings confirmed that positive effects of economic growth could not be transferred to the poor and that economic growth paved the way for higher inequality. The growth elasticity of inequality is higher in the urban zones than in the rural regions and the growth effects are offset by the increase in inequality. The absolute magnitude of gross elasticity of poverty to growth is higher than the net elasticity of poverty to growth. Also, the net elasticity of poverty to growth is higher in rural areas than in urban areas. The regional patterns of poverty in Pakistan are presented in table 2.3:

Table 2.3: Headcount Ratio across provinces over time in Pakistan

Provincial Region	1993	1994	1997	1999	2002	2005	2006	2008
Punjab (Rural)	25.48	33.97	28.74	34.24	35.85	27.89	26.67	19.06
Punjab (Urban)	21.28	18.29	17.38	23.69	23.41	16.26	12.96	10.45

Sindh (Rural)	28.64	32.14	20.20	33.13	45.02	23.87	32.20	23.02
Sindh (Urban)	16.68	12.19	12.10	15.09	20.01	11.14	11.11	08.95
KPK (Rural)	35.04	40.35	43.96	42.93	43.39	34.80	31.02	19.20
KPK (Urban)	24.48	26.90	28.12	25.89	29.10	22.10	24.81	13.17
Baluchistan (Rural)	26.21	28.14	43.21	20.93	37.74	28.85	57.05	55.21
Baluchistan (Urban)	30.43	16.96	23.26	22.78	26.18	18.78	33.74	26.87

Source: Reproduced from Cheema and Sial (2012)

The intra-provincial analysis revealed that poverty initially increased in all provinces until 2002 and then decreased a bit afterwards. The incidence of poverty is highly prevalent in Baluchistan province especially in rural Baluchistan. It is the most backward region of the country in terms of economic growth and poverty prevalence.

The progress of the country is also measured through human development because poverty is also defined as the deprivation of opportunities and social exclusion due to inequality and injustice in society. The progress evaluation based on human development is measured by the method of 'Human Development Index' (HDI) introduced by the 'United Nations Development Program' (UNDP). Table 2.4 exhibits the details of HDI for Pakistan during 1980 to 2014:

Table 2.4: Pakistan's HDI trends based on consistent time series data and new goalposts

YEAR	Life expectancy at birth	Expected years of schooling	Mean year of schooling	GNI per capita (2011 PPP$)	HDI Value
1980	57.00	3.70	1.80	2,437	0.353
1985	58.60	4.10	2.10	2,836	0.380
1990	60.10	4.40	2.30	3,094	0.399
1995	61.50	4.80	2.80	3,284	0.423
2000	62.70	5.20	3.30	3,324	0.444

2005	63.90	6.20	4.50	3,996	0.495
2010	65.10	7.40	4.60	4,380	0.522
2011	65.40	7.50	4.70	4,453	0.527
2012	65.70	7.70	4.70	4,557	0.532
2013	66.00	7.80	4.70	4,680	0.536
2014	66.20	7.80	4.70	4,866	0.538

Source: Human Development Report (2015)

Table 2.4 shows that Pakistan's HDI value for 2014 is 0.538, giving it a rank of 147 out of 188 countries in the world. The overall HDI value has increased from 0.353 in 1980 to 0.538 in 2014 or an increase of 52.5%. The country is still in the "low development group" with below the average value of HDI (0.607) for countries in South Asia. Also, the 'inequality adjusted human development' (IHDI) shows that Pakistan's HDI dropped to 0.377 from 0.538 when it is discounted for inequality. It shows a drop of 29.9% due to inequality in distribution of HDI indices (Human Development Report, 2015). Table 2.5 shows the cross country comparison of HDI in South Asia.

Table 2.5: Cross country comparison of HDI in South Asia

Regional Rank	Country	Human Development Index (HDI)	HDI Rank	Life expectancy at birth	Mean years of schooling	Expected years of schooling	Gross national income (GNI) per capita	Human Development Index (HDI)
		Value		(years)	(years)	(years)	(2011 PPP $)	Value
		2013		2013	2012	2012	2013	2012
1	Sri Lanka	0.750	73	74.3	10.8	13.6	9,250	0.745
2	Maldives	0.698	103	77.9	5.8	12.7	10,074	0.695
3	India	0.586	135	66.4	4.4	11.7	5,150	0.583
4	Bhutan	0.584	136	68.3	2.3	12.4	6,775	0.580
5	Bangladesh	0.558	142	70.7	5.1	10.0	2,713	0.554
6	Nepal	0.540	145	68.4	3.2	12.4	2,194	0.537
7	Pakistan	0.538	146	66.6	4.7	7.7	4,652	0.535
8	Afghanistan	0.468	169	60.9	3.2	9.3	1,904	0.466

Source: Author's compilation of Human Development Report (2014)'s data

Table 2.5 shows that no South Asian country falls in the category of 'very high human development' category of HDI and only Sri Lanka have achieved the category of 'high human development' with HDI value of 0.750 which is higher than the average HDI value in the world (0.720). The category of 'medium human development' includes Maldives, India, Bhutan and Bangladesh, and the category of 'low human development' contains Nepal, Pakistan and Afghanistan. These HDI scores clearly indicate that despite showing enormous economic growth, the process of human development could not be aligned with the pace of growth. In addition, the increasing trend of GDP per capita clearly exhibits unequal distribution of income which is a dominant factor in income inequality.

2.3 Determinants of Poverty in Pakistan

A number of determinants are responsible for poverty prevalence in Pakistan; they can be broken down into two broad categories i.e. administrative factors and socioeconomic factors (Arif and Farooq, 2012). One of the main administrative factors is governance. The governance of the country affects its economic path and ultimately results in a better life for its citizens. Good governance is an essential support to achieve economic growth and development (ADB, 2002). Unfortunately, Pakistan has been lacking good governance throughout its history. The era of the 1990s witnessed a topsy-turvy political condition with evidences of loot and corruption by the politicians and public sector plunders. The political stability and peace are necessary ingredients of economic growth and business promotion. A business-friendly environment entices the domestic investments as well as the foreign investments. On contrary, political instability weakens consumer-n-investor's confidence on banking and finance sectors that ultimately paves the way for

capital flights. Apart from lack of good governance social injustice and unequal playing fields thrash the potential of economic growth and poverty alleviation in Pakistan. Since its inception in 1947, the country has been in a constant political rivalry between politicians and armed forces. The period of marital coup in Pakistan is as almost equal to the period of democratic regimes; therefore, such rivalry exerts the pressure on socioeconomic institutions and causes a failure of institutionalization in Pakistan. Social injustice is another prevalent phenomenon in Pakistan that drags it in constant cycles of poverty. A weak regulatory framework with inadequate access to justice cause a failure of property rights enforcement and protection. The lack of transparency in resource allocation (both budgetary and non-budgetary) increases the sense of deprivation in poor and a major cause of poverty prevalence in Pakistan. A common use of political power for the exploitation of poor is a main concern in the vulnerability, social injustice and deprivation of poor in the country.

The trend of poverty is not declining in Pakistan rather it shows a fluctuated one. The growth-employment-poverty nexus couldn't achieve the target of poverty reduction. The poor and deprived have been trapped in a continuous cycle of poverty due to ineffective governmental policies. The country became an ally of the US forces in war-against-terrorism after the brutal incidence of 9/11 but the decision threatened its own sovereignty and peace; the militancy increased in the country and the intensity of terrorist attacks has intensified. The overall uncertainty reduced the business potential and foreign direct investment. The budgetary allocations were not sufficiently allocated on human development sectors like education, health and infrastructure development. The budget

allocation for education is just about 2% of GDP and the share of health in budget is only about 1% of GDP (Arif and Farooq, 2012). The agricultural growth is not substantial and up to the mark to eradicate poverty at rural level. One of the significant factors is the unequal distribution of lands due to the failed policies of land reforms in the country. During the 1970s and 1980s the agricultural growth had effectively reduced the rural poverty but the trend did not continue in the 1990s onwards (World Bank, 2005). The data indicate that 73% of farms were owner-operated in 1990 and the rest were under tenancy agreements. The land ownership increases the potential of growth in cultivation and it enhances the access to credit through formal banking and financial sectors (ADB, 2002). Another important factor for poverty prevalence in the country is macroeconomic instability. The 'International Monetary Fund' (IMF)'s paper regarding the strategy to curb poverty suggests that the poor are mainly distributed around the poverty line; therefore, the growth in income and distribution has positive effects on poverty reduction but the relative increase in prices offsets the potential of real income growth. The cost of volatile income growth is higher for the poor (IMF, 2005).

2.4 Poverty Alleviation Strategies in Pakistan

According to IFAD (2015) Pakistan has adopted a national strategic plan to eradicate poverty with the following six point agenda: i) acceleration of economic growth; ii) macroeconomic stability; iii) development of human capital; iv) augmenting target interventions; v) expanding social safety nets; and vi) improving governance. The social safety net or social safety programs to mitigate poverty are not conducted under the umbrella of any specific institution in Pakistan (ADB, 2002) but the country's "vision

2030" is considered a key policy document alongside medium term development framework 2011-2014 and poverty reduction strategy paper-II (IFAD, 2015). Another renowned project for poverty alleviation in Pakistan was 'Pakistan 2025: One Nation One Vision' that aimed to achieve 'millennium development goals' (MDGs) and 'sustainable development goals' (SDGs) (LSE, 2014). Poverty in Pakistan is considered mainly a rural phenomenon, which is why most of the policies are focused on rural poverty alleviation. Some of the key elements of these policies focus on land reform, rural development program, social development program, social safety net schemes, and microfinance.

Land reforms addressed a biggest hurdle in growth for an agricultural country, namely unequal land distribution. The concentration of land ownership was severe in early 90s as Khan (1999) reported that the "*large farms (defined by the Census as > 60 acres) accounted for a negligible number of total farms in both 1980 and 1990, but the area they cultivated more than doubled from 3 percent to 7 percent of the total.*". The land ownership situation has not changed since 2000. Only 37% of all farmers own land and out of that 61% own less than 5 acres. Government-owned lands were distributed among the poor thrice in the history of Pakistan (see Table 2.6) but such corrective measures did not impact a lot on poverty because the distributed lands were quite a meager relative to the need of poor people. All previous attempts for land reforms in Pakistan miserably failed due to a lack of follow-up, unavailability of farm inputs and a failure to provide an easy access to rural credits.

Table 2.6: Land Reforms in Pakistan

Reforms	Ceiling (Acres)		Area (000 Hectare)			Beneficiaries (000)
	Irrigated	Non-Irrigated	Resumed	Distributed	Balance	
1959	500	1000	1022.90	955.70	62.30	186.6

			(5.6%)			
1972	150	300	481.20 (2.55%)	295.90	185.30	71.5
1979	100	200	1578.30 (8%)	1290.10	288.20	272.6

Source: (Qureshi, 2001; Arif and Farooq, 2012)

Rural development programs were conducted just after the inception of Pakistan. In the early 1950s, the village aid program (1952) was launched to target rural development, including progress in production, health and education sectors. The other similar projects include Rural Works Program (1963-1972), the People's Works Program (1972-1982), the Integrated Rural Development Program (1972-1980), the Five-Point Program (1985-1988), the Tameer-e-Watan Program (1991), and the Khushhal Pakistan Program (1991-2001). The total expenditures on these development programs reached to Rs.400 billion but unfortunately not even a single program achieved its targets due to mismanagement and a lack of dedication.

The social action plan (SAP) was initially launched in mid-1980s in two phases. The target areas were education, health, water supply, sanitation, and population welfare. The program could not achieve its target due to the lack of management and follow-up; the allocated budget for SAP was Rs.600 billion but only Rs.356 billion was used and the rest of the development funds lapsed. In the second phase of SAP during (1997-2002) only 45% of its allocated budget was used (Arif and Farooq, 2012).

As for social safety net schemes, direct income transfers to the poor were employed e.g. Benazir Income Support Program (BISP), Zakat, Employees Old Age Benefit

Institution (EOBI), food support program by Pakistan Bait-ul-maal, Employees Social Security Institutions (ESSI), Pakistan Poverty Alleviation Funds (PPAF), and the small loans by Zarai Taraqiati Bank (Arif and Farooq, 2012).

Microfinance is one of more recent poverty alleviation strategies adopted by the government. The provision of small credits in the form of microfinance had gained momentum after the success story of the Grameen Bank in Bangladesh. The Orangi Pilot Project (OPP) and the Aga Khan Rural Support Program (AKRSP) were considered the pioneers in the field of microfinance in Pakistan. The existing practice of microfinance is mainly dominated by the conventional or interest-based microfinance.

2.5 Current state of Conventional Microfinance in Pakistan

Microfinance practitioners in Pakistan can be distinguished into three broad categories: "micro-finance institutions" (MFIs); micro-finance banks (MFBs), and "rural support programs (RSPs). MFIs are mostly 'non-government organizations' (NGOs) having non-bank status, registered under the Societies Act, Trust Act, and Companies Ordinance. 'Micro finance banks' (MFBs) have a commercial bank license but their services are exclusively for microfinance. The first MFB was established through a presidential decree in 2000. Currently ten MFBs are licensed, eight of which are working at the national level and two at the provincial level. 'Rural support programs' (RSPs), characteristically, an NGO with the status of non-profit organization, are specifically focused on rural areas and working under the jurisdiction of 'securities and exchange commission of Pakistan' (SECP).

Out of fifty microfinance practitioners who are registered with 'Pakistan Microfinance Network' (PMN), nine are MFBs, thirty-three are MFIs, and eight RSPs. At the end of 2014, the microfinance industry had crossed the mark of 3 million borrowers (3.14 million) a first in the history of Pakistan (Pakistan Microfinance Review, 2015). Despite some serious growth challenges, microfinance growth has been accompanied by a corresponding growth in micro-savings and micro-insurance. The main challenges to microfinance's growth include some macro-level factors such as the shortage of energy in the country, inconsistent interest rates fixation, and a trend of slow economic growth, serious threats to sustainability from the macroeconomic side like energy shortage, a consistent pattern of interest rate reduction and slow economic growth. Regarding the regulatory framework, one of the significant developments in regulations was the issuance of prudential regulations by the State Bank of Pakistan on June 10, 2014[3]. These regulations allow the microfinance banks to use formal clearing system which will greatly affect the mechanism of deposit mobilization. On the regularization front of the non-bank financial institutions, the Securities and Exchange Commission of Pakistan' (SECP) headed the steering committee of all stakeholders including the State Bank of Pakistan (SBP). It is expected that the committee will finalize the regulatory framework by the end of 2015. Another important development on regulations is the enhancement of a 'micro credit guarantee facility' (MCGF) which allows the MFIs to get loans from commercial banks and can issue redeemable capital. In 2012, 'microfinance credit information bureau' (MFCIB) was established with the help of SBP, 'Pakistan poverty alleviation fund'

[3] Details are available at : http://www.sbp.org.pk/acd/2014/C3-Annex.pdf

(PPAF), ‘department for international division’ (DFID), and ‘international finance corporation’ (IFC), aimed at resolving the issues of information asymmetry, adverse selection, moral hazards, over-indebtedness and multiple borrowings. A number of MFIs are consulting and availing the facilities of MFCIB for loan sanctioning through formal queries. A viable development towards outreach expansion is the evolution of branchless banking which is focused on granting loans through digital medium. Although currently a few MFIs have adopted their branchless banking through cellphones, other market players are also extending their services with the help of digital channels (Pakistan Microfinance Review, 2014).

CHAPTER 3

LITERATURE REVIEW
CONVENTIONAL AND ISLAMIC MICROFINANCE

This chapter reviews existing literature on microfinance's role in poverty alleviation. It discusses both "conventional" and "Islamic" microfinance approaches. The first part reviews the definitions of microfinance and the growth of its development initiative as a means of poverty alleviation. It also describes the state of conventional microfinance in South Asia and summarizes the literature, including selected criticisms, on conventional microfinance. The second section briefly describes Islamic microfinance and sheds light on its viability in poverty alleviation efforts.

3.1 Poverty Alleviation through Conventional Microfinance

3.1.1 Defining microfinance

Since its inception, microfinance has been considered a major tool for poverty alleviation due to its versatility and accessibility that differentiates it from other available methods of poverty alleviation. The simple or textbook definition of microfinance focuses on the services that it provides, but the core definition exhibits not only the literal meanings but the element of responsibility as well. The literal meaning of microfinance asserts 'a one millionth part of finance.' Adding responsibility to the definition makes microfinance a firm way of providing financial services to poor, deprived and unbanked people. Otero (1999) looks at microfinance as the financial provision to the poor and self-employed. Wrenn (2007) defines microfinance as the financial services provider to deprived people

especially to those who are underserved by the formal financial sector. These services include loans, savings, and insurance. Marulanda and Otero (2011) enhanced the core definition by asserting that financial inclusion of the poor through microfinance provides a shield against the "up-and-down income streams" in poor's lives due to the lack of financial resources. The primary objective of microfinance was to satisfy the financial needs of the poor across the globe, but its noble objective is not merely to fill the income gap of poor but to lift them out of the poverty trap and to show them a way of successful financial management. Rhyne and Otero (2006) assert that the proper use of financial inclusion enlightens the poor about the ways of protection against catastrophic shocks. Expanding the canvas of financial inclusion can create better societies with the active participation of previously excluded people. The former Secretary General of the United Nations (UN), Kofi Annan said that 'Microfinance is an idea whose time has come.' Its accessibility would reduce poverty by generating income through jobs creation. Also, the sustainability of microfinance could be used to alleviate poverty in order to achieve millennium development goals (MDGs) of poverty reduction (UNCDF, 2005). At its inception, microfinance was just treated as microcredit whose objective was to help poor farmers as the initial outreach was limited to rural areas. But a worldwide acknowledgement made it an active tool for income generation and poverty reduction (Bateman, 2014). The definition of microfinance could not be completed without the expressions of Muhammad Yunus, Nobel Laureate and legend in the field of microfinance. He extended the basic idea of microfinance by asserting that 'right to credit' is to be included in the list of basic human rights like food, shelter and education (Grameen Bank, 2012; Akula, 2010; The Guardian, 2007; Yunus and Julis, 1999, p. 17). Such

pronouncements highlight the importance of microfinance for the sustenance of poor lives. Recent authors like Musa, Couchoro, and Ashta (2013) suggest that microfinance should look upon the existing financial products like equity, savings, insurance and remittances, alongwith its original goal of microcredit. Also, the consistent monitoring and evaluation of microfinance products can maintain the balance between the poor's needs and financial products without any exploitation of both lenders and borrowers. The definitions of microfinance covered above, draw a basic framework that heavily depends on microcredit or the form of tiny credit to poor, unbanked, and deprived people. However, the modernization of financial markets and products has paved the way for new and innovative microfinance products. Before describing those microfinance products and their innovative forms, it would help to shed light on the historical evolution of microfinance, formerly known as microcredit.

3.1.2 Microfinance in History: Selected Developments

Financial borrowing is not a new concept in the history. Ibn-Khuldun mentioned it in his famous writing of Al-Muqaddimah (1377, p. 364) and at another place while referring to the poem of *Sharif-ibn-Hashim* (p. 795). Formal financial institutions have been providing services to financially neglected poor for centuries. For example, the Irish Loan Fund (ILF) was the oldest one in the lot that was established in the 18th century with the objectives of uncollateralized loans to poor and needy people. Nevertheless, the history of modern microfinance can be considered during the 18th century when Spooner (1846, p.9) asserted that the poor entrepreneurs should acquire the credit on any agreed upon terms if they don't have their own means of investment for productive activities. In the context

of rural agricultural farmers, he emphasized that productive activities shouldn't be constrained due to the lack of financial resources and they must borrow to streamline consumption smoothing. The credit for starting village banking and credit unions could be given to Raiffeisen who established the first bank in Austria in 1886. The village bank movement, started by Friedrich Wilhelm Raiffeisen in Germany had reached around 2 million customer by the end of 1901. The Irish Local Fund, founded by Jonathan Swift in 1700s, was widely acknowledged in Ireland and reached around 300 local funds at the end of 1840s. Small loans on cheap interest rates were provided through (ILF) for a short span of time. In the early 18th century, Wakefield instituted the movement of savings bank to lift poor children and their parents out of poverty trench (Roodman, 2012). The last decade of the 18th century also marked the inauguration of the Peoples Credit Bank[4] and the Bank Perkreditan Rakyat in Indonesia (CGAP, 2006). Apart from informal credit sources, a range of diverse credit institutions was available in the field of microcredit lending. Domestic arrangement of credit cooperation had existed way before the inception of microfinance. For example, Rotating Savings and Credit Associations (ROSCAs) and Savings and Credit Cooperatives (SACCOs) are found across the world, e.g. Chit Funds in India, and BEE-SEE[5] in Pakistan, among others. Up until the early 1970s, the focus of microcredit was largely on rural agriculture farmers with the hope of productivity and income increase. State-owned banks and financial institutions were instructed to grant soft loans to poor and marginalized farmers. Those efforts were heavily supported by the states in the form of concessionary loans and subsidiaries. The experiments of 'development through tiny-loans' were being adopted around the globe especially in India, Pakistan,

[4] PCB later became the largest microfinance serving unit in Indonesia with around 9000 units.
[5] The root word came from the people who used to accumulate Rs.20 each (Bees is Urdu word for twenty).

Bangladesh, Brazil, and most of the poverty hit countries. Such experimental efforts include the success story of Muhammad Yunus, an economics professor in Chittagong, Bangladesh In 1976. He initiated tiny-loans to poor agricultural women in the form of group-lending [6]. The project got unexpected success and helped direct attention to microfinance for poverty alleviation.

The growth of microfinance has been particularly significant in South Asia. South Asia is home to almost 1.6 billion people where majority of the population (60%) live below the poverty line ($2 / day) and almost half of such population (54%) are financially excluded (South Asian Association of Microfinance Networks, 2015). Recent estimates by the 'microfinance information exchange' (MIX) indicated that the region has reached 54.1 million borrowers, with a gross loans portfolio of US$ 9.7 billion (MIX, 2013). The countries in this region have a very diverse financial development history as the region contains 46% of adults who have a bank account, which has significantly been increased from 32% in 2011. Sri Lanka is on top of the list with 83% adults having a bank account and both Afghanistan and Pakistan with merely 15% adults having a bank account (CGAP, 2015).

The microfinance industry shows an enormous growth in the South Asian region. At the end of 2014, the industry had reached to 58.5 million borrowers with 'gross loan portfolio' (GLP) of US$10.48 billion. India and Bangladesh are leading in the region with 28.69 million borrowers (US$4,978 million GLP), and 25.67 million borrowers (US$ 4,462

[6] The group lending method was later acknowledged throughout the world.

million GLP), respectively. Microfinance in Afghanistan, Pakistan and Sri Lanka moderately performed well during the same period. The overall sustainability could be considered satisfactory as the value of 'portfolio at risk' (PAR>30 days) is great than 1.6% (SAMN, 2015). Table 3.1 shows the financial indicators for the South Asian microfinance at the end of the second half of 2014.

Table 3.1: South Asian microfinance (at the end of 2014)

Country		Afghanistan	Bangladesh	India	Pakistan	Sri Lanka	TOTAL
Number of Branches	Fixed	149	17,702	10,251	2,527	863	31,492
	Mobile	-	-	-	11	-	11
Number of Staff		2,415	126,817	75,195	18,269	5,125	227,821
Micro Credit	Active Borrower (million)	0.17	25.67	28.69	3.14	0.84	58.51
	GLP (million)	126.64	4,462.00	4,978.00	664.3	251	10,481.94
Micro Savings	Active Savers (million)	0.24	32	-	8.52	-	840.76
	Savings (USD million)	23.1	2,472.00	-	432.8	-	2,927.90
Micro Insurance	Policy Holders (million)	-	212	30.31	3.75	-	55.26
	Sum insured (USD million)	-	182	9,459.80	601.2	-	10,243
Sustainability	Number of institutes with OSS> 100%	4	550	41	35	-	630
	Total Reporting instructions	14	550	46	41	-	651
	% of sustainable institutions	28.57%	100.00%	89.13%	85.37%	-	96.77%
Risk	Portfolio at Risk	2.1	3	0.31	1.1	-	1.63

* Data for Nepal is not included
Source: SAMN, 2015 (recompiled by the author)

3.1.3 Critical issues in conventional microfinance

The role of microfinance in poverty alleviation cannot be determined without addressing the following issues of serious nature. A well-designed microfinance program must have the capacity to reach the poorest of the poor. The non-targeted poor can exclude themselves from microfinance services if such services are offered without matching the needs of poor people. Selectively targeting the entrepreneurial poor may provide the financial sustainability to MFIs but at the expense of neglecting the poorest and thus hindering the goals of poverty alleviation (Navajas et al., 2000; Simanowitz, 2000 referred in Morduch and Haley, 2001). Some of these critical issues may be considered as "supply-side" or "microfinance institution-related" matters, while others as "demand-side" or borrower-oriented. Supply-side issues include: uncollateralized loans; adverse selection and moral hazard; high transaction costs; and information asymmetries. Demand-side issues include: exorbitant interest charges; and unethical recovery practices.

3.1.3.1 Uncollateralized loans

One of the main issues for MFIs is the provision of loans without collaterals which differentiates formal financial institutions that have been strongly criticized for not providing the loans to small entrepreneurs due to the lack of collateral. From a financial sustainability prospect, the collateral against loans ensures a sold loan-security against the possible default. The unsecured loans are considered a highly risky business by the formal financial system and such criteria discourage poor entrepreneurs to use formal financial services. Although the inception of microfinance opens the doors of financial services to

poor entrepreneurs, the issue of loan-security is not waived off completely. The method of group-lending (in which social-capital or peer pressure is used as a security) got success throughout the world (Marakkath, 2013, p.6), and it is considered a way of loan-security but a number of reported group-defaults cast doubts on its applicability. Joint liability in group lending increases the repayment rates and efficiency because contract enforcement becomes less costly and the probability of resource exploitation in case of default approaches to minimum (ibid, p.24, 47). Despite the success of group lending in microfinance, it is evidently proven that the repayment failure of one member of the group instigates the other members to follow and eventually the whole group defaults. On the other hand, individual-based lending is quite closer to conventional banking and finance. To address such issues, the methods of lending need to be modified under the current scenario to fine-tune the microfinance applicability and to make microfinance more useful in poverty alleviation.

3.1.3.2 Adverse selection and moral hazard

In the absence of collateral against loans, the main problem for microfinance is the selection of borrowers which is quite quintessential for a long run relationship between the borrowers and the lenders (in this case microfinance). The assurance of loan repayment especially from poor borrowers demands a systematic way of idiosyncratic risk minimization. Such pitfall increases the difficulties of MFIs in borrower's selection and in most of the cases, interest rate is used as a proxy to select the borrowers. This increases the risks of default because the target population of MFIs is usually considered the poorest strata of the society. MFIs charge high interest on highly risky loans on the verge of high-

risk high returns environment. At a certain level of interest rate, the poorest borrowers choose to leave the market without borrowing when their 'willingness to pay' approaches to zero. The exclusion of poorest-borrowers strikes dualistically, first, MFIs' core objective of poverty alleviation is not achieved, and second, rest of the borrowers in market borrow at high interest rates who have a very low probability of repayment. The adverse selection seriously hurt the financial sustainability of MFIs that creates an extra burden of subsidiary dependence, and in the long run, such phenomenon impends the whole microfinance system to collapse. The forced-savings method (borrowers are bound to save with MFIs) seems a solution of adverse selection problem (Armendáriz-de-Aghion and Morduch, 2000), but an additional book-keeping and management increases the cost of loans. Eventually, higher cost reduces the profits of MFIs that requires an increase in interest rates to match the revenue with cost and to keep the financial sustainability of MFIs intact.

3.1.3.3 High transaction costs

Another important issue revived in recent innovative development in microfinance industry is a high transaction cost. The emblem of high interest charges is always justified with high transaction cost by the MFIs as they entertain poor who usually are unserved by the formal financial system. A majority of MFIs customers belong to rural areas where formal banking and financial services are scarce. That is why, the startup cost and the cost of transaction for MFIs operating in rural areas are high. In addition, the profit margin in small loans is relatively lower than the corporate-level loans that makes the business environment for MFIs is difficult in terms of financial management. Beside the high sunk cost or startup cost, the operational costs are also higher relatively than the big loans

(usually granted by the banks) due to an excess demand of microloans in poor regions. Also, the administrative cost and the cost of fund (borrowed by MFIs if not subsidized) are also at higher level that makes the total transaction cost high at MFIs end (Micro Capital, 2006). A potentially high demand for loans requires the MFIs to deploy active loan-officers who can simultaneously manage many loans. Such demands put extra burden on loan-officers that increases the probability of poor's exploitation from the loan officers. Armendáriz-de-Aghion and Morduch (2000) assert that high transaction costs can be reduced in group lending with the help of scheduled meeting of borrowers by the loan officers (CGAP, 2007). This assertion looks quite valid but the domain of rural area and the fact that most of the MFIs customers are rural farmers, attending such frequent meetings might reduce their working time and revenue generation which is essential for a timely repayment of the loan installment.

3.1.3.4 Information asymmetries

Information asymmetries is defined as the scenario of market transactions in which one party is less informed than the other, and it is considered a worst case of market failure in microfinance (Autor, 2010, p.3; Healy and Palepu, 2001). Such transactions look highly risky in microfinance due to the grant of insecure loans (without physical collateral). The imbalanced power in such situations provides the opportunities of exploitation to the better-informed party. It is usually considered in microfinance that the information asymmetry works only within the relationship of lenders (MFIs) and borrowers, but adding donor agencies in this relationship creates further complications in the microfinance system. In the tripartite system of microfinance, donors lack complete information about the end users

of their funds, borrowers do not have information about donor agencies, and MFIs (financial intermediary) lack a complete information of borrowers. This three tier weak system raises the issues of adverse selection and moral hazard, and such negative externalities ultimately cause market failure. Stiglitz and Weiss (1979) suggest that the method of credit rationing can be used to solve the problem of information asymmetries. The asymmetric information system of microfinance (see figure 3.1) describes that the donor agencies do not interact directly with the borrowers but the MFIs play the role of intermediary. That is why the donor agencies lack the full information of the borrowers who basically use their funds.

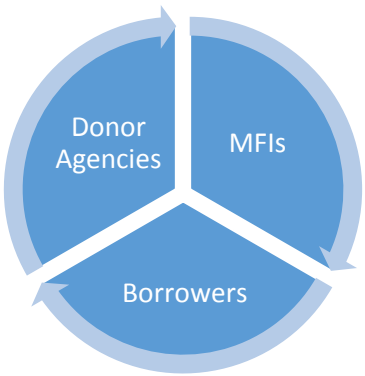


Figure 3.1: Tricyclic Information Asymmetric System of Microfinance
Source: Author's representation

Ghosh and Van Tassel (2013) describe that the donors in information asymmetric environment grant funds according to the loan magnitudes. Optimal grants come in the shape of small loans, while large loans require some financial returns. Also, poverty alleviation is not subject to equilibrium (a point where the demand for funds exactly matches the supply of funds) but a better information system is required to grant the loans to appropriate borrowers.

3.1.3.5 Exorbitant interest charges

One of the main issues that microfinance borrowers always face is an excessive rate of interest on loans. Exorbitant interest rates are always justified by MFIs with high transaction cost but from the borrowers' perspectives excessive interest charges on loans put an extra burden of income generation not only on them but for the repayment of the principal amount. The claim MFIs put forward in justification of high interest rate is that highly risky uncollateralized microloans need extra risk-premium. Such claims look valid if the main objective of microfinance is just to maintain a financial business with the poor, otherwise, exorbitant interest rates can be lethal for the poor's subsistence. The attainment of financial self-sufficiency requires high interest rates and poor borrowers are ready to pay such high interest (Brau and Woller, 2004) but the main concern here is for the poorest borrowers with few income generation opportunities, due to incomplete, incompetent and uncompetitive markets, usually found in rural and undeveloped areas. Secondly, with a target of high interest, the selection bias will come into effect because MFIs will sanction the loan applications of relatively wealthier borrowers and in such cases, microfinance will be ineffective in poverty alleviation. Gonzalez-Vega (1998) gives the importance of regulation to standardize the lending interest rates because unregulated MFIs charge relatively higher interest rates to cover the startup cost with some profit margins. Possibly, loan market might be cleared at very high interest rates due to an excessive demand for loans against relatively lesser supply of funds, but the potential growth opportunities might not be availed of and the objective of poverty alleviation won't be achieved. The recent regulations in the Russian microfinance industry require the MFIs to register with the

Russian Central Bank and Federal Financial Markets Service with a mandatory reporting requirement. Also, the regulatory body (the Russian Central Bank and Federal Financial Markets Service) will regularly publish an average interest rate on retail financial products that could be used as a 'benchmark interest rate'. An interest margin 20 percent of official average interest rate (published by the regulatory authority) is allowed, and anything beyond that level will be considered usurious (Mamuta, 2012). It is pertinent to note that the guidelines provided by the CGAP regarding the effective interest rates on microloans can principally be used by MFIs especially new comers. The pricing formula given by CGAP is stated below:

$$R = \frac{AE + LL + CF + K + II}{1 - LL}$$

Where;

R	Effective interest rate
AE	Administrative expenses
LL	Loan loss rate
CF	Cost of capital
K	Capitalization ratio
II	Investment income

Besides the above-mentioned base formula for pricing, a number of alternative methods were also provided to easily compute annual interest rate according to the nature and structure of the MFI. It is of a great concern that changing the method of interest calculation can affect the magnitude of interest. A one percent monthly interest rate can amount to thirty nine percent annual interest rate, and a six percent monthly interest rate can be as devastating at 189% per annum (CGAP, 1996). Table-3.2 shows the annualized effective interest rates.

Table 3.2 : ANNUALIZED EFFECTIVE INTEREST RATES

Stated Monthly Rate	BASE CASE Interest charges on declining balances, 4 equal monthly payments	Alternative 4 Flat interest charged on initial balance, prorated over 4 months payments	Alternative 5 Flat interest charged on initial balance, deducted from loan disbursement	Alternative 6 Flat interest (on initial bal.) and 3% commission deducted from loan disbursement	Alternative 8 Flat interest (on initial bal.) and 3% commission deducted from loan disbursement
1.00%	12.00%	19.00%	19.80%	35.60%	38.90%
1.50%	18.00%	28.50%	30.30%	46.60%	51.50%
2.00%	24.00%	37.50%	41.00%	58.00%	64.50%
2.50%	30.00%	47.10%	52.00%	69.80%	78.00%
3.00%	36.00%	56.30%	63.80%	82.00%	92.00%
3.50%	42.00%	65.50%	75.80%	94.70%	106.60%
4.00%	48.00%	74.60%	88.30%	108.00%	121.80%
4.50%	54.00%	83.60%	101.30%	121.70%	137.60%
5.00%	60.00%	92.60%	114.80%	136.10%	154.20%
5.50%	66.00%	101.50%	128.80%	151.10%	171.40%
6.00%	72.00%	110.40%	143.50%	166.70%	189.50%

Source: CGAP (1996)

3.1.3.6 Unethical recovery practices

One of the strong criticisms against microfinance is that it uses unethical recovery practices in the case of default. A number of reported cases have blanched the true face of microfinance before the world. The double-edged sword of exorbitant interest rates with harsh and unethical recovery proceedings triggered the suicides among the microfinance borrowers (who were not able to repay) in India. The high interest rate ceiling imposed by the government of Andhra Pradesh, India, was practically ineffective for most of the MFIs. The ex post facto interest rate of 100% becomes 158% on 'annual percentage rate' (APR) and almost 353% on 'annual effective interest rate' (AER). Most of the MFIs do not get harmed with interest rate capping (Ashta, Khan, and Otto, 2011). Such lexical provision allowed the MFIs to exploit the poor in the name of poverty alleviation. According to the

BBC News, more than 80 people have committed suicide in Andhra Pradesh after defaulting microloans (BBC News, December 16, 2010). Another published report says that more than 200 people had committed suicide in 2010 due to the debt burden and harsh recovery practices in Andhra Pradesh, India (Business Insider, February 24, 2012). While explaining the root-cause of such misery, Dobusch, Mader, and Quack (2013, p. 52) assert that the bubble of lending growth in microfinance had ruptured due to an excessive indebtedness. After such incidents, some of the Indian politicians started to believe that the goal of poverty alleviation through microfinance is just a creep. The microfinance crises in Bolivia and Bangladesh had erupted at almost the same period in late 1990s. The intensity of the crisis in Bangladesh was so severe that the Grameen Bank's repayment rates dropped from 98% to below 90% (Armendáriz, and Morduch, 2010, p. 146). The issue of unethical recovery practices is of a great nature and needs the immediate attention of the regulatory authorities of microfinance.

3.1.4 Rethinking conventional microfinance

Inasmuch as poverty alleviation has been considered the core objective of microfinance since its inception, it is important to critically examine the role of microfinance. The success story of the Grameen Bank in Bangladesh helped reinforce the importance of microfinance in development paradigm. Before microfinance, the poor were not able to borrow from formal financial institutions as their empty-pockets did not allow them to use such financial facilities. The startup of microfinance has provided such opportunities to them through financial inclusion. Financial inclusion was necessary to bring the poor into the formal financial system. The lack of borrowing due to unavailability

of collateral was the main constraint in socioeconomic development in rural areas in general and in agricultural sector in particular. The poor are always in dire need of microfinance services because their financial streams do not have systematically consistent patterns especially for rural and agricultural farmers and peasants. The agricultural income usually comes twice or thrice in a year (through the sales proceeds of cultivation) but the expenses incur on daily basis such piecemeal income doesn't cater consumption smoothing in their everyday lives. Also, unequal income streams do not allow to get appropriate farms inputs necessarily require for crops and cultivation. The edge of risk increases in case of catastrophic shocks and weather vulnerabilities. In many ways, microfinance has come to be considered as a "silver bullet" that would solve all the problems of the poor people (Kernani, 2007; Financial Times, 16 December 2010; Holingworth, 2014).

Several studies have taken a second look at the claims of and for microfinance. Khandker (2001) concludes that despite increasing dropout-rates (5% to 10%), microfinance borrowers performed better in both periods, in terms of per capita income and expenditure, and overall growth. The study conducted in Bangladesh based on follow-up surveys (initial survey in 1991-92 and final survey in 1998-99) found some positive effects of microfinance on poverty alleviation. Also, poverty incidence was lower in 1998-99 than 1991-92. Appah, John, and Wisdom (2012), in their study on poverty reduction and microfinance in Bayelsa state of Nigeria, concluded that traditional rotating credit is significantly different from microfinance, and the microfinance has statistically significant impacts on poverty but the government assistance is necessary to eradicate poverty. The autonomy of microfinance in Nigeria requires freedom from political manipulation and

influence. Durrani, Usman, Malik, and Shafiq (2011) also found that efficient microfinance enhances poor people's quality of life as it helps in consumption smoothing, risk management, asset acquisition, entrepreneurial capabilities, income generation, and an overall improvement. Jegede, Kehinde, and Akinlabi (2011) found that the income and socioeconomic status of the poor in Nigeria had increased due to microfinance services. Microcredit is a vital tool for poverty alleviation in Nigeria despite having the issues of accessibility and outreach. In Bangladesh, Pitt, Khandker, Chowdhury, and Millimet (2003) ascertained the evidence of microfinance on gender differences and health status. They found that the impact on women participants strongly outweighed the impact on their male counterparts. Also, the credit provided to women had significant effects on children's health status.

Poverty has different faces and different consequences. As Robinson (2001, p.27) noted, the poor do not suffer due to lack of basic necessities but due to other social diseases such as homelessness, disenfranchisement, self-disgrace, and social backwardness etc. McCulloch and Baulch (2000) also argue that income smoothing strategies can reduce transitory poverty but chronic poverty eradication requires sustainable income growth of the households. For higher income streams, capital accumulation (both human and physical) can be obtained through an active intervention. Microfinance services can have a lasting impact on poverty as it can bring the economic welfare and power of self-sustenance (Remenyi and Quinones, 2014, p.53-54). However, hoping to get rid of chronic poverty through credit interventions is difficult to establish because chronic poverty does not come through financial market failures but from low productivity and a lack of resource

endowment (Lipton and Ravallion, 1993, p. 62). Therefore, considering microfinance a 'master key' for all unsolved problems might have over-generalization effects.

Institutional settings play an important role in microfinance success which differ from country to country. Navajas, Schreiner, Meyer, Gonzalez-Vega, and Rodriguez-Meza (2000) conclude that the impacts of microfinance on social improvement depend not only on accessibility and outreach but scope, length, breadth and cost. Among them length is most important because it brings incentives that trigger investment in other spheres. The microfinance movement is almost in its fifth decade (considering its initiation in the early 1970s) and gained a momentum in the development studies. However, a paradigm shift towards institutional self-sufficiency can be seen in its core objectivity that drastically affect the borrowers' selection and an overall impact of microfinance on poverty. The negligence of the poorest of the poor and the selection of relatively wealthier borrowers bring a mission drift in microfinance (Mersland, and Strøm, 2010; Armendáriz, and Szafarz, 2009; Copestake, 2007). Simanowitz (2000) indicates that the adviser to the 'Consultative Group to Assist Poor' (CGAP) stressed the need for financial self-sufficiency of microfinance institutions (MFIs). He asserts that the microfinance will not create the positive impacts on poverty until the price charge by MFIs doesn't coerce the borrowers to discontinue their relationship with MFIs. This looks quite valid from the financial sustainability point of view but one should not forget that the core objective of microfinance is not merely to provide banking services to the poor but to uplift them from poverty. The applicability and effectiveness of microfinance heavily rely on socioeconomic conditions of the country and the domains of its services which in most cases are rural areas

with low education and high prevalence of poverty. This fact has been proven throughout the world that microfinance creates opportunities for the poor and improves their lives in terms of financial strength.

A number of studies have shown through different lenses the impact of microfinance on the poor and its role in poverty alleviation. However, there are also many studies that have investigated the possible counterproductive effects of microfinance on poverty. Most of the impact studies are focused to draw the line between borrowers and non-borrowers that might overstate the resultant effects due to selection bias. Hulme and Mosley (1996, p.19) did not find the positive effects of microfinance on poor households. They noted that most of the borrowers whose income were below the poverty line were actually worse-off after microfinance loans as compared to non-borrowers. Dichter (2006) established the fact that most of the microfinance borrowing have been used for consumptions rather than on entrepreneurial activities. That is why, the impact of microfinance on poor's income is not significant. Although microfinance borrowing provides a better consumption-smoothing, it also increases the dependency on external source of income rather than self-sufficiency. Leikem (2012) concluded that the goals set in Microcredit Summit in 1997 have not been accomplished. The neglected stratum of the poorest of the poor is not benefitted by microfinance as their income has not significantly increased despite availing the opportunities of microfinance products. One of the reasons for the negligence of the poorest is an over-emphasis on financial self-sufficiency by lending institutions that coerces them to choose relatively stable poor rather than the deprived and the poorest. Many recent studies suggest that the microfinance services alone

could not enhance and uplift the poor if not integrated with proper training and monitoring. The provision of small loans is not a standalone factor in poverty eradication because most of the microfinance customers lack education, skills, and a risk-taking instinct. Income generation though entrepreneurial skills requires a broad vision, creativity, and consistency which are not viable in microfinance customers as most of the poor are merely 'employees' rather than employers or entrepreneurs (Mahajan and Ramola, 2003; Pollin, 2005; Karnani, 2007). The focus on less-poor entrepreneurs casts doubts on its objectivity because the prime motive of microfinance is poverty alleviation. The main reasons of 'mission drift' are the effects of commercialization and business-orientation. The other formal financial institutions, operating for profits, purposefully neglect the small entrepreneurs due to cost considerations (usually higher in small lending). On the other hand, microfinance institutions provide financial resources to small entrepreneurs on the expense of neglecting the poor to intact their financial sustainability. Bateman (2011) asserts that after the adoption of 'randomized control trial' (RCT) methodology in 2007, most of the impact evaluation studies based on RCT have found no or little effects of microfinance services on the poor. In general, the media usually shows the success stories of microfinance and neglect the failed-programmes. A biased attitude of media strengthens the concept that microfinance is an all-in-one toolkit for the poor.

The overwhelming importance given to microfinance sometimes generates improper assessment of its role in poverty alleviation. Without saying that the claims of poverty eradication are invalid, a thorough probe can broaden our vision on the viability of microfinance. Usually, the target customers of microfinance are the poor, destitute,

unbanked, and unintegrated with the formal financial system especially women who, in the case of the Grameen Bank, account for 95% of the customers. The term 'empowerment' is broadly conceived for empowerment without gender discrimination especially for societies where women have less authority in decision making. As Kabeer (2001) notes, the gender specific empowerment goals are undermined due to the fact that these goals are linked with a single function of loan's repayment. This preoccupation creates hindrances in model making of effective financial services especially in male-chauvinistic societies where women's entrepreneurial abilities are not counted due to their suppressed roles. In addition, higher loan returns by women borrowers is not the reflection of their empowerment or financial authority because in male dominant societies like Bangladesh, India, and Pakistan etc. women coercively share their borrowing with other household members. Thus, if women empowerment is measured merely through the ratios of loans repayment then the impact evaluation of microfinance can give misleading results. Hulme (2000) insists upon the need of careful monitoring of microfinance in the context of its overlooked role in poverty alleviation. Microfinance should be more welfare-oriented than business-oriented. Regarding the claims of poverty alleviation, he cites that except for Bangladesh microfinance couldn't even 'scratch the surface of poverty' in the world. The myth created by microfinance that the poor are always able to repay loans is illogical and unrealistic. Although microfinance can create opportunities for the poor due to financial inclusion, it does not always happen. For example, the poor people working in narrow and inefficient markets where income-generating opportunities are scarce, the probability of debt incidence is high, considering the vulnerabilities of exogenous shocks (both catastrophic and social). While a majority of MFIs target poor women, the problem of repayment from

women strata is high, and in some cases female borrowers committed suicides due to the fear of repayment inability. Hulme (2000) indicates that the Kenya Women's Finance Trust and other MFIs discourage 'savings only' and apply the balancing out if the incumbent borrowers refuse to take further loans. The efficiency of microfinance is not enough in poverty eradication and a multifaceted strategy is required to combat the existing challenges. Nteziyaremye and MkNelly (2001) noted that making a weekly repayment is quite difficult for the poor women with the existence of weak domestic markets. The poor households are more vulnerable to external shocks due to unavailability of alternative sources of income. The dynamic distinction between the poorest and economically active poor shows that poor households shift from one category to another with the passage of time. Although microfinance provides a better bargaining power to women, patriarchal societies do not allow the women to get an authoritative position. The women's financial control is seen negatively in such societies where male members of the household dominate in income and consumption decision making processes. Vengroff and Creevey (1994) indicate that women empowerment through microfinance is often perceived negatively in patriarchal societies and increases the burden and workload on women. In such societies, house chores and children's upbringing are considered the innate tasks for women. Additional entrepreneurial responsibilities increase their workload that is inevitable to ensure timely repayment of microfinance loans. In their study of social capital formation by the Bangladesh Rural Advancement Committee (BRAC) in a rural village of Bangladesh, Saharia and Iiguni (2007, p. 104) found that although the MFIs have the potential to create social capital through enforcement and mobilization, it is not a built-in functionality of MFIs to create such social capital. The effective social capital formation

requires a well-designed social capital formation strategy and its implementation at the grass roots level.

3.2 Poverty alleviation through Islamic microfinance

As discussed in the previous chapter, conventional microfinance in Pakistan has not significantly contributed to poverty alleviation. Consequently, the prospect of what is termed "Islamic microfinance" has been raised in some sectors. This section describes the characteristics features of Islamic microfinance, its strength, weaknesses, and potential to curb poverty with special reference to Pakistan. It also investigates whether or not it can be used as a replacement of conventional microfinance.

3.2.1 Islamic Microfinance and its Foundations

The basic definition of Islamic microfinance can be derived from its name i.e. the way to provide tiny loans within the legitimate boundaries of Islamic jurisprudence called *Shariah.* It is a set of defined rules applicable to all market transactions without harming the interest of any party. It can efficiently be used to reduce the probability of exploitation by any party involved in a market transaction. The common misconception about the difference between conventional microfinance and Islamic microfinance is that the latter doesn't charge interest while the former one is strongly criticized for charging exorbitant interest. However, the said difference is partially true because Islamic microfinance also differs in its objectives which supersede financial sustainability. The religion itself is focused on tolerance, compassion, and society's welfare; that is why the societal interests

are always preferred over individual interests in Islam. The concept of Islamic microfinance is principally based on solidarity, consolidation, brotherhood and mutual agreements. Business transactions are not just the profit of one party at the expense of others because it increases the probability of exploitation and creates an uncomfortable business environment. The Islamic way of business believes in a win-win situation for all the parties involved in the business.

3.2.1.1 Fundamental doctrine of Islamic microfinance

The rationale of Islamic microfinance rests upon the egalitarian doctrine which demands an equal treatment for all (El-Sheikh, 2011, p.89). The Islamic beliefs of equality are quite reflective of the Judeo-Christian beliefs that God loves all human equally and they should be treated with equal status and morality. Egalitarianism proposes equal sociopolitical and economic rights and indiscriminate privileges for all (Rothbard, 1974). It is a philosophical position that keeps the central thought of equality in the shell of justice so it demands that inequality be reduced to a level where it cannot harm the society at large. Societies with justice provide equal opportunities to all and constraints the ways of extra advantages, where people get prosperity due to an abundance of opportunities (Robinson, 2016). Such characterization of societies can be taken from the concept of 'welfare state' in Islam (Chapra, 1979, p. 4). Although the core objective of conventional microfinance was poverty alleviation and welfare in terms of social development but the present era of globalization transcends its objectives in the direction of commercialization. On the other hand, Islamic microfinance believes in the equality of opportunities such as the indiscriminate accessibility of financial resources, and the main focus is on the poor strata

of society which remains highly negligible in the sights of financial players. The strategy to establish a welfare state with a strong focus on the poor is a fundamental departure in launching Islamic microfinance. The concept of grass-root level development through micro lending comes from the collection of divine scripts. It is pertinent to note that the divine instructions about lending poor, come together with innate prohibition of interest on loans (Chapra, 1979, p. 22). Such lending without interest is quite similar to the form of lending used in Islamic microfinance which, as noted earlier, differs primarily from conventional microfinance.

3.2.2 Religious assertions

The notion of lending to the poor is as old as human history, and the assertions considered as divine are presented in almost all holy scripts in one form or another. In the following sections we shed light on religious assertions that are believed to encourage lending to poor and needy people. An important element or the common factor in such instructions is the protection of the rights of borrowers and lenders that avoids disputes between these two and provides a built-in mechanism against the conflicts of interests.

3.2.2.1 Judeo-Christian Commandments: The Biblical Verses

Dr. Rabbi Louis Jacobs explains in his book *The Jewish Religion: A Companion* (1995) that granting loans on interest, termed as 'usury' is forbidden in Biblical assertions. The excerpt taken from Exodus (22:24) says "if you lend money to any of my people, even to the poor with thee, thou shalt not be to him as a creditor; neither shalt thou lay upon him

interest." On the same subject, the excerpt from the Deuteronomy (23:20-21) says "Thou shalt not lend upon interest to thy brother: interest of money, interest of victuals, and interest of anything that is lend upon interest. Unto a foreigner thou mayest lend upon interest; but unto thy brother thou shalt not lend upon interest; that the Lord thy God may bless thee in all that thou puttest thy hand into, in the land whither thou goest in to possess it." It is also mentioned that support of the poor through financial means is obligatory, as Leviticus (25:35-37) says "You shall not charge interest on loans to your brother, interest on money, interest on food, interest on anything that is lent for interest. You may charge a foreigner interest, but you may not charge your brother interest, that the Lord your God may bless you in all that you undertake in the land that you are entering to take possession of it." Similarly, Luke (6:34-35) asserts "And if you lend to those from whom you expect to receive, what credit is that to you? Even sinners lend to sinners, to get back the same amount. But love your enemies, and do good, and lend, expecting nothing in return, and your reward will be great, and you will be sons of the Most High, for he is kind to the ungrateful and the evil", and "Give to the one who begs from you, and do not refuse the one who would borrow from you" (Matthew, 5:42).

3.2.2.2 Islamic Commandments: The Quranic Verses

The *Quran* says "Allah has permitted trade and forbidden usury. Allah destroys usury and gives increase for charities. And Allah does not like every sinning disbeliever" (2:275-276). While protecting the rights of lenders, it is commanded that "O You Who Believe! When you contract a debt for a fixed period, write it down. Debts are written and given within two honest witnesses" (2:282-283). Islam doesn't want the exploitation of any

party involved in any business transaction whether it would be on cash or on credit basis. Instructions are therefore given to write down the contract with two honest witnesses so that the chances of quarrel in future could be minimized. The written contract can be used as a proof in case of any dispute arises between the parties involved in a transaction. On the same note, getting a loan under necessary circumstances is permitted in Islam but the borrower must have the intention of repayment otherwise it would be considered a willful oppression and a great sin (Yusuf, 2010). The objective of establishing a welfare state thorough charities and almsgiving is considered a pathway of brotherhood. Such bonding among rich and poor shares not only the resources and opportunities, but it minimizes the gulf between rich and poor. That is why the concept of income redistribution is quite important in the welfare state. The Holy Prophet Muhammad (peace be upon him) urged the followers to give loans to the needy and deprived. The Prophet (peace be upon him) said "The one who gives charity is rewarded tenfold. The one who gives loan is rewarded eighteen fold" (Ibn-e-Maja, p. 175). The act of giving loan supersedes the act of giving charity in terms of virtuousness and reward. To protect the rights of lenders, the borrowers are instructed to obey the rules and they should have pure intentions of repayment. Another saying of the Prophet (peace be upon him) narrates "The person who takes wealth from people with the intention of repaying it, Allah will assist him in repayment of loan. The person who takes wealth from people with the intention of squandering it, Allah will cause him destruction" (Bukhari, Musnad-e-Ahmed, 3:285). The conditional constraints on loan usage restrict the misuse of loans by the borrowers and implicitly require them to use loans on productive activities while attaching the conditions of repayment intents. Such proximity could efficiently be used to minimize the long-standing issues of information

asymmetry and moral hazards in conventional microfinance. As a common practice, the conventional MFIs barrage loans without assessing the ex post facto repercussions of over-stretching the financial elasticity of the poor.

3.2.3 Islamic approach of poverty alleviation

The Islamic vision of poverty alleviation is a bit different from the orthodox approach of poverty alleviation through conventional microfinance which is evidently skewed towards the goals of 'commercialized finance' (the term I specifically use for the commercialization of financial services). The Islamic ways of poverty alleviation rest upon the concept of a welfare state in which the welfare of society is pursued. Being the custodian of economic resources, the state's role in creating a welfare state comes at primary position that demands an active contribution. If the state fails to establish an active mechanism for redistribution of resources, the emblem of responsibility is transferred to other economic players in society especially the rich and elite class, who enjoy a majority of perks during prosperity and economic development. The main framework of Islamic microfinance is based on egalitarianism which demands the equality of all human being. The main point of departure is that all resources belong to God (Allah) who created everything and humans are merely the custodians of God's creation. This gives the understanding that the *Supreme* power is God, being the creator of the universe, as the *Quran* says "He it is Who created for you all that is in the earth" (2:29). Nevertheless, it does not contradict or reject the property rights of the owners but extends it further so that equality could prevail and to make an egalitarian society. In the present world of economic scarcity, the concept of resource redistribution balances the perks among human beings

and reduces the inequality between them which is a necessary element to form a welfare state. Figure-3.2 shows the main components required to build a model welfare state.

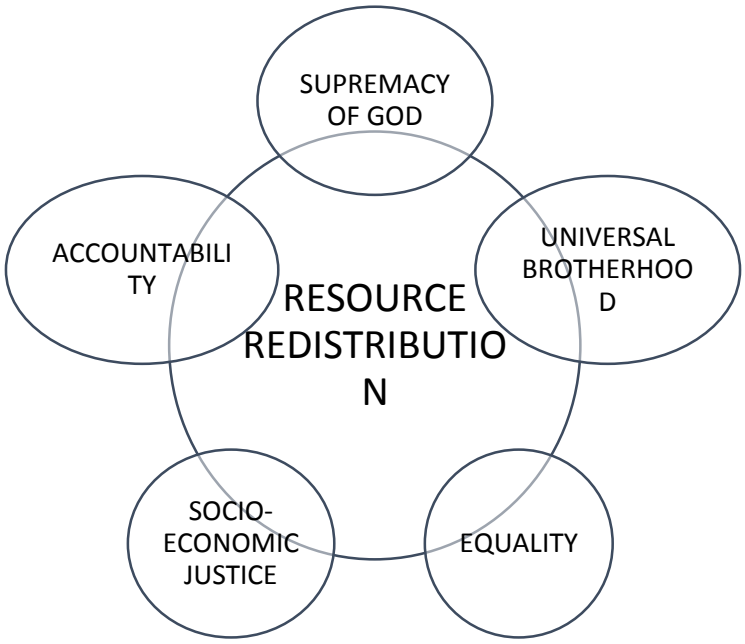


Figure 3.2: Components of a Welfare State in Islam
Source: Author's representation

The above figure shows the Islamic view of the welfare state which requires the following components for an active resource redistribution: Supremacy of God, universal brotherhood, equality, socio-economic justice, and accountability. Wealth has a tendency to concentrate at one point, creating income inequality between rich and poor, which is why the Islamic mode of poverty alleviation uses resource redistribution to reduce wealth concentration. Although the accumulation of wealth is not prohibited, it is instructed that a meager share of wealth should be spared for poor and needy people. The concepts of *Zakat, almsgiving* and *Sadaqat* take precedence over other commandments related to financial matters. Foremost among the five pillars of Islamic theology, *Zakat* is a financial obligation on each and every Muslim who holds a certain level of wealth in a given year. It is used as

a tool for poverty alleviation in which, every year, a prescribed rate of wealth is shared with the poor and thus to discourage wealth concentration. Islamic microfinance is used as an institutionalized way of resource redistribution that is why a majority of Islamic microfinance models are based on *zakat* and *charities*.

3.3 Empirical studies on Islamic microfinance

The concept of microfinance is closely associated with poverty alleviation and its main objective is to help financially excluded, unbanked, and poor entrepreneurs with some capability to generate funds. However, the concept of financial inclusion is not limited to small credits only; it covers a broad range of financial products like deposits, payments services, money transfers and micro insurance as well (Conroy, 2003, pp. 2). Microfinance services provide some hopes in the lives of the poor entrepreneurs who are usually away from formal banking services (Ledgerwood, Julie, and Candace, 2013, pp. 5). Their innate inability to provide collateral against the loans coerce them to live their entire life in deep poverty cycles. Despite the fact that microfinance is committed to a noble cause, modern commercialization effects have often raised a skepticism on conventional microfinance services because the recent trend in microfinance advances against the double bottom line objectives (Drake and Rhyne, 2002). It is worth noting that most of the modern microfinance practitioners agreed that existing microfinance could not achieve the double bottom line because the institutions focused on financial self-sufficiency lack a social view of microfinance, and the institutions concerned about poverty outreach outrightly ignore financial aspects. This unfilled gap in microfinance paves the ways for Islamic microfinance.

Broadly speaking, the Islamic financial system comprises Islamic banking and finance including microfinance. The fundamental doctrine for both Islamic banking and Islamic microfinance is Islamic (*Shariah)* jurisprudence *(*a set of divine principles revealed in the Quran). The *Shariah* emphasizes two main restrictions on all financial matters. First, interest (*Riba)* is forbidden in all transactions because of its exploitative nature; and second, all transactions involving risk and uncertainty (*Gharar)* such as gambling and speculation are prohibited. Pollard and Sameers (2007) noted that Islamic finance encourages asset-based investments to connect the financial sector and the real sector of the economy. Intuitively, the money has a tendency to concentrate at one point, which is why Islam does not consider money as a commodity because its value cannot be increased until and unless it is used for some productive activities. An alternative mechanism of profit-n-loss in Islamic finance envisages a circular channel of growth by enticing all stakeholders onboard. Fund providers are not merely considered money lenders (having fail safe return-on-investments) but the active investors who share risks and rewards (CGAP, 2006). Although both Islamic microfinance and conventional microfinance have the same objectives of financial inclusion for economic growth, the methods of application are significantly different from each other. Conventional microfinance largely depends upon the interest charges on loans; whereas Islamic microfinance is based on interest-free contrivance and relies mainly on charities like *zakat, sadaqat*, and, *almsgiving*. This point is also attributed by Rahman (2007) that Islamic microfinance maximizes social services through charities. The profit-n-loss method of Islamic microfinance uses other channels to fulfil the demand for funds without eyeballing the interest income. He concludes that *Shariah*-compliant

financing instruments can be used more efficiently if risk mitigation techniques can be aligned with the modern financial environment. The substantial growth of Islamic banking can be used to financially back up Islamic microfinance because both of them work under the same jurisdiction and fundamental principles. According to Abdouli (1991), Islamic banks can narrow the gap of income distribution which has been increasing due to the conventional banking. Islamic banks provide not only financial assistance but also establish a long-term business relationship with small and medium entrepreneurs through active monitoring and proper guidance. The probability of project success increases when loans provided with proper guidance, technical assistance, and supervisory skills. To explain rudimentary contracting practice of Islamic banks, Rajesh, Aggarwal and Yousuf (2000) assert that most of the Islamic banks lack *Shariah-based* equity (PLS) financing because they are skewed towards debt-like instruments, as rational response to their operating environment. An intensified competition between Islamic banks and conventional banks can create more opportunities for profit and loss contracts. At present, the way Islamic banks are operating is more or less incentive seeking than *Shariah* compliance because a significant portion of financial contracts consists of debt-like financing (*Murabaha* and *Ijarah)* instead of profit-n-loss sharing-based financing (*Mudarabah* and *Musharakah).* Dhumale and Sapcanin (1999) noted that there is a compatibility match between the practices of Islamic banks and microfinance. The former one grants loans on the basis of expertise and skills without physical collateral while the latter one uses entrepreneurial abilities and expertise in profit generating economic activities; thus these two can make the difference by working together. Ahmed (2002) considers Islamic microfinance to be in its infancy period and is yet to develop a profound system that can compete with existing

microfinance. Conventional microfinance is facing some serious challenges such as serving the ultra-poor, asymmetric information, high drop-out ratio, and double dipping etc. (Ahmed, 2002). Although Islamic microfinance has yet to develop a solution set, it has the potential to cope such issues. He pointed out that a lack of 'research and development' (R&D) is a root cause of the communication gap between loan providers and the poor entrepreneurs. He proposed that international agencies can provide financial training and assistance to both groups to align the existing system. Financial subsidization is also needed to enhance the outreach and efficiency of microfinance. Khan (2008) asserts that a distant gap between demand and supply of loanable funds causes the limited success of conventional microfinance. The inconsequential subsidization from international donors puts an extra burden on 'micro finance institutions' (MFIs) to become self-sufficient rather than merely dependent on external sources. A paradigm shift from social welfare to financial sustainability coerces MFIs to charge exorbitant interests. This mission drift enlarges the inconsistency of conventional microfinance (Mersland, and Strøm, 2010; Armendáriz, and Szafarz, 2009; Copestake, 2007). Khan (2008) proposed that Islamic microfinance can acquire funds through Islamic charities i.e. *Zakat*, *Sadaqat* and A*lmsgiving* to fill the demand and supply gap. However, his theoretical assertion does not provide a clear-cut line of action to make microfinance a substantial tool for poverty alleviation. In addition, other consequential factors are also undiscussed such as information asymmetry, concentrated outreach, loans from multiple sources, and the adverse selection etc. In the context of microfinance in Australia, Ahmad and Ahmad (2008) explain that Islamic Microfinance Service Providers (ISMPs) play a dominant role in the welfare of Australian Muslim Community but their clientele base is limited. The

outreach expansion is needed to make it more efficient. Moreover, ISMPs should formulate Islamic financial products according to the needs of the poor in Australia. Uddin and Barai (2016) explored the role of Islamic microfinance in Bangladesh, and found that the loans provided by the Islamic microfinance significantly increased the income of the respondents. The study is based on 87 structured interviews conducted under the Rural Development Schemes of Islamic Bank Ltd, to determine the income differentials after the Islamic credits. The empirical findings of the study noted that the Islamic credits have a positive relation with the income and age of the borrowers. However, the study does not address the possible issues of multicollinearity and heteroscedasticity in the dataset.

3.4 Selected analytical approaches: Linear probability models

The last section of this study uses linear probability model to assess the probability of success of Islamic microfinance in Pakistan. For this purpose, this section reviews some studies that have applied linear probability models with some policy options. Although some of these studies focus on other issues, they nonetheless show the validity of using linear probability models. For instance, Gebreselassie and Ludi (2008) use a Logit model to investigate the factors that influence smallholders' decision whether or not to participate in output markets. The model uses observations taken from survey data and binary dummy values where household participation is represented with Yi=1 and not-participation is mentioned with Yi=0. The empirical findings indicate that household do not participate in relatively older markets on an average six years older. Also, the female household head do not participate in output markets. Ozier (2011) studied the impact of secondary school on human capital, occupational choice, and fertility for young adults in Kenya by using the

linear probability model. The main concern is the recent trend showing that the probability of enrolment in government-operated schools was rising, thus allowing an estimation of the causal effect of schooling in a regression discontinuity framework. The empirical findings reveal that secondary schooling increases the human capital. Regarding the gender distribution, the probability of low-skill self-employment for male was reduced, and the secondary schooling for female reduces the early-age pregnancy in teenaged girls. Bertrand, Black, Jensen and Lleras-Muney (2014) studied the effects of board quotas on Female Labor Market Outcomes in Norway. Their study found that post the reforms period, the newly appointed female board members were more qualified than their female predecessors. Also, the gender gap in earning within board members was reduced in the post-reforms period. Nevertheless, the reforms had less effects on women's decisions in general i.e. decisions to attend business education programs and convergence of earning trajectory between male-female graduates of such programs. Bernardi and Riddle (2014) studied the long term consequences of parental divorce on children's education achievement. The objective of the study is to find the connection between parental divorce and children's education. A comparative approach is used on survey level data with linear probability models. The empirical results indicate that parental divorce is negatively linked with children's tertiary education attainment. The penalty of breakup for highly educated parents is higher than other parents. Also, the breakup penalty is independent of the degree of diffusion of divorce. Dharmapala and Hines (2009) conduct the study to find out the countries which become tax heavens by using the linear probability model (Probit). The data of 41 countries is used to investigate the probability of becoming tax heaven country. The empirical findings suggest that after controlling the other effects, the quality of

governance has a significantly large connection with the probability of becoming tax heaven. Huizinga, Laeven and Nicodeme (2012) studied the international taxation and multinational firm location decisions. Their findings suggest that the parent country's corporation taxation has independent and strongly negative effects on the probability of foreign subsidiary location. The parent country's taxation is evidently distortive because of a high sensitivity of foreign subsidiary location decision and corporation taxation. Dollar and Svensson (2000) analyze the success or failure of structural adjustment programmes based on 200 reform programmes. They found that a number of donor-effort variables are the main determinants of success and failure of such programmes. In summary, these studies show the logic and validity of using linear probability models to determine the consequence of a policy decision or intervention.

3.5 Chapter Summary

The critical analysis on poverty alleviation through microfinance reveals that the relationship between these two is not as straightforward as it looks because poverty is a chronic disease which requires a long term solution. Microfinance can be a remedial measure to settle the issues of transitory poverty with proper monitoring and evaluation. Treating microfinance as a "silver bullet" can have devastating overstated effects that may turn the table in the opposite direction. Targeting the double-bottom line without adjusting the issues of *mission drift* can only bring the inefficiency and distraction that will seriously hurt the noble cause of poverty alleviation (Mersland, and Strøm, 2010; Armendáriz, and Szafarz, 2009; Copestake, 2007). The literature review sheds light on the role of conventional and Islamic microfinance in poverty alleviation. Conventional microfinance

has achieved a limited success due to integrated malfunctioning in the existing system. On the other hand, Islamic microfinance has the potential to cope with these challenges but also requires a sound financial backup and product diversification. A consortium of Islamic banks and financial institutions can be utilized to establish a common pool that will be useful to cater the needs of poverty alleviation projects in an efficient manner.

CHAPTER 4
METHODOLOGICAL FRAMEWORK

The methodological framework of this study includes the following four segments:

i. Performance Evaluation of conventional microfinance based on efficiency scores through Data Envelopment Analysis (DEA) and Financial Ratios (FRA);

ii. Perceived differences between conventional microfinance and Islamic microfinance based on primary survey data;

iii. Proposed mosque-based Islamic microfinance model to overcome the shortcomings of existing microfinance; and,

iv. Probability of successful implementation of Islamic microfinance in Pakistan based on primary survey data.

4.1 Performance evaluation of conventional microfinance in Pakistan through Data Envelopment Analysis (DEA)

Microfinance institutions are bit different from the conventional banking system in their operational settings because they grant loans without the requirement of physical collateral despite having other commonalities with conventional banking system like deposits, loans, and insurance services. The 'double bottom line' is an extended feature of microfinance that addresses its financial sustainability and social value creation (Tulchin, n.d.; Brau and Woller, 2004; Lewis, 2008; Gutiérrez-Nieto, Serrano-Cinca, and Molinero, 2009). The traditional methods to assess the banking units mainly focus financial

performance only but the performance evaluation of microfinance requires a prism to evaluate both financial and social performances. The financial performance is usually measured through financial indicators but there is no specific method to assess the social performance. No universal standard is emerged by now that can be used to evaluate social performance of institutions (Zeller et. al. 2006; Gutiérrez-Nieto, Serrano-Cinca and Molinero, 2009). Ferro-Luzzi, and Weber (2006) used factor analysis for the performance evaluation of 45 MFIs in Geneva. They used factor analysis with seemingly unrelated regression (SUR) with the help of Simultaneous Equation Model (SEM), however, their correlation coefficient matrix shows some significantly higher correlations that might be the case of multicollinearity and heterecoscedacity.

Data Envelopment Analysis (DEA) is extensively been used to evaluate the efficiency of financial institutions especially in banking and finance (Charnes et al, 1978). Some of the studies from banking and finance literature that used DEA for performance evaluation are Yeh (1996); Paradi and Schaffnit (2004); Charnes, Cooper, Huang and Sun (1990); Saha (2005). This study extends the DEA model to assess the performance of microfinance institutions in Pakistan. We will extend our assessment through DEA to the extent that it could cover both financial and social performance. The performance evaluation of microfinance is not extensively been conducted in Pakistan due to an unavailability of reliable data. The usual practice of performance evaluation of MFIs is based on the methods used by the rating agencies. Some of the very common methodologies of MFIs' rating are PEARLS rating system developed by the World Council of Credit Unions, ACCION Camel developed by ACCION International, Girafe rating

system developed by PlaNetFinance, MicroRate developed by Damian von Stauffenberg of MicroRate, MicroBanking Bulletin/ MicroBanking Standards Project funded by CGAP, the Philippine Coalition of Micro-finance Standards, CGAP Microfinance Rating And Assessment Fund, Institutional Performance Standards and Plans, developed by the Committee of Donor Agencies for Small Enterprise Development and Donor's Working Group on Financial Sector Development, United Nations Capital Development Fund, M-CRILs developed by Micro-Credit Ratings International Ltd. Most of the rating agencies focus only financial sustainability aspect and follow the standard guidelines and framework used by Standard and Moody. The 'Girafe' gives weightage to efficiency while other rating agencies have developed their own rating scales and mainly focus on sustainability of MFIs (Gutiérrez-Nieto, Serrano-Cinca and Molinero, 2009). Some of the frequently used social performance evaluation methodologies are shown in Table 4.1.

Table 4.1: MFIs Social Assessment Methodologies

Name	Description	Analysis
IMP-ACT	International action-research program that aims at improving the quality of micro financial services and their impact on fighting poverty. _http://www.imp-act.org_	It relies on the collection of quantitative and qualitative information from MFI clients. Descriptive statistics, test of differences in means and medians, correlations and hypotheses tests are generated from data obtained.
AIMS	Assessing the Impact of Microenterprise Services (AIMS) tries to measure how microfinance interacts with their borrowers' lives. _http://www.msiworldwide.com/gral/nwproductsinfo/aims page.htm_	It places families at the center of its analysis. It uses qualitative and quantitative techniques. It considers hypotheses at household, individual, Enterprise and community levels.
SROI	Social Return On Investment (SROI) attempts to measure in the form of an investment ratio the social and environmental value created by an organization.	The methodology is still under construction. For example, the income generated by enterprise tries to be measured through savings to donors.

	http://sroi.london.edu	
ACCION PAF	Accion Poverty Assessment Framework (PAF) has been created by Accion, a not-for-profit North American organization that groups MFIs, many of which are in Latin America. It compares socio-economic characteristics of its clients against national and international poverty lines (e.g. a $ a day). _http://www.accion.org_	The data it employs at the moment are the data available within the MFI. Income or expenditure is compared with poverty lines. It analyses correlations and multivariate regressions to assess the potential of some variables as proxies of poverty level. For example, loan size.
PAT	The Poverty Assessment Tool of CGAP (PAT) measures poverty outreach by placing the clients of an MFI in the context of the non-clients. This is the same methodology used by United Nations Human Development Index (HDI).	The analysis is done on the basis of 300 poverty indicators that are reduced to 30 by means of principal components analysis. A poverty index is finally constructed from these indicators.
SPI	The Social Performance Indicators Initiative (SPI) goes beyond poverty outreach. Social performance would have four dimensions: outreach to the poor and excluded, adaptation of the services and products to the target clients, improving social and political capital of clients and communities, and social responsibility of MFIs. _http://www.spifinance.com_	Four dimensions are collected by a questionnaire. The answers receive a weighting system from a principal components analysis. The results are represented by means of a rhombus, whose four vertices give a measure of MFI social performance.

Source: Gutiérrez-Nieto, Serrano-Cinca and Molinero (2009)

4.1.1 Data and Variables

The data are collected through microfinance information exchange (MIX) which is a US-based data provider. The MIX publishes standardized data across the industry to ease-out the intra-industry comparisons among the indicators. The dataset used in this study is constructed by compiling the data of 27 MFIs of Pakistan for the period 2007~2011. The efficiency scores are calculated for the period of 5 years to get the robust results. Table 4.2 shows the classification of MFIs in Pakistan.

Table 4.2: Classification of MFIs in Pakistan

S#	Name	Abb.	S#	Name	Abb.
1	Akhuwat	AKH	15	Khushhali Bank	KHU
2	Apna Microfinance Bank	APN	16	NRSP	NRS
3	ASA Pakistan	ASA	17	Orangi	ORA
4	Asasah	ASH	18	Orix Leasing	ORI
5	BRAC – PAK	BRA	19	POMFB	POM
6	Buksh Foundation	BUK	20	PRSP	PRS
7	CSC	CSC	21	RCDS	RCD
8	CWCD	CWC	22	Rozgar	ROZ
9	DAMEN	DAM	23	SAFWCO	SAF
10	FFO	FFO	24	SRSP	SRS
11	FMFB - Pakistan	FMF	25	Sungi	SUN
12	JWS	JWS	26	TMFB	TMF
13	Kashf Bank	KAB	27	TRDP	TRD
14	Kashf Foundation	KAF			

Source: Author's compilation

4.1.2 Input and Output Variables

The efficiency scores calculated through DEA require the selection of input and output variables that is a cumbersome task because it exhibits the operational setting of the firms / decision making units (here MFIs). The traditional approach in banking and finance literature does not exhibit any consensus about the constituents of input-output variable selection (Kumar and Gulati, 2008). The banking and finance literature reveals two main approaches for input-output selection i.e. production (value-added) approach, and intermediation (assets) approach. The intermediation approach defines the banks as intermediary that perform financial intermediation between the depositors and investors (Sealey and Lindley, 1977; Kumar and Gulati, 2008) or in economics' term the banks convert economic savings into investments. On contrary, the production approach defines the banks as production units that use factor of production in the form of physical inputs

and produce output. The production approach defines the MFIs characteristics more than the intermediation approach because a majority of MFIs are dependent on donations and subsidiaries rather than just collection of deposits. Table 4.3 shows the description of input and output variables used in this study:

Table 4.3: Description of variables used in this study

Variable Class	Variable Name	Description	Unit of Measurement	Variable used in Previous Literature
Input	Total Assets (TA)	As per CGAP (2003)'s classification of all assets account net of contra-assets accounts such as loan-loss rate provision and accumulated depreciation	US Dollar	Gutiérrez-Nieto, Serrano-Cinca and Molinero (2009); Kumar and Gulati, 2008; Luo (2003); Seiford and Zhu (1999); Akhavein, Burger and Humphary (1997).
Input	Operating Cost (OC)	Total cost of operations including personnel expenses, financial expenses and depreciations.	US Dollar	Pastor, Lovell, and Tulkens (2006); Athanassopoulos (1997); Akhavein, Burger and Humphary (1997).
Input	Number of Employees (E)	Total number of employees including consultants and part-timers.	Number	Gutiérrez-Nieto, Serrano-Cinca and Molinero (2009); Pastor, Lovell, and Tulkens (1999); Sherman and Ladino (1985); Athanassopoulos (1997); Akhavein, Burger and Humphary (1997).
Output	Total Revenue (R)	Total revenue including interest and non-interest income	US Dollar	Seiford and Zhu (1999); Pastor, Lovell, and Tulkens (2006).
Output	Interest Income (I)	Total income earned through interest.	US Dollar	Seiford and Zhu (1999); Pastor, Lovell, and Tulkens (2006).
Output	Gross Loan Portfolio (G)	As per CGAP (2003)'s classification of the outstanding principal balance of all of an MFI's outstanding loans,	US Dollar	Gutiérrez-Nieto, Serrano-Cinca and Molinero (2009); Athanassopoulos

		including current, delinquent, and restructured loans, but not loans that have been written off.		(1997); Akhavein, Burger and Humphary (1997); Sherman and Ladino (1985);
Output	Number of Borrowers (B)	The number of borrowers is used to acquire the social value creation by the MFIs.	Number	Gutiérrez-Nieto, Serrano-Cinca and Molinero (2009).
Output	Outreach (O)	The variable is created by taking the ratio between average loan balance per borrower and per capita GNP.	Number	Gutiérrez-Nieto, Serrano-Cinca and Molinero (2009).

Source: Author's compilation

The performance evaluation of financial institutions needs different specifications so that the results can be compared (Akhavein, Berger and Humphery, 1997; Gutiérrez-Nieto, Serrano-Cinca and Molinero, 2009). These specifications in DEA models reflect the combinations of various inputs and outputs. This study investigates an overall performance of MFIs in Pakistan and for this purpose I evaluate financial efficiency and social efficiency. The financial efficiency is evaluated by three output indicators i.e. total revenue (TR), interest income (I), and gross loans portfolio (G). The social efficiency is evaluated by two output indicators i.e. number of borrowers (B), and Outreach (O). These DEA efficiencies are calculated under the assumption of constant returns to scale following the studies conducted by Charnes et al. (1978), Gutiérrez-Nieto, Serrano-Cinca and Molinero (2009), and Kumar and Gulati (2008). Seven different specifications are used in this study, first, I calculated efficiencies by using three inputs and one output for financial and social indicators then I used three inputs and two outputs for each class. First, R, I, and G for financial efficiency, and B and O for social efficiency are calculated separately than I used G and TR together for financial efficiency, and O and B together for social efficiency. The empirical results are shown in 'empirical results' chapter.

4.2 Performance evaluation of conventional microfinance in Pakistan through Financial Ratios Analysis (FRA)

4.2.1 Indicators for financial performance evaluation

The financial indicators are used to evaluate financial performance. Data projection and ratio analysis are used to measure the overall performance of conventional microfinance in Pakistan with special reference to the South Asian microfinance industry. Four broad categories are used for financial performance evaluation, namely serving the poor, financial sustainability, efficiency; and competition.

4.2.1.1 Serving the poor (Depth of microfinance)

The indicators to evaluate serving to poor include depth of microfinance, breadth of microfinance and quality of loan portfolio. The depth of microfinance exhibits how far the microfinance services are facilitated to poor, non-banked and deprived people. The common indicator is the number of active clients in a given time.

4.2.1.2 Breadth of outreach

It is observed that the size of the loans offered by the microfinance determines the serving to poorest of the poor. The breadth of microfinance outreach (poverty extent) is measured through the ratio between average loan outstanding and GNI per capita of each country in corresponding years.

4.2.1.3 Portfolio quality

This measure is important to check the operational performance of the MFIs because an appropriate level of loan repayment is mandatory for operational stability. The success of business demands the protection against possible delinquency issues, and a failure to maintain the quality of portfolio (in terms of loan repayment) may seriously hurt the financial backbone of the business because it will increase the loan loss ratio. The quality of portfolio is measured through the PAR > 30 days i.e. portfolio at risk >30.

4.2.1.4 Financial Sustainability (Returns on Equity or ROE)

The indicators to evaluate financial sustainability include Return on Equity, and Return on Assets. The ratio return on equity describe the financial position of the firm. A sound value of ROE exhibits a better management of financial investments. The ratio between net income and shareholders' equity defines the return on net worth.

4.2.1.5 Returns on Assets (ROA)

Another frequently used measure in financial accounting is "returns on assets" (ROA) which describes the net income generated by using the assets. The percentage between net income and total assets shows the financial soundness and profitability of the firm.

4.2.1.6 Efficiency (Operating Expenses Ratio or OER)

The indicators to evaluate the efficiency of microfinance, a couple of commonly used measures are taken on board i.e. operating expenses ratio (OER) and cost per loan. Besides above mentioned two measures, operational self-sufficiency (OSS) exhibits an overall position of the microfinance. The capital adequacy ratio (CAR) is also used. The OER explains how efficiently MFIs operate and do they have necessary capacity to cope the insolvency shocks. It also shows the efficiency of management because it compares the operating expenses to net income.

4.2.1.7 Operational Self-Sufficiency (OSS) and Cost per loan

For the measurement of financial efficiency, OSS and cost per loan indicators are used. OSS defines how efficiently MFIs cover operating expenses by using their operating income and cost per loan indicator exhibits the ability of providing low cost loans to their customers.

4.2.1.8 Capital Adequacy Ratio (CAR)

The capital adequacy ratio is an important indicator of efficiency as it determines the ability of MFIs to meet their financial obligations and absorb the risk. The ratio measures the amount of capital relative to weighted average assets of MFIs.

4.2.2 Competition

Two mainstream approaches explain the mechanism of competition with a particular reference to firms' performance in the industry. The 'structure conduct performance' (SCP) paradigm (Mason, 1939; Bain, 1951) explains that the performance of firms is a function of industry structure which is made up by its operating environment (the way buyers and sellers meet and transactions take place). According to McGee (1988) the SCP is not a dynamic model which takes industry in equilibrium under the strict conditions of perfect competition. On the contrary, 'efficient structure hypothesis' (ESH) measures efficiency on the basis of market shares. The market shares are used as a proxy and their links with profitability are determined. Smirlock (1985) asserts that ESH implicitly presumes that the market concentration provides a market power irrespective of the number of firms in the market. Market shares reallocate from inefficient firms to efficient firms that means it demands the firms to keep efficient in order to remain in a competitive environment. The firms can pay the price of being inefficient by losing the market shares which will force them exit after reaching the shut-down point. Catena (2009) asserts that highly competitive environments force inefficient firms to lose the business while remaining firms in the market implicitly reallocate the shares of losing firms.

4.2.2.1 Panzar and Rosse (PR) model (H-Statistics)

Competition can directly be measured through the Lerner Index (introduced by AP Lerner, 1934) in which 'price-cost-markup' (PCM) approach is used but the problem is that PCM estimation requires a detailed data of all costs and prices which sometimes difficult to obtain. Therefore, alternative method of non-structural model like Herfindahl-

Hirschman Index (HHI) is used which assesses the competition through market concentration but it has some accuracy issues that give misleading results. Another non-structural method 'Panzar and Rosse' (PR, 1987) has vastly been used in 'new empirical industrial organization' (NEIO) literature. The PR model uses a reduced form revenue equation with factor input prices. One of the main benefits of using PR model is that it gives a parsimonious estimation and doesn't depend on large data set that usually requires in other models like HHI.

The empirical relationship of PR model is written as:

$$\log R = \alpha_0 + \sum_{i=1}^{n} \beta_i \log p_i + \gamma_q \log q + \varepsilon_t \quad (1)$$

The basic propositions of the PR model assert that a sum of factor price elasticities of reduced form revenue would have either a negative value or zero in case of monopoly because an increase in factor prices creates negative implications on monopolist's revenue. In contrast, a positive H value indicates the intensity of competition in the industry. If the H-value goes higher at positive streak (from 0 to 1) the competition becomes better. The H-value peaked up to unity will indicate a perfect competition in the market. The second proposition of PR model explains that a sum of the factor price elasticities in the long run competitive environment must be equal to unity implying that a change in factor prices also changes the marginal cost with same magnitude. Therefore, to remain in a competitive environment, firms need to adjust the quantity being a price taker in the competition. Table-4.4 shows the interpretation of H-statistics.

Table 4.4: Interpretation of H-statistics

Equilibrium Test		
Equilibrium	Disequilibrium	
H=1	0<H<1	H≤ 0
Perfect Competition	Monopolistic competition free entry equilibrium	Monopoly equilibrium
Natural monopoly in a perfectly contestable market		Perfect colluding oligopoly
Sales maximizing firms subject to breakeven constraint		Conjectural variations short-run oligopoly

Source: Author's compilation

Microfinance has now become a subset of formal financial system. Thus, there is a chance that it will be affected by the global financial crises. To test this hypothesis we empirically investigate the implications of 'global financial crisis' (GFC, 2007-08) on microfinance in South Asia. The following model with dummy variables is established to get the impact of GFC (2007-08):

$$\log R = \beta_0 + \sum_{i=1}^{n} \beta_i \log p_i + + \sum_{i=1}^{n} \delta_i \log p_i * FD + \varepsilon_t \quad (2)$$

To check the robustness of the model(1) specified above, two other specifications are also applied by replacing the dependent variables with interest income and ROA; while keeping the independent variables same as in equation (1).

4.2.2.2 Boone Indicator (2004)

In contrast to PCM, the Boone Indicator uses 'Relative Profits Difference' (RPD) to measure the competition between the firms. It provides a direct link between profits and firms' efficiency i.e. in competition, firms need to maintain a high level of efficiency to

remain in the business to keep their market shares intact which could be reallocated to other firms if the business efficiency drops down. It also imposes a rigorous condition on less efficient firms to increase their efficiency level to remain in the competitive industry. The competition is measured by comparing the relative profits of the firms with the level of their efficiency. Nevertheless, RPD primarily assumes that the markets contain homogenous goods, the homogenous working conditions prevail in the markets, the exogenous factors could not affect efficiency levels and the marginal cost is same across business units. The Boone Indicator can be written as:

$$\log \pi_{it} = \alpha_0 + \beta_1 \log MC_{it} + \varepsilon_t \tag{3}$$

Where β_1 is expected to be a negative value because marginal cost has a negative relationship with profits, implying that an increase in marginal costs will decrease the profits of the firms in a competitive environment. Consequently, a significantly higher value of β_1 will indicate the intensity of competition in the market. The equation (3) requires marginal costs of the firms which is not directly observable; therefore, I use the following Translog Cost function to derive the marginal cost:

$$\ln C = \alpha_0 + \sum_i \alpha_i \ln p_i + \frac{1}{2}\sum_i \alpha_{ii} \ln^2 p_i + \frac{1}{2}\sum_i \sum_j \alpha_{ij} \ln p_i \ln p_j + \beta_q \ln q + \frac{1}{2}\beta_{qq} \ln^2 q$$
$$+ \frac{1}{2}\sum_i \beta_{iq} \ln p_i \ln q + \delta_t t + \delta_{tt} t^2 + \sum_i \delta_{it} \ln p_i . t + \delta_{qt} \ln q . t \tag{4}$$

(t = 1, 2, 3…T), (Pi = L, K, F), $(\alpha_{ij} = \alpha_{ji})$

(ln C represents log of total cost of production, ln p_i, ln p_j are log of prices and ln q is log of output, time is measured through t. Whereas, α, β and δ are estimation parameters).

Linear homogeneity in input prices requires that:

$$\sum \alpha_i = 1 \qquad \sum \alpha_{ij} = 0 \qquad \sum \beta_{iq} = 0$$

The following equation for marginal cost is derived after some mathematical substitutions:

$$MC_{it} = \left(\beta_q + \beta_{qq} \ln q + \sum_i \beta_{iq} \ln p_i + \delta_{qt} t \right) \left(\frac{C}{q} \right) \tag{5}$$

4.2.2.3 Data and Variables

To investigate competition in microfinance I use Panzar-and-Rosse and Boone Indicator models with fixed-effects and random-effects regressions. The dataset is constructed by compiling the data of 354 MFIs located in six countries of South Asia for the period 2003~2011. The data are collected from 'microfinance information exchange' (MIX) which is a U.S. based data service provider. Three variables for factor costs are calculated as the ratio of capital expenses to net fixed asset, interest expenses paid for borrowings, and personnel expenses to number of employees. Total assets include tangible fixed assets and non-fixed assets. Interest income includes interest earned on loans and total income includes interest income plus non-interest income. The proxy variable to measure the size of MFIs is number of employees. The ratio of equity-to-assets is calculated as total equity to total assets and the proxy variable for borrowers indebtedness is loan loss rate. The dummy variables are also used for scale, self-sufficiency, regulatory framework and legal status. All values are represented in the US dollar except indicated otherwise.

4.3 Social Performance Evaluation

4.3.1 Indicators for Social Performance Evaluation

The analysis of social performance indicators is based on the survey reports collected by the Pakistan Microfinance Network for 27 MPs at the end of 2014.

4.3.1.1 Target Customers

This indicator defines the priority areas of microfinance institutions. It has the classification of women customers, rural area focused, urban area focused, and adjacent and youth customers as the priority customers.

4.3.1.2 Social Objectives

This indicator explains the main goals of microfinance institutions like poverty alleviation, employment generation, initiation of entrepreneurship, health improvement, gender equality and women empowerment, improvement of water and sanitation services, and enhancement of financial accessibility.

4.3.1.3 Poverty Alleviation

This indicator shows the target clients of microfinance institutions. It exhibits the core objective of microfinance as its classification suggest i.e. ultra poor, moderate poor, or low income poor.

4.3.1.4 Interest Rate Calculation Methods

This indicator is important to determine the social performance of microfinance institutions because the interest rate calculation derives the repayment schemes of the borrowings. It is pertinent to note that different calculations give different repayments incidence of interest on borrowers.

4.4 Survey of people's perceptions of conventional and Islamic microfinance in Pakistan

In order to examine the people's perceptions of conventional and Islamic microfinance, the study conducted a sample survey in Karachi, Pakistan. The survey covered all six districts in Karachi, a mega city with nearly 17 million population, or roughly nine percent of Pakistan's total population of 200 million, Karachi is the capital of Sindh province (World Population Review, 2016). The contribution of Karachi in manufacturing GDP of Sindh province is about 30 percent and the percentage share of Sindh in Pakistan's GDP is 28-30%. Administratively it has 6 districts, 18 towns, and 178 union councils (Karachi Metropolitan Corporation, 2016). The city is diversified in terms of citizens as it shares the population of all provinces of Pakistan. The city is chosen to draw our samples because of its diversified nature and the representation of all castes and culture of entire Pakistan.

A pilot survey was initially conducted in the district central, Karachi. After a careful scrutiny of the responses, a full-scale survey was carried out during the period July-October 2014. A sample size of 420 respondents (70 respondents per district) was set,

allowing for a sampling error of plus or minus 5 percent, and a confidence level of 95 percent. Due to invalidated survey responses, however, the final sample size of 332 respondents was obtained. Respondents were selected using a street-intercept technique, a method commonly used in market research (Butler, 2008). To ensure that the sample would represent the variability in the population, interviewers made sure to conduct the interviews in various locations in each district. Six highly qualified enumerators (one for each district) helped out in data collection.

The questionnaire included five sections, with the first three sections consisting of 30 close-ended questions and the last two sections containing 15 items using a five-point Likert-type scale. The responses taken from the surveys were recorded in SPSS 16.0 and assigned the codes accordingly. The data projection technique was used to analyze the data by using Microsoft excel, SPSS 16.0, and E-Views 8.0.

4.5 Probability of Successful implementation of Islamic Microfinance in Pakistan

This section empirically examines the probability of successful implementation of Islamic microfinance in Pakistan. For this purpose, a linear probability model could be used but the problem in using such model is that the probabilities could not be limited between the lower bound of 0 and upper bound of 1 (figure 4.1) because of the functional form of 'linear probability model' (LPM). The functional form can be written down as:

$$P_i = p(y_i = 1) = \beta o + \beta_1 x_{2i} + \beta_2 x_{3i} + \beta_3 x_{4i} + \ldots\ldots + \beta_k x_{ki} + \varepsilon_i \quad \ldots\ldots (1)$$

And for binary random variable

P (Y=1 / X) is equal to E (Y/ X)

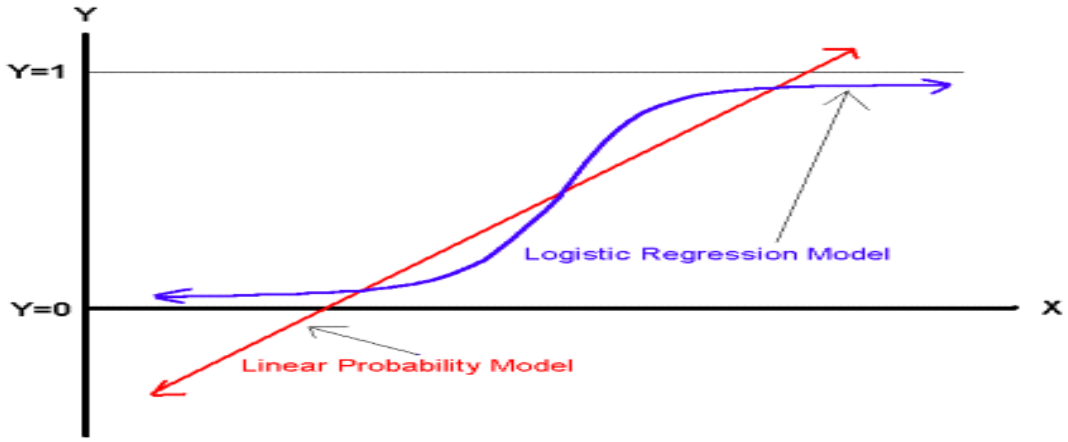


Figure 4.1: The difference between Linear Probability Model and Logit Models
Source: Iqbal (2012)

The LPM has some serious issues as Iqbal (2012) explains; the dependent variable in LPM takes only a value of either zero or one. The explanatory variables and stochastic random errors are also taken an only value from the two, therefore, the assumption of normal distribution for the disturbance term is violated. Also, as the error term systematically changes, the chances of heteroscedasticity increase. For this reason, the heteroscedasticity-robust standard errors are preferably used in limited probability models. The alternative approaches of Logit and Probit are preferred to avoid such estimation issues, therefore, this study uses Probit model instead of linear probability model. The functional form of Probit is written down as:

$$P(y_i = 1/x_i) = \varphi(x'_i\beta) \ldots\ldots (2)$$

(where $\varphi$is cumulative density function)

4.5.1 Data

We use the questionnaire survey data which were collected to ascertain the people's perception about conventional microfinance and Islamic microfinance in Pakistan. The data is primary in nature and the data collection was held in July to October'2014, in all districts of Karachi, Pakistan. A total 332 survey questionnaires are used to gather the data for this study.

4.5.2 Variables

This section assesses the probability of success for the implementation of Islamic microfinance in Pakistan. The likelihood is investigated by using the variables that determine the awareness of Islamic microfinance in our respondents. For the independent variables, five categorical variables are transformed into dummy variables by assigning the values of 1 for 'agree' and 'strongly agree' Likert-scale categories, and 0 otherwise. The dependent variable 'success' is transformed into dummy by using the variables that gives the awareness that Islamic microfinance is a better tool for poverty alleviation.

4.5.3 Model

The following model is developed for this study:

$$P\ (Sx_i = 1/x_i) = \varphi\{(IMFI_{EMR}.\beta_1 + IMFI_{GOV}.\beta_2 + IMFI_{HELP}.\beta_3 + IMF_{SH}.\beta_4 + IMF_{UN}.\beta_5 + \varepsilon_1))$$

Where,

Sx is 1 in case of positive response that IMFI serves poorest of the poor and 0 otherwise.

IMFI.EMR is 1 in case of positive response that IMFI emerges due to Islamic Banks and 0 otherwise.

IMFI.GOV is 1 in case of awareness that the government support can catalyze the poverty alleviation efforts through IMFI and 0 otherwise.

IMFI.HELP is 1 in case of awareness that it IMFI lifts poor out of the poverty and 0 otherwise.

IMFI.SH is 1 in case of awareness that IMFI works within *Shariah* boundaries and 0 otherwise.

IMFI.UN is 1 in case of awareness that IMFI doesn't use unethical practice and 0 otherwise.

MFI.POOR is 1 in case of awareness that conventional MFI serves the poorest of the poor.

CHAPTER 5
RESULTS AND DISCUSSION

The empirical findings presented in this chapter are based on the methodological framework of this dissertation that is divided into four segments. The first segment evaluates the role of microfinance in poverty alleviation in Pakistan through data envelopment analysis (DEA). Financial and social efficiencies are calculated through DEA to ascertain the overall efficiency of MFIs in Pakistan. The performance evaluation is also conducted through financial ratios analysis (FRA). Segment two explores the perceived differences between conventional microfinance and Islamic microfinance based on primary data gathered through a survey conducted in Pakistan from July to October 2014 which sought to ascertain the peoples' perceptions about conventional and Islamic microfinance. Segment three proposes a newly developed model for Islamic microfinance for poverty alleviation, and section four investigates the probability of successful implementation of Islamic microfinance in Pakistan. The empirical results are presented in order of investigation.

5.1 Performance evaluation of conventional microfinance in Pakistan through Data Envelopment Analysis (DEA)

The financial and social efficiencies are calculated through data envelopment analysis (DEA). To keep the discussion simple, a mnemonic notation was used. The first letter of the notation contains the type of efficiency, i.e. F for financial efficiency, S for social efficiency and O for overall efficiency, and the second part exhibits the output variables, i.e. R for total revenue, I for interest income, G for gross loan portfolio, B for

number of borrowers, and O for outreach. The names of MFIs are also reduced to their first three letters. Table 5.1 exhibits the descriptive statistics of the variables.

Table 5.1: Descriptive Statistics of variables

	ASSETS	COST	EMP	TOT_INC	INT_INC	GLP	BRWRS	OUTRCH
Mean	18670884	9620807.	504.5630	3278851.	3212653.	14938906	68719.90	0.316031
Median	4682307.	2252579.	191.0000	999592.0	999592.0	3326817.	23730.00	0.210000
Maximum	1.27E+08	61809315	3731.000	22028321	21532907	2.86E+08	565863.0	6.042700
Minimum	70424.00	65594.00	12.00000	0.000000	9866.000	98435.00	84.00000	0.000000
Std. Dev.	28185608	13448299	710.1675	5326933.	5175358.	33117404	110668.8	0.560633
Skewness	1.817410	1.792104	2.137901	2.112369	2.115375	5.194640	2.397860	8.330740
Kurtosis	5.308218	5.636122	7.525731	6.410869	6.426153	37.87129	8.117274	83.03704
Jarque-Bera	104.2863	111.3508	218.0516	165.8387	166.7124	7447.184	276.6680	37594.87
Probability	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Sum	2.52E+09	1.30E+09	68116.00	4.43E+08	4.34E+08	2.02E+09	9277187.	42.66424
Sum Sq. Dev.	1.06E+17	2.42E+16	67581279	3.80E+15	3.59E+15	1.47E+17	1.64E+12	42.11752
Observations	135	135	135	135	135	135	135	135

Source: Author's compilation

Table 5.2 displays the Pearson's coefficient correlation matrix between the efficiency scores for financial and social specifications. The Pearson's coefficient correlation between the social efficiency and the financial efficiency is 0.510, and is significant at the 1% level of significance. These two efficiencies are associated with each other suggests that both efficiencies are equally important in order to obtain the double-bottom line objectives. The positive correlation between the number of borrowers and outreach (0.730) is also significant implying that a higher outreach increases the probability of more borrowers.

Table 5.2: Pearson's coefficient correlation matrix between efficiency scores

Specification	S_B	S_O	F_G	F_R	F_I	F_GR	S_BO
S_B	1.0000	-	-	-	-	-	-
S_O	0.7309*	1.0000	-	-	-	-	-
F_G	0.8086*	0.6789*	1.0000	-	-	-	-
F_R	0.6631*	0.6809*	0.6535*	1.0000	-	-	-
F_I	0.6665*	0.6753*	0.6820*	0.8605*	1.0000	-	-
F_GR	0.0623**	0.1094	0.1589***	0.3923*	0.3029*	1.0000	-
S_BO	0.2391**	0.3722*	0.1432***	0.3130*	0.1973**	0.5107*	1.0000

*, **, *** show significant at 1%, 5%, and 10% level of significance

Table 5.3 shows the efficiency scores obtained through different specifications. Three inputs (total assets, employees, and total costs) are used to obtain these efficiencies. The mnemonic notation of variables is used to classify the efficiencies with input-output combinations, i.e. S-B stands for Social efficiency with number of Borrowers as output variable, S-O stands for Social efficiency with Outreach as output variable etc.

Table 5.3: Efficiency scores through different specifications

MFI's Name	Social Efficiency		Financial Efficiency			Financial	Social	Mean Efficiency
	Three Inputs Single Output					Three Inputs Two Outputs		
	S-B	S-O	F-G	F-R	F-I	F-GR	S-BO	Overall
AKH	0.021	0.021	0.030	0.509	0.615	0.592	0.885	0.739
APN	0.023	0.073	0.120	0.607	0.617	0.599	0.968	0.784
ASA	0.033	0.081	0.033	0.387	1.000	0.165	0.141	0.153
ASH	0.011	0.029	0.052	0.190	0.188	0.423	0.710	0.567
BRA	0.003	0.022	0.031	1.000	0.412	0.673	1.000	0.837
BUK	0.001	0.002	0.024	0.143	0.142	0.866	1.000	0.933
CSC	0.016	0.016	0.049	0.265	0.265	0.440	0.371	0.406
CWC	0.013	1.000	0.064	0.324	0.330	0.445	1.000	0.723
DAM	0.021	0.031	0.045	0.326	0.326	0.390	0.591	0.491
FFO	1.000	0.321	1.000	0.764	1.000	0.853	1.000	0.927
FMF	0.030	0.346	0.073	0.526	0.526	0.553	1.000	0.777
JWS	0.072	0.166	0.252	0.587	0.587	0.599	0.440	0.520
KAB	0.053	0.452	0.400	1.000	0.675	1.000	0.978	0.989
KAF	0.036	0.861	0.041	0.456	0.469	0.482	1.000	0.741

KHU	0.027	1.000	0.081	0.507	0.507	0.525	1.000	0.763
NRS	0.028	1.000	0.038	0.437	0.437	0.462	1.000	0.731
ORA	0.023	0.023	0.047	0.336	0.336	0.212	0.099	0.156
ORI	0.021	0.079	0.041	0.327	0.327	0.340	0.336	0.338
POM	0.033	0.175	0.216	0.576	0.576	0.977	0.985	0.981
PRS	0.054	0.216	0.162	0.925	0.925	0.979	1.000	0.990
RCD	0.011	0.029	0.026	0.249	0.291	0.563	0.955	0.759
ROZ	0.041	0.041	0.155	0.561	0.561	0.469	1.000	0.735
SAF	0.015	0.038	0.041	0.280	0.280	0.461	0.704	0.583
SRS	0.018	0.019	0.130	0.330	0.351	0.782	0.563	0.673
SUN	0.035	0.035	0.048	1.000	0.436	0.532	1.000	0.766
TMF	0.007	0.028	0.018	0.304	0.309	0.232	0.814	0.523
TRD	0.013	0.044	0.057	0.311	0.389	0.287	0.304	0.296

Source: Author's compilation

Figure 5.1 exhibits the efficiency plots for all MFIs according to their social and financial efficiency scores. The upper right corner shows the MFIs with highest efficiency scores in both classes, i.e. social and financial.

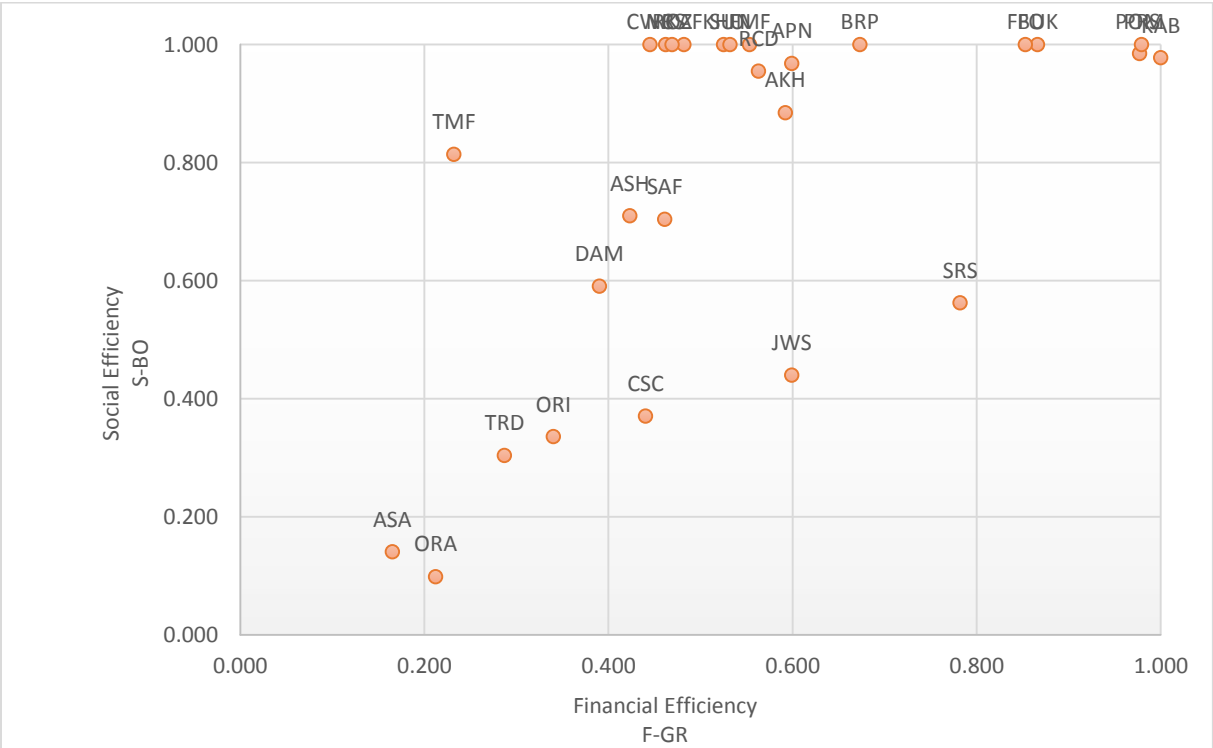


Figure 5.1: Social Efficiency against Financial Efficiency
Source: Author's compilation on the basis of DEA efficiency scores

It is pertinent to mention that not a single MFI achieved a full-fledged efficiency or the peak of double-bottom line. KAB is leading from the front in highest financial efficiency but less perfect in social efficiency. Similarly, a few MFIs have achieved social efficiency but didn't get high scores in financial efficiency like BRP, BUK, CWC, FFO, FFM, KAF, KHU, NRF, PRS, and SUN. The MFIs that perform on both fronts (BUK, FFO, KAB, POM, and PRS) can be called as industry leaders. Figure 5.2 depicts the situation of overall efficiency scores. The MFIs in the lower right quadrant moderately performed in financial and social efficiencies and the MFIs in the lower left corner performed below the average on both financial and social fronts. In order to stay in the microfinance market they should improve or strengthen their operational settings and improve their efficiencies. Out of 27 MFIs only a single unit (KAB) is shown to be a full-fledged financially efficient institution and only 11 are full-fledged socially efficient MFIs. The overall efficiency picture is shown in Figure 5.2.

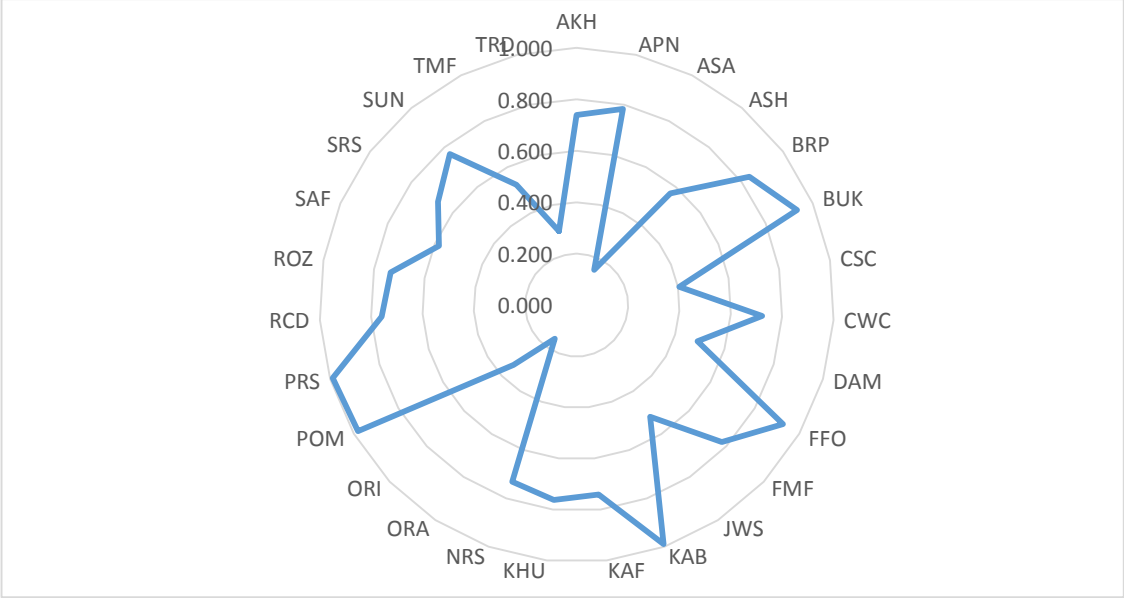


Figure 5.2: Overall Efficiency of MFIs in Pakistan
Source: Author's compilation on the basis of DEA efficiency scores

Out of 27 MFIs, not a single MFI achieved 100% overall efficiency or the double-bottom line objectives during the period under consideration. PRS, POM, KAB, BUK, and FFO performed quite superbly with overall efficiency scores of 0.990, 0.981, 0.989, 0.933, and 0.927 respectively. The lack of efficiency might be the result of a low level competition in microfinance industry in Pakistan (see detailed analysis on competition in Section 5.2.2). The competition-efficiency hypothesis asserts that a higher competition leads to a higher efficiency (Schaeck and Čihák, 2008; Jiménez, Lopez, and Saurina, 2013). In order to increase portfolio of borrowers, the MFIs relax the borrowing constraints; Hay and Liu (1997) (as cited in Berger and Hannan (1998) noted that under the Cournot competition there is an additional incentive of more market shares.

5.2 Performance evaluation of conventional microfinance in Pakistan through Financial Ratios Analysis (FRA)

5.2.1 Financial Performance Indicators

Table 5.4 shows the financial performance indicators of microfinance in Pakistan for the period 2003-2014. The shaded columns show the industry averages for microfinance in South Asia.

Table 5.4: Financial Performance indicators of microfinance in Pakistan

Fiscal Year	Pakistan						Average for South Asian Countries				
	OSS	Cost per loan (in US$)	OER (%)	ROA	Depth of Outreach (%)	CAR (%)	OSS	Cost per loan (in US$)	OER (%)	ROA	CAR (%)
2003	82%	5.02	18.60	-0.97	10.00	47.87	116%	5.90	24.90	-5.10	22.89
2004	79%	29.18	21.53	-2.64	13.00	38.89	113%	9.70	23.74	-5.38	23.96
2005	172%	-30.11	20.16	-20.75	14.00	31.10	124%	13.50	19.86	-4.21	17.72

2006	88%	34.67	22.69	-1.80	17.00	31.15	117%	14.40	17.34	-0.52	17.31
2007	93%	39.02	23.59	-1.70	15.00	24.06	125%	24.29	15.75	0.21	15.53
2008	63%	29.48	19.88	-12.52	13.00	21.94	119%	24.88	15.25	-1.38	15.52
2009	93%	36.88	24.09	-1.50	22.00	24.83	110%	28.88	15.99	0.39	15.37
2010	97%	39.22	15.38	-0.03	15.00	1.40	121%	35.68	13.74	1.15	12.25
2011	103%	41.10	22.89	0.25	8.00	22.08	122%	37.18	14.39	-0.32	16.31
2012	110%	37.27	21.44	1.77	7.00	20.84	113%	28.04	12.54	-0.56	15.70
2013	118%	36.78	20.31	2.92	7.00	21.28	113%	53.13	16.29	2.50	21.81
2014	117%	76.11	25.69	2.63	4.00	18.30	109%	46.16	15.34	1.85	20.13
Average	101%	31.22	21.35	-2.86	11.97	25.31	117%	26.81	17.09	-0.95	17.88

Source: Author's calculation based on Microfinance Information Exchange's data

Table 5.4 shows the strength of microfinance in Pakistan where operational self-sufficiency has been increasing for the last six years and MPs in Pakistan are successful to maintain the average OSS greater than 100 percent for the period under consideration. However, it is lesser than the industry average (117%) of the South Asian microfinance. The main reason for a higher industry average in South Asia is the performance of three outstanding countries (Bangladesh, India and Sri Lanka) which maintained the average OSS for the same period as 125%, 111%, and 117% respectively. The average cost per loan for the microfinance in Pakistan is also higher (US$31.25) than the average in the region (US$26.81). It can be argued that the cost per loan is affected by high operating expenses ratio in Pakistan as it could only be maintained at 21.25 (on average) which is the second highest in the region after Afghanistan (37.82) and higher than the South Asian industry average (17.09). The average ROA for Pakistan is negative (-2.86) but it shows a positive trend in the last few years (since 2011). However, the country's average ROA is lower than the average ROA in the region (-0.95). The average for the depth of outreach is 11.97% which shows that on average, the percentage of serving the poorest is around 12% in the gross loan portfolio. Interestingly, these ratios are in single digits for the last few

years and stand at merely 4% in 2014 which shows an imbalance between financial sustainability and social outreach. Regarding financial strength, the capital adequacy ratio (CAR) of 25.31% (on average) is highest in the region and higher than the average CAR of the South Asian microfinance (17.88%). Although the financial strength of microfinance in Pakistan is apparent, the element of capital under-utilization cannot be ignored. According to *Basel-II* guidelines, the financial units should maintain the CAR at 8% to 12% and above. The overall picture of financial performance shows that microfinance in Pakistan did not perform convincingly well as compared with other countries in the region. The reported figures of PMR (2014) show that GLP has increased by 31%, from 46.6 billion rupees in 2013 to 61.1 billion rupees in 2014, but the largest share of GLP belongs to MFBs (61%), followed by MFIs (21%) and RSPs (19%). The market is highly concentrated as around 82% of GLP is shared among nine MPs. Regarding the lending methodology, a majority of MPs use group lending (68%) while the individual lending is just (32%) but most of the MFBs prefer to use individual lending due to procedural leniency. The ratio between male and female borrower is 58% to 42% and the split between rural-urban is 57%-43% with an increasing trend of urban lending. The majority of MFBs are urban-focused and expand their outreach in urban peripheries. They enjoy a lion's share of overall profit in the industry (47%) followed by MFIs (25%) and RSPs (28%).

5.2.2 Competition

Competition is first assessed through a PR model, then Boone Indicator is employed to measure the intensity and evolution of competition over time. Next, the H-statistics (collected through PR model) is used to compute the partial factors of competition intensity.

The empirical estimation is based on panel regression instead of 'ordinary least squares' (OLS) to a cross-section data of 354 MFIs for the period 2003-2011. The summary statistics of variables is presented in table 5.5.

Table 5.5: **Summary statistics of variables**

Description	Variables	Formation	Unit	Mean	Median	Std. Dev.	Skewness
Total Assets	A	Total Assets	US$	18864184	1774669	87608884	10.200
Output	Q	Gross Loan Portfolio	US$	16706326	1497704	71028629	8.092
Total Cost	TC	Operating Cost+ Non-Operating Cost	US$	6721432	611029	29635435	8.83
Cost of Capital	K	Capital Cost-to-Net Fixed Assets	-	-2.284	-0.150	28.386	-4.890
Equity/ Asset Ratio	E	Total Equity / Total Assets	-	2.369	0.150	12.027	5.319
Unit Fund Cost	F	Interest Cost/ Total Borrowing	-	0.099	0.080	0.143	10.696
Interest Income/ Assets	IR	Interest Income / Total Assets	-	0.168	0.140	0.183	7.246
Unit Labour Cost	L	Personnel Cost/ No. of Employees	-	2062.544	1667.930	1421.751	1.804
Loan Loss Rate	LL	Loan Loss Rate	-	0.434	0.020	2.983	29.638
Total Income/ Total Assets	TR	Total Income/ Total Assets	-	0.273	0.210	0.269	7.092
Returns on Assets	ROA	Returns on Assets	%	-0.020	0.020	0.299	-12.260
Returns on Equity	ROE	Returns on Equity	%	0.272	0.120	5.100	31.707
Economic Growth	GDP	GDP Growth	%	6.749	6.240	3.320	1.891
Size of the Firm	S	No. of Personnel	No.	527.000	84.000	2174.699	8.855
Self Sufficient	SS	Dummy	1=Self-sufficient; 0=Otherwise				
Regulated	R	Dummy	1=Regulated; 0=Otherwise				
Scale	S	Dummy	1=Small; 2=Medium; 3=Large				
Legal Status	LG	Dummy	1=NGO; 2=Bank; 3=NBFI;4=Otherwise				

Source: Author's compilation

One of the main advantages of using panel regression is that it gives more accurate inferences of parameters by keeping more variability in the sample with high degree of freedom. The panel regression is quite appropriate to test the dynamic relationships due to a better control for omitting variable bias (Hsiao, 2007). Three different models are used to assess competition with different dependent variables, i.e. total income, interest income and ROA. 'Fixed effects' (FE) estimation is employed based on significant rejection of null hypothesis by the Hausman Test that the 'random effects' (RE) estimation is consistent and efficient. The regression results are displayed in Table 5.6.

Table 5.6: Regression results of the competition in microfinance sector in South Asia

Independent Variables	Dependent variables					
	TR		IR		ROA	
	Fixed Effects	Random Effects	Fixed Effects	Random Effects	Fixed Effects	Random Effects
Intercept	-5.464* (0.528)	-4.973* (0.397)	-4.544* (0.412)	-4.555* (0.333)	-0.499* (0.143)	-0.124 (0.103)
Log(L)	0.179* (0.054)	0.179* (0.039)	0.133* (0.042)	0.167* (0.03)	0.017 (0.014)	-0.017 (0.010)
Log(K)	-0.046* (0.018)	-0.036* (0.015)	0.007 (0.014)	0.005 (0.012)	-0.008 (0.005)	-0.009 (0.010)
Log(F)	0.400* (0.060)	0.221* (0.045)	0.270* (0.047)	0.153* (0.037)	0.019 (0.016)	0.010 (0.011)
Log(Q)	0.125* (0.017)	0.101* (0.014)	0.102* (0.013)	0.086* (0.011)	0.001 (0.004)	0.001 (0.004)
Log(A)	0.055* (0.021)	0.037* (0.018)	-0.005 (0.016)	-0.015 (0.015)	0.023* (0.005)	0.013* (0.004)
Log(S)	0.208* (0.033)	0.113* (0.026)	0.190* (0.025)	0.141* (0.021)	0.008 (0.009)	-0.0007 (0.009)
$\overline{R}^2$	0.69	0.15	0.75	0.13	0.61	0.17
H statistic	0.533	0.270	0.410	0.325	0.028	0.010
Wald statistic H=1	-0.466 (0.0756)	-0.635 (0.0582)	0.058 (0.059)	-0.672 (0.0486)	-0.971 (0.020)	-1.016 (0.015)
Wald statistic H=0	0.533 (0.0758)	0.0364 (0.0582)	0.411 (0.059)	0.327 (0.0486)	0.028 (0.020)	-1.016 (0.015)
Hausman Test	-	142.300 [0.000]	-	90.735 [0.000]	-	36.961 [0.000]

Observations	1483	1483	1485	1485	1468	1468

Note: Log (L), log (K) & log (F) represent log of unit cost of labor, capital and fund, while log (Q) log (A) & log(S) represent log of output, assets and size respectively. We used 'fixed effects' (FE) panel estimation on the basis of Hausman Test. ( ) represent standard errors, [ ] show p-values & *, **, *** exhibit significance level at 1%, 5% and 10% respectively. Source: Author's compilation.

The Boone Indicator model is also applied to capture the evolution of competition with the passage of time because we assume that competition is not a time invariant phenomenon. The empirical results confirm that the competition has intensified in the South Asian microfinance during the period under consideration. The results for the evolution of competition are shown in Table 5.7.

Table 5.7: Evolution of competition over time (Boone Indicator)

Years / Country	Afghanistan	Bangladesh	India	Nepal	Pakistan	Sri Lanka
2003	-0.0411	-0.0221	-0.0231	-0.0412	-0.0323	-0.0472
2004	-0.0421	0.0183	0.0172	-0.0007	0.0075	-0.0073
2005	-0.0433	0.0173	0.0163	-0.0008	0.0073	-0.0075
2006	-0.0391	0.0222	0.0201	0.0038	0.0113	-0.0035
2007	-0.0381	0.0224	0.0212	0.0039	0.0120	-0.0027
2008	-0.0372	0.0232	0.0223	0.0046	0.0128	-0.0020
2009	-0.0392	0.0221	0.0212	0.0035	0.0117	-0.0031
2010	-0.0386	0.0231	0.0214	0.0041	0.0123	-0.0026
2011	-0.0392	0.0223	0.0212	0.0031	0.0113	-0.0035

Note: The table represents the estimates of the Boone indicator. The dependent variable, log (ROA) is regressed on marginal cost derived from the Translog cost function in equation (4) using 'fixed effects' (FE) estimation on the basis of Hausman test. Source: Author's compilation.

The empirical analysis also measures the impacts of GFC (2007-08) on microfinance in South Asia. Fixed Effect estimation is used on the basis of Chow test which

gives the confirmation of structural breakup in the dataset. The estimates of Chow test and the testing of competition are presented in Table 5.8.

Table 5.8: CHOW test estimation and competition

TESTING FOR COMPETITION (H-STATISTICS)						
$H_0 = \beta_1 + \beta_2 + \beta_3 = 1$ (Perfect Competition) $H_1 = \beta_1 + \beta_2 + \beta_3 \neq 1$						
Dependent variable	TR		IR		ROA	
Period	Pre GFC	Post GFC	Pre GFC	Post GFC	Pre GFC	Post GFC
Test statistics	0.317	0.460	0.272	0.374	0.245	0.015
Result	Reject H_0	Reject H_0	Reject H_0	Reject H_0	Reject H_0	Reject H_0
Market Structure	Monopolistic Competition		Monopolistic Competition		Monopolistic Competition	
ALTERNATIVE TEST (Wald test of zero restriction)						
$H_0 = H = 1$ (Perfect Competition)						
Test statistics	982.428	995.395	1554.999	1467.767	1574.595	12113.3
p-values	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Result	Reject H_0	Reject H_0	Reject H_0	Reject H_0	Reject H_0	Reject H_0
Market Structure	Monopolistic Competition		Monopolistic Competition		Monopolistic Competition	
$H_0 = H = 0$ (Monopoly)						
Test statistics	04.759	19.976	6.787	12.041	5.580	1.009
p-values	(0.002)	(0.000)	(0.000)	(0.000)	(0.000)	(0.387)
Result	Reject H_0	Reject H_0	Reject H_0	Reject H_0	Reject H_0	AcceptH_0
Market Structure	Monopolistic Competition		Monopolistic Competition		Monopolistic Competition	Monopoly

Note: The H statistics and the Wald tests reject the null hypothesis of perfect competition and monopoly before and after GFC in all three models except in model 3 where the Wald test shows the market structure as monopoly. Source: Author's compilation.

The empirical results suggest that the intensity of competition is increased after (GFC). Hence, it may be argued that business opportunities in post GFC period attracted new MFIs to enter with high expectations of potential profits. New MFIs choose to penetrate in established markets to minimize their startup cost. Although this strategy

provides them a better screening opportunities without incurring additional costs, it also increases the probability of double-dipping and default. The regression results of Pre-GFC and post-GFC estimates are presented in Table 5.9.

Table 5.9: Regression results for the impact of GFC (2007-08) on microfinance

Explanatory Variables	Dependent Variables					
	TR		IR		ROA	
	Pre GFC	Post GFC	Pre GFC	Post GFC	Pre GFC	Post GFC
Intercept	-4.831* (0.567)	-4.447* (1.092)	-3.568* (0.445)	-4.438* (0.801)	-0.369* (0.158)	-0.605* (0.285)
FD	No	0.384 (0.455)	No	-0.870* (0.356)	No	-0.236 (0.127)
Log(L)	0.092 (0.059)	0.169 (0.097)	0.028 (0.046)	0.140 (0.076)	0.226 (0.016)	0.006 (0.027)
Log(L).FD	No	0.076 (0.038)	No	0.112* (0.030)	No	0.005 (0.010)
Log(K)	-0.0002 (0.019)	-0.083 (0.038)	0.023 (0.015)	-0.007* (0.030)	-0.011* (0.005)	-0.006* (0.014)
Log(K).FD	No	-0.082 (0.018)	No	-0.031* (0.014)	No	0.005 (0.005)
Log(F)	0.225* (0.068)	0.374* (0.122)	0.221* (0.054)	0.241* (0.095)	0.030 (0.019)	0.015 (0.034)
Log(F).FD	No	-0.082* (0.018)	No	0.020 (0.041)	No	-0.015 (0.015)
Log(Q)	0.078* (0.019)	0.097* (0.038)	0.063* (0.015)	0.124* (0.030)	0.002 (0.005)	0.006 (0.010)
Log(Q).FD	No	0.018* (0.019)	No	0.060* (0.014)	No	0.004 (0.005)
Log(A)	0.072* (0.022)	0.009* (0.050)	0.020 (0.017)	-0.052 (0.039)	0.023* (0.006)	0.024* (0.014)
Log(A).FD	No	-0.063* (0.027)	No	-0.072* (0.021)	No	0.0004 (0.007)
Log(S)	0.175* (0.035)	0.241* (0.068)	0.143* (0.027)	0.225* (0.053)	0.0003 (0.009)	0.012 (0.019)
Log(S).FD	No	0.066* (0.032)	No	0.082* (0.025)	No	0.0003 (0.009)
$\overline{R}^2$	0.71	0.71	0.77	0.77	0.62	0.62
Chow Test	H_0 ; $\alpha_1 = \alpha_2$: $\beta_1 = \beta_2$ H_1 ; $\alpha_1 \neq \alpha_2$: $\beta_1 \neq \beta_2$		$F - \frac{RSS_W - (RSS_1 + RSS_2)/k}{RSS_1 + RSS_2/n - 2k}$			
	Tabulated values	1%=2.65 5%=2.11	Test value	204.13	Result: Reject H_0	

Note: Log (L), log (K) & log (F) represent log of unit cost of labor, capital and funds, while log (Q) log(A) & log(S) represent log of output, assets and size respectively. We used 'fixed effects' (FE)

panel estimation on the basis of Hausman Test. The financial crises dummy stands 1 in post GFC and 0 otherwise. The Chow test confirms the structural break in our dataset. ( ) represent standard errors, [ ] show p-values. *, **, *** exhibit significance level at 1%, 5% and 10% respectively. Source: Author's compilation.

5.2.3 Social Performance Indicators

The analysis on social performance indicators is based on the data collected by the Pakistan Microfinance Network for 27 MPs. The responses are taken from 5 MFBs, 19 MFIs, and 3 RSPs at the end of 2014. Table 5.10 shows the responses of the microfinance practitioners for the evaluation of social performance.

Table 5.10: Social Performance Indicator of Pakistan's Microfinance Industry

1. Target Customers					
Priority Areas	MFBs	MFIs	RSPs	N.A	TOTAL
Women	5	18	2	2	27
Rural Area Focused	5	18	3	1	27
Urban Area Focused	5	16	2	4	27
Adjacent and Youth	-	2	-	25	27
2. Social Objectives					
Goals	MFBs	MFIs	RSPs	N.A	TOTAL
Enhancement of financial accessibility	5	19	2	1	27
Poverty alleviation	5	19	3	-	27
Employment generation	2	13	1	11	27
Initiation of entrepreneurships	1	7	2	17	27
Support of existing business	5	14	3	5	27
Opportunities for the youth	-	5	-	22	27
Health improvement	1	3	-	23	27
Gender equality and women empowerment	2	10	3	12	27
Improvement in water and sanitation services	-	2	1	24	27
3. Poverty Alleviation					
Target Clients	MFBs	MFIs	RSPs	N.A	TOTAL
Poorest of the poor	-	3	1	23	27
Moderately poor	5	11	2	9	27
Low income poor	5	16	2	4	27
4. Interest Rate Calculation Method					

Calculation Methods	MFBs	MFIs	RSPs	N.A	TOTAL
Declining Balance	3	6	2	-	11
Flat Rate	2	13	1	-	16
Others.	-	-	-	-	0

Source: Author's recompilation of the data provided by PMR, 2014

The first section of Table 5.10 highlights that most MPs target women customers and neglect the youth, which is only considered by a couple of MFIs. Also, the majority of MFBs and RSPs are less concerned about youth development. Although targeting women customers is a good step towards women empowerment and gender equality, ignoring youth and serving mostly urban customers will not help in poverty eradication. In the second category of social objectives, all MPs have set the goals of poverty alleviation and enhancement of financial inclusion, but their goals are compared with the target strata of clients, most of the MFBs and MFIs have shown reluctance in serving the poorest of the poor who actually deserve the most microfinance services. The least prioritized areas among all are 'health improvement' as only one MFB, and three MFIs have this objective, and 'water and sanitation improvement' (only two MFIs and one RSP are concerned). The third section of Table 5.10 defines the role of MPs in poverty alleviation through the selection of their target clients. Not a single unit out of five MFBs, only three of 19 MFIs, and only one of three RSPs serve the poorest of the poor. This scenario reflects that microfinance in Pakistan has lost track of the double bottom line, and the goals of poverty eradication have smoldered. A majority of MPs serve moderately poor and low income poor to secure repayment of loans and to maintain their GLP, which is an indication of skewedness towards financial commercialization. The microfinance authorities in Pakistan have consistently been claiming the expansion of outreach by showing the increased values of GLP and number of borrowers, but the above analysis shows that the poorest of the poor

have been neglected by all three major market players of the microfinance industry in Pakistan. The last section of Table 5.10 explains the methodology of interest calculation which is a prime factor in the possible exploitation of the poor through exorbitant interest charges on microloans. A majority of MPs use flat rate interest calculation method (60%) which is evidently higher than the declining balance method, used by only 40% of total MPs. The declining balance interest rate is better for microfinance borrowers because its calculation is based on outstanding loan balance. The borrowers have to pay the interest only on the remaining balance after each and every payment. In contrast, flat rate interest is calculated on the full original amount throughout the loan term without any consideration of loan repayment.

Both the financial and social performance evaluation revealed that the microfinance sector in Pakistan is clearly skewed toward business orientation and financial commercialization. The monopolistic competition of microfinance (see Table 5.6) provides the opportunity to involve in a rent-seeking behavior. Marotta (2013) observed that rent-seeking does not add national value and is based on coercion including piracy, lobbying, or just giving away money.

5.3 People's Perceptions of Conventional and Islamic Microfinance in Pakistan

This section contains the actual responses recorded through the survey questionnaires and recapitulated here for further empirical analysis. It is pertinent to note that this section has been published in the *Turkish Journal of Islamic Economics* vide 2016: 3(1) p.37-61.

5.3.1 Respondents' characteristics

The demographics section includes age, gender, vicinity, marital-status, number of children, education, and religion. Majority of the respondents (43.34%) are young, belonging to the age group of 18-30 years. About 29 percent belong to the age group of 31-45 years, 20.46% are in the age category of 46-60 years, while 6.93 % are above 60 years old. There were more female respondents than the males (55% versus 45%, respectively). Table 5.11 shows the demographics and financial position of the respondents.

Table 5.11: Demographics and Financial Position

Regional distribution of respondents	(%)
South	15
East	20
West	14
Central	31
Malir	12
Korangi	8
Total	100

Age Groups	Frequency	Percentage	Cum. Freq.
18-30	144	43.37	43.37
31-45	95	28.61	71.98
46-60	68	20.48	92.46
61 and above	23	6.93	99.39
No Answer	2	0.61	100
Total	332	100	

Education	Frequency	Percentage	Cum. Freq.
No Education	7	2.1	2.1
Basic Education	7	2.1	4.2
Secondary	14	4.2	8.4
Intermediate	60	18.1	26.5
Graduation	101	30.4	56.9
Masters	131	39.5	96.4

Ph.D.	11	3.3	99.7
Others	1	0.3	100
Total	332	100	
Occupation	Frequency	Percentage	Cum. Freq.
Unemployed	14	4.2	4.2
Student	100	30.1	34.3
Govt. Service	39	11.7	46.1
Private Service	108	32.5	78.6
Business	18	5.4	84
House wife	37	11.1	95.2
Others	16	4.8	100
Total	332	100	
Income	Frequency	Percentage	Cum. Freq.
No income	7	2.1	2.1
< Rs.6000	8	2.4	4.5
Rs. 6001 ~ Rs. 15000	23	6.9	11.4
Rs. 15001~ Rs. 30000	61	18.4	29.8
Rs. 30001~ Rs. 60000	120	36.1	65.9
> Rs.60000	101	30.4	96.3
No Answer	12	3.7	100
Total	332	100	

Source: Author's compilation

The respondents are mostly Muslim (95.5 percent) and majority are highly educated – with a doctorate degree (3.3 percent), a master's degree (39.5 percent), are college graduates (30.4 percent), or are currently in college (22.3 percent).

More than half of the respondents (54 percent) are currently employed, either in the private sector (32.5 percent), in the government (11.7 percent), in their own businesses (5.4 percent) and other income-generating activities (4.8 percent). A third of the respondents are students (30.1 percent), 11.1 percent are housewives, and 4.2 percent were unemployed.

The respondents are of moderate income: 18.4 percent earn between Rs.15001 to Rs.30000, 36.1 percent earn between Rs.30001 to Rs. 60000, and 30.4 percent earn more than 60000. Some earn less than Rs 6000 or none at all (2.4 and 2.1 percent, respectively). Out of 332 respondents, 158 mentioned additional income from sources such as farm land (4), capital investment (45), share market investment (26), remittance from abroad (27) and others sources (56). Roughly one out of three owned a means of transportation: 29.5 percent have motorbikes/scooters, and 29.2 percent have cars. Others reported owning a rickshaw/qingi (5.2 percent), a bicycle (3.9 percent) or a tractor (2.4 percent). However, some 26.5 percent reported not owning any means of transportation.

Regarding the access to formal financial services, a majority have formal bank accounts (78.6%) and 21.4% do not have account in any bank. Of those with a bank account, 61.4% use a commercial banks, 10.2% use Islamic banks, 5.1% use foreign banks and 1.8% use other banks. Regarding the type of bank accounts, 36.7% have current accounts, 33.4% have profit-n-loss (PLS) accounts, 5.1% have interest free accounts and 3.3% have other types of accounts.

5.3.2 Credit comfortability

This section analyzes the existing financial environment for borrowing. Pakistan has a broad range of banks but acquiring loan is difficult. Presently, 56 banks are in operation in the country (Pakistan & Gulf Economist, 2013) and most of the banks have either headquarters or main branches in Karachi. The survey asked about the major constraints in borrowing from the major banks. The data show that 128 out of 332

respondents had availed themselves of the bank facility to obtain loans in their life time. Of those who obtained a loan, 7% got a loan of Rs. 6000/- or less, 10% between Rs. 6001/- to Rs. 15000/-, 19% between Rs.15001/- to Rs. 30000/-, 36% between Rs. 30001/- to Rs. 60000/- and 28% had Rs. 60001/- and more.

Another issue that affects the effectiveness of microfinance is the usage of loans in inappropriate ways particularly for purposes other than economic activity or income generation. The survey results indicate that a major proportion of the borrowing was used for non-productive activities and only 23.44% reported using the loans for business purpose. The other purposes for which the loan was used included funeral ceremony of a relative (6.25%), accident, injury or illness of a family member (17.19%), catastrophes (3.91%), marriage of a family member (25.78%), other purposes (13.28%), and consumption purpose (10.16%). A high percentage of loans were used for non-income generation that could be a startling sign for lenders as their investments would be considered highly risky with the assumption of a high default. This leads to a high monitoring cost at the lenders' end. Regarding the formal source of borrowing, conventional MFIs is a major source of borrowing (32%) followed by commercial banks (30%), NGOs (19%), Islamic banks/ MFIs (13%), credit unions (4%) and non-bank financial institutions (2%). Interestingly, it seems that commercial banks and conventional (interest-based) MFIs have better networks and systematic methods for a formal lending. On the other hand, Islamic banks or MFIs are still growing and need time to get the customers' confidence necessary to attract the potential borrowers. Figure 5.3 shows the share of lending by various financial institutions.

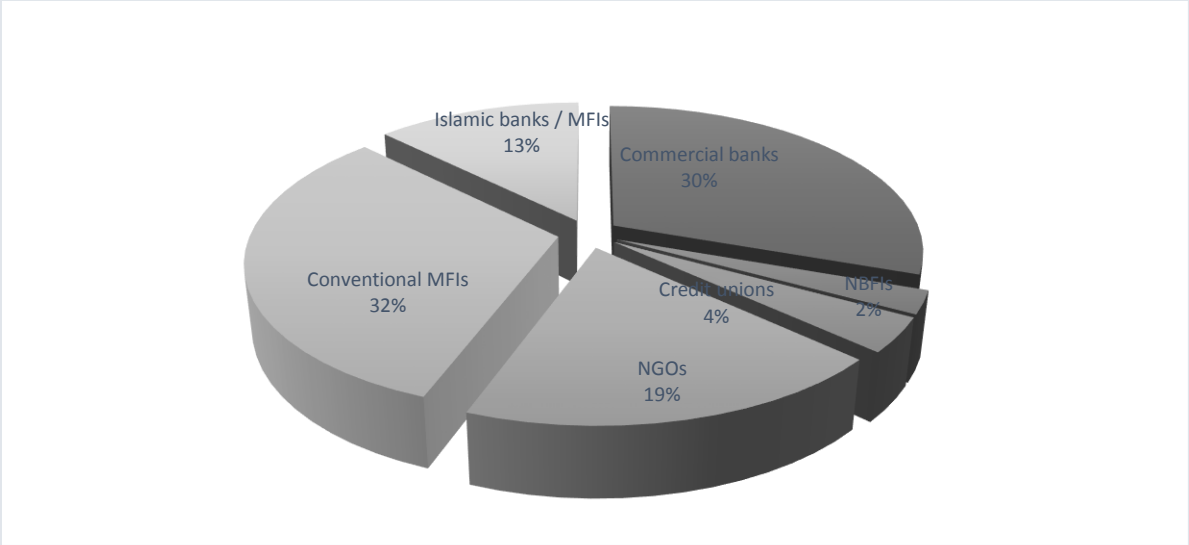


Figure 5.3: Formal sources of borrowing (Source: Author's compilation)

A significant portion (62%) of the respondents acquired loans from the formal sources and 32% obtained the loans from informal credit sources. Interestingly, there is a big difference between the interest charges on loans, provided by informal sources and formal lending sources. It shows that informal source of lending is very attractive for borrowers because informal sources charge lesser interest on loan than formal sources. Table-5.12 shows the comparison of interest paid on loans.

Table 5.12: Interest paid on loans to formal and informal source of lending

Interest charges on loans	Formal lending sources	Informal lending sources
No interest	10.13%	71.43%
10% or below	7.59%	8.16%
Between 11% to 20%	25.32%	6.12%
Between 21% to 30%	21.52%	4.08%
Between 31% to 40%	18.99%	10.20%
40% or more	16.46%	-

Source: Author's compilation of survey data

5.3.3 Main constraints in borrowing

A significant portion (65%) of our respondents reported that they had faced problems while acquiring loans. Table 5.13 shows the main hurdles that borrower faced in borrowing.

Table 5.13: Hurdles in borrowing

Type of problems	Freq.	Per%	Cum%
Access to loan provider is far	18	21.43	21.40
Collateral requirements	27	32.14	53.60
Inordinate delays in loan processing	14	16.67	70.20
Exorbitant interest charges on loan	25	29.76	100.00
Total	84	100.00	

Source: Author's compilation of survey data.

One of the main issues in borrowing was the collateral requirement that contextualized the inception of microfinance. The data revealed that 32% respondents had severely faced this constraint while borrowing. The other borrowing issues include exorbitant interest charges on loans as mentioned by about 30% of respondents consider. The lack of outreach is also a burning issue for loan providers, because 21% respondents think that accessibility constraints cause the wastage of time and resources. Procedural lapse in formal borrowing is an issue that catalyzes inordinate delays in loan sanctioning and disbursement, with about 17% of respondents having faced this problem in borrowing.

5.3.4 Repayment Issues

Regarding the problems in repayment, a majority of respondents could not save enough to repay on time due to some unforeseen events. Forty four percent of respondents

reportedly consumed the loans because of catastrophic problems or marriage of a family member. The second main reason for nonpayment or delay in payment was exorbitant interest that made the borrowers bankrupt. Some of the borrowers (14%) purposely used the loans for nonproductive activities (see Table 5.14).

Table 5.14: Repayment constraints

Repayment constraints	Freq.	Per%	Cum%
Used loans for consumption purpose	9	14.06	14.10
No savings left due to catastrophes, accident, injury and illness	14	21.88	35.90
No savings left due to marriage of any family member	14	21.88	57.80
High interest rates made it difficult to repay	21	32.81	90.60
Others	6	9.38	100
Total	64	100	

Source: Author's compilation of survey data

5.3.5 Perceptions towards conventional (interest-based) microfinance

How did respondents view the performance of conventional (interest based) microfinance? The first set of questions asked about existing microfinance's role in poverty alleviation efforts in Pakistan. The issue of charging high interest rate has received strong criticisms since the inception of microfinance but in the last couple of decades it became a burning issue (CGAP, 1996). The main reason for the growing concerns is the transformation of some MFIs into a private commercial corporations (CGAP, 2006). A significant majority of respondents (63.5 percent) agreed with the statement that existing microfinance charges distortionary interest, while 15.06 percent disagreed, 16.27 percent were undecided and 4.22 percent gave no answer. This majority view reflects the reality that conventional microfinance in Pakistan charges exorbitant rates, ranging from 30 percent to 50 percent (Munir, 2012). The conspicuous reasons MFIs always provide for

charging distortionary interest rates include high administrative and operational costs of loans, risks of default, and an excessive demand with relatively a short supply of loans. Nevertheless, as a guideline for loan pricing, Ledgerwood, Julie, and Candace (2013, p. 218) assert that a balanced approach is required because charging too high will eventually reduce the loan demand that can hurt the sustainability of microfinance, while charging too low will not allow to cover the costs of loan.

Table 5.15: Descriptive statistics and analysis of responses about conventional microfinance

Questions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	No Answer	Mean	SD
1. Do you agree that existing (interest based) microfinance charge exorbitant interest rates?	16 (4.82)	34 (10.22)	54 (16.31)	119 (35.81)	95 (28.62)	14 (4.22)	3.76	1.139
2. Do you agree that existing (interest based) microfinance use complex calculation of repayment instalments that is not understandable?	12 (3.61)	32 (9.64)	39 (11.75)	130 (39.16)	108 (32.53)	11 (3.31)	3.90	1.090
3. Do you agree that existing (interest based) microfinance is empowering the poor people despite high interest charges?	53 (15.96)	136 (40.96)	58 (17.47)	57 (17.17)	18 (5.42)	10 (3.01)	2.54	1.127
4. Do you agree that existing (interest based) microfinance is serving poorest of the poor people in the society?	71 (21.40)	142 (42.80)	54 (16.30)	44 (13.30)	9 (2.71)	12 (3.59)	2.31	1.050
5. Do you agree that existing (interest based) microfinance lift the poor out of poverty?	65 (19.59)	141 (42.47)	50 (15.06)	53 (15.96	12 (3.61	11 (3.31)	2.40	1.097
6. Do you agree that existing (interest based) microfinance use unethical	7 (2.11)	31 (9.34)	60 (18.07)	85 (25.60)	138 (41.57)	11 (3.31)	3.98	1.097

practices for the recovery of loans?								
7. Do you agree that existing (interest based) microfinance is more business-oriented?	8 (2.41)	31 (9.34)	47 (14.16)	110 (33.13)	124 (37.35)	12 (3.61)	3.97	1.072

Source: Author's calculation of survey data

Microfinance is often criticized for being too complicated in the calculation of repayment installments. About 72 percent agreed with this point, 13.25 percent disagreed, 11.75 were undecided and 3.31 percent did not answer to this question (Table 5.15, item 2). It is worth noting that presently, two methods are frequently being practiced for the calculation of interest rates, i.e. flat rate method and declining balance method. Both these methods differ in their calculation and give different effective interest rates. The declining balance method is much easier to calculate but could be confusing for borrowers (Ledgerwood, Julie, and Candace, 2013, p. 219).

Microfinance practitioners claim that the poor are being empowered through loans and financial inclusion because the microloans are considered the ways to gender equality and empowerment (Armendariz-de-Aghion and Morduch, 2005, p. 184). On this point, the survey showed that majority of people do not agree (56 percent), only 22.59 percent people agreed, while 17.47 percent were undecided and 3.01 percent did not answer (Table 5.15, item 3). While refuting the claim of empowerment, Armendariz-de-Aghion and Morduch (2005, p. 195) argued that gender empowerment was seen with a suspicious eye by microfinance practitioners who were focused on strong financial institutionalization.

The goal of serving the "ultra-poor" (poorest of the poor) is an utmost consideration for microfinance because it scales down poverty in the long run. Asked if microfinance is indeed serving the poorest of the poor, 66.16 percent of respondents disagreed with the statement, 15.96 percent agreed, 16 percent were undecided, and 3.61 percent had no reply. On the same note, Ghosh (2013) asserts that just in the last few years the status of microfinance has shifted, "from being lauded as the silver bullet to solve the problems of development and poverty reduction, to being derided as the progenitor of financial instability and enhanced vulnerability among the poorest people who can ill afford to take this additional burden." Navajas et al. (2000) found that five major microfinance providers in Bolivia do not reach to poorest of the poor but just above and below the poverty line. Apart from the success stories, results of this research contradict the overemphasized and self-proclaimed claims of microfinance regarding poverty eradication in Pakistan.

Although microfinance has been acclaimed in the world for many years, some of the critics have questioned its application and viability. A couple of recent randomized studies could not find the proofs that microcredit has raised the income and consumption of the poor people, at least during the term of studies (Rosenberg, 2009). Similarly, this research revealed that almost 62 percent of our respondents do not agree that microfinance really lifts the poor out of poverty. Only 20 percent agreed with this view, 15 percent remained neutral and 3 percent had no answer.

Another important issue is the use of forceful measures in recovery proceedings. A non-discriminatory practice demands that each and every borrower should be treated fairly

with due respect and dignity. Unfortunately this is not being practiced especially if borrowers are ultra-poor or if loan officers have heavy workload. Because of such pressures, loan officers often make mistakes and behave inappropriately. Sarker (2013) notes that in such situations, loan officers adversely select borrowers and use unethical practices for repayment that sometimes lead to create chaos in borrowers. One prime example of such indecent behaviour of loans officers is a microfinance in India. Hudon (2011, p.127) states that in Indian microfinance often uses unethical and aggressive recovery practices. However, the scope of this research is limited to the case of Pakistan, therefore, we get the views regarding the unethical practices used by microfinance in Pakistan. It seems that a majority of our respondents have the views reflective of the actual scenario as about 67 percent respondents agreed that microfinance uses unethical practices for repayment. Only 11 percent of respondents disagreed, while the rest (20 percent) were either undecided or did not reply to this question.

The final survey question focused on the perceptions toward commercialization in microfinance. About 70.48 percent respondents agreed that microfinance is more business-oriented. In contrast, about 11.75 percent of respondents do not see any mission drift in microfinance, 14.16 percent were undecided and 3.61 percent had no answer (see Table 5.15; items 7).

The survey findings on the people's perceptions toward conventional microfinance or interest-based microfinance clearly indicate that a vast majority of people do not perceive the existing form of microfinance as a *Silver Bullet* which can solve all the

problems of the poor masses. The objectives of poverty alleviation through existing forms of conventional microfinance cannot be achieved because the current microfinance schemes lack the true approach of *altruism.* The *altruistic* approach defines the objectives of *help for others* as explained by Suzuki and Miah (2015, p. 471). The deviant behavior of existing microfinance can also be defined with the help of Agency-Cost theory if we consider that the subsidiaries and donations received by the microfinance are redistributed to poor people. The principal-agent setting of microfinance triggers the conflict of interest between the funds providers (donors) and the funds redistributors (MFIs).

5.3.6 Perceptions towards Islamic microfinance

Table 5.16 shows the descriptive statistics and the analysis of responses about Islamic microfinance.

Table 5.16: Descriptive statistics and analysis of responses about Islamic microfinance

Questions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	No Answer	Mean	SD
8. Do you agree that Islamic (interest free) microfinance operate under the *'Shariah'* boundaries?	40 (12.05)	98 (29.52)	55 (16.57)	84 (25.30)	47 (14.15)	8 (2.41)	3.00	1.281
9. The main objective of Islamic (interest free) microfinance is to help poor people?	12 (3.61)	46 (13.86)	61 (18.37)	128 (38.56)	77 (23.19)	8 (2.41)	3.65	1.101
12. Do you agree that Islamic (interest free) microfinance is a better tool for poverty alleviation?	7 (2.11)	18 (5.42)	56 (16.87)	179 (53.92)	63 (18.97)	9 (2.71)	3.85	0.875
13. In case of default, Islamic (interest free) microfinance do not use	20 (6.06)	47 (14.16)	107 (32.23)	104 (31.33)	46 (13.81)	8 (2.41)	3.34	1.082

unethical practices for recovery?								
14. Do you agree that through government support Islamic (interest free) microfinance can be used more effectively in poverty alleviation efforts?	7 (2.11)	41 (12.35)	43 (12.95)	164 (49.40)	69 (20.78)	8 (2.41)	3.76	0.996
15. Do you agree that Islamic (interest free) microfinance is emerging in Pakistan due to an emergence of Islamic banking and finance?	7 (2.11)	23 (6.93)	55 (16.57)	184 (55.42)	55 (16.56)	8 (2.41)	3.79	0.882

Source: Author's compilation of survey data

The analysis in this section is based on the responses of people on Islamic microfinance. As noted above, the prohibition of interest (*Riba)* in Islam does not permit Islamic microfinance to charge any form of interest on lending. The views presented in table-5.16 show that the perception whether Islamic microfinance work within the *Shariah* boundaries or not? About 42 percent respondents have given the vote against it and merely 39 percent respondents agreed that Islamic microfinance work under the Islamic jurisprudence called *Shariah*. From rest of the 19 percent 17 percent were undecided and 2 percent did not reply (see table-5.16; item 8). The responses look quite rational as the *Shariah-compliant* products in Pakistan are scarce. This asserts that despite the considerable growth of Islamic microfinance in the last few years, the *Shariah-compliant* products represents less than one percent in Pakistan. Moreover, the State Bank of Pakistan has also urged the Islamic banks to improve their investment for the expansion of outreach to meet the overwhelming demand of *Shariah-based* banking products (SBP-KAP Study Report, 2014).

How do people perceive the core objectives of Islamic microfinance? A majority of respondents (62 percent) believe that the primary objective of Islamic microfinance is to help the poor, About 17 percent disagreed with this view, while 19 percent were undecided and 2 percent had no answer (Table 5.16, item 9). In fact, Islamic microfinance can serve the goal of poverty alleviation more effectively than other form of microfinance because the innate objective of *Shariah* is to build a strong community capacity. In the same context, Abdul-Rahman (2007) asserts that the primary goal of microfinance is to assist the poor economically in order to get them out of the poverty trap, while Islamic microfinance takes one step farther by providing them interest-free loans.

The analysis on the choice of borrowing revealed that a significant majority of borrowers (76%) like to borrow from Islamic financial sources, the second largest choice was informal sources i.e. friends and family (16%), and merely 6 percent trust on existing microfinance. Figure-5.4 shows the choice of potential borrowings.

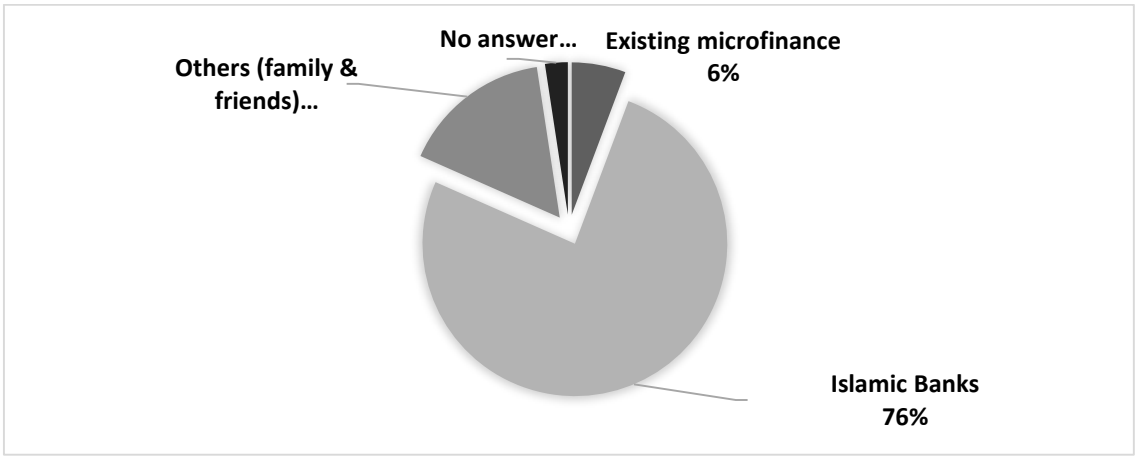


Figure 5.4: Choice of borrowing
Source: Author's compilation of survey data

About 54% among those who chose Islamic banks / microfinance prefer it due to its impeccability of repayment without the imposition of interest. About 43 percent want to borrow due to religious reasons; getting involved in interest-bearing financial transactions is considered a big sin and against the basic ideology of Islam. Just 2 percent respondents think that getting loans by Islamic sources is a way of an easy access. Figure 5.5 shows the reasons for choosing Islamic finance for borrowing.

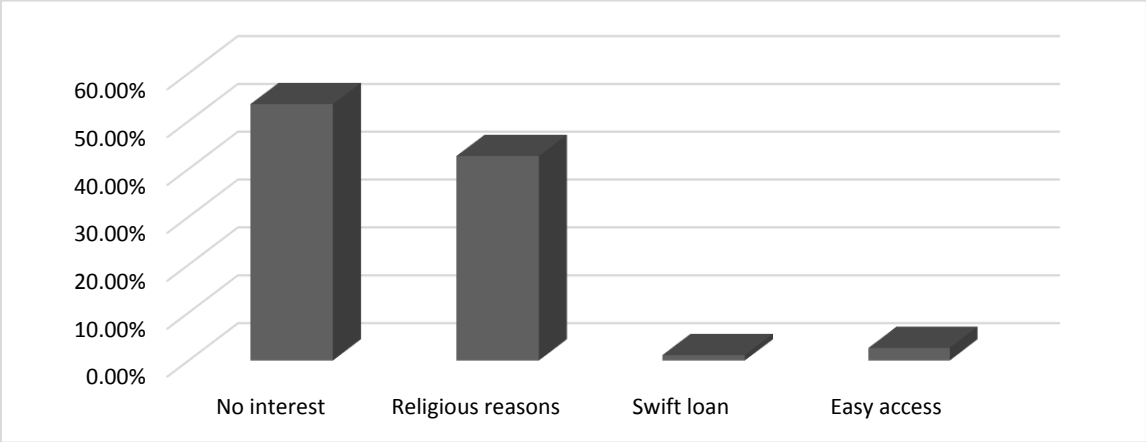


Figure 5.5: Reasons to choose Islamic banks / microfinance
Source: Author's compilation of survey data

The difference between Islamic microfinance and existing microfinance is not just the imposition of interest charges; Islamic microfinance is considered a better tool for poverty alleviation because it is based on *Shariah* principles, thus distinguishing it from other microfinances (Onakoya and Onakoya, 2013). On the same note, Ul-Hassan (2007) asserts that Islamic microfinance is based on social justice which is a core element of Islamic principles. A majority of respondents (73%) view Islamic microfinance a better tool for poverty alleviation. Only 7 percent were against this view, 17 percent remained neutral and 2 percent did not reply (see table 5.16; item 12).

Another important criticism that conventional microfinance always faces, is coercive practices for recovery in case of default. In theory, Islamic microfinance shuns unethical practices for repayment. Table-5.16 shows the analysis of perceptions regarding recovery practice of Islamic microfinance. The responses revealed that 45 percent respondents agreed that in case of default, Islamic microfinance does not use coercive practices, 20 percent of respondents disagreed, 32 percent were indifferent and 2 percent did not reply (see Table 5.16; item 13).

Government support can increase the participation of Islamic microfinance in poverty alleviation. A majority of respondents (70 percent) agreed that the government can play a vital role in poverty alleviation efforts through Islamic microfinance. It can provide subsidiaries and soft loans that can be channelized through Islamic microfinance. However, 15 percent respondents reject the idea of government assistance in microfinance matters. The possible reasons for the rejection of government's role in poverty alleviation might be the track record of poor performance and bad governance of democratic governments in the history of Pakistan (see Table 5.16; item 14).

The term 'financial inclusion' is frequently used in microfinance literature to refer to the inclusion of financially excluded poor into a formal banking system. This concept tacitly acknowledges the role of microfinance as a part of the formal banking system and expects the banks to provide financial support to microfinance. How do people perceive the links between Islamic banking and Islamic microfinance? About 70 percent of respondents think that the emergence of Islamic microfinance is caused by the emergence

of Islamic banking. About 9 percent did not agree and 21 percent did not reply (see Table 5.16; item 15). It is worth noting that Pakistan is always considered a pioneer in Islamic banking. In addition, the Islamic banking industry in Pakistan has been growing at an enormous pace (about 30 percent) for the last few years (SBP-IBB, 2014).

The above analysis indicates that a majority of people in Pakistan understand the fundamental differences between Conventional and Islamic microfinance, and that respondents consider Islamic microfinance as a source of potential borrowing in the future because it works within the *Shariah* boundaries and charges no interest on loans. It can be used to eradicate poverty due to its *altruistic* approach that urges to help each other and establish a trustworthy relationship between borrowers and lenders. The mechanism of Islamic microfinance works with egalitarian principle (Ali, 2015, p. 238; Rahim, 2010; Rahman and Rahim, 2007) that considers the welfare of society as an utmost objective. The Islamic system of justice and fairness is quite closer to the theory of justice provided by the American philosopher John Rawls in his famous writing *A Theory of Justice*. The first principle of Rawlsian theory of justice demands the equal rights for all. It further elaborates that "Because the citizens are equal in their moral features, they have an equal claim to the benefits from the system of cooperation" (Moon, 2008).

5.4 Towards an Islamic Microfinance Model

The preceding analyses, based on various sets of data, have shown the limits of conventional microfinance in Pakistan**.** The financial and social performance evaluations of conventional microfinance showed a markedly business orientation, and a bias for financial commercialization. Moreover, the sample survey amongst the general population

showed a critical and skeptical attitude toward the aims and practices of conventional microfinance on the one hand, and an openness toward Islamic microfinance on the other. These results, therefore, point to the prospects of implementing a more effective Islamic microfinance system.

In this section, therefore, I formulate a mosque-based Islamic microfinance model and attempt to test whether it can be successfully implemented. I begin with a review of two general types of Islamic microfinance models, and follow it with a description of the main features of my proposed model. I then present a project feasibility analysis of this model, supported by a business plan. Finally, I run a regression analysis to test the probability of successfully implementing the model.

It must be emphasized at the outset that the proposed model is mainly exploratory. As such, more thorough studies are needed to test its empirical viability. Analyses such as a demand forecast, for example, can provide more concrete data to help validate the model. Similarly, regression analyses can incorporate more risk factors that usually affect micro-finance service delivery. These limitations notwithstanding, the study hopes to examine the possibility of the model's success/failure based on minimal conditions and assumptions, such as people's basic awareness of Islamic microfinance's aims and characteristics.

5.4.1 Islamic microfinance models: Waqf (Endowment)-based and Charity-based

Islamic microfinance models are skewed towards social outreach and social welfare rather than financial sustainability which has long been a focus of attention of conventional microfinance. These models follow the central theme of resource redistribution consistent with the aims of an Islamic welfare state. Their objectives are aligned with the components listed in Islamic concepts of poverty alleviation. The *Waqf (Endowment)* is considered an important feature in the history of Islamic finance. The concept has been widely acknowledged by a number of researchers (Khan, 2001; Ahmed, 2007; Kaleem and Ahmed, 2009; Adam and Lahsasna, 2013), but the model comprises some built-in risks that make its practical applicability ambiguous. For example, the *Waqf* endowments used for microfinance loans have some inherent risks such as high transaction cost of generating funds that do not cover the face value of loans in interest-free lending. The substitution effect occurs if the cost of generating loan is higher than the value of loan. In that case, the *Waqf* endowment could be invested in higher profit businesses rather than microfinance. Secondly, in countries like Pakistan, the *Waqfs* are managed by the provincial government authorities. These provincial authorities do not allow the *Waqfs* to work autonomously, therefore, they are not able to provide financial support to microfinance. In addition, legal complexities delay the lending process and require formal approval from the government departments thus making it inefficient.

On the other hand, the charity-based model uses Islamic charities as a source of funding for their operation especially *Zakat, Sadaqat,* and *Qard-Hasna*. One such model is proposed by Kaleem and Ahmed (2009) which uses the *Waqf* certificate instead of ordinary shares. The funds generation is proposed to take place through the sale of interest-

free *Waqf* certificates that could be used to finance the interest-free micro lending. Also, the volunteers are involved in the system to assist the professional management, but the model did not elaborate how the transaction costs in the system will be kept at par because appointing professional management needs their salaries and perks that can affect the cost of loan. Another important issue in the said models is the issuance of *Waqf* certificates that may require an approval from the legal authorities of the hierarchal order under which *Waqfs* operate, that can create legal complications. Figure 5.6 shows the *charity* based Islamic microfinance model.

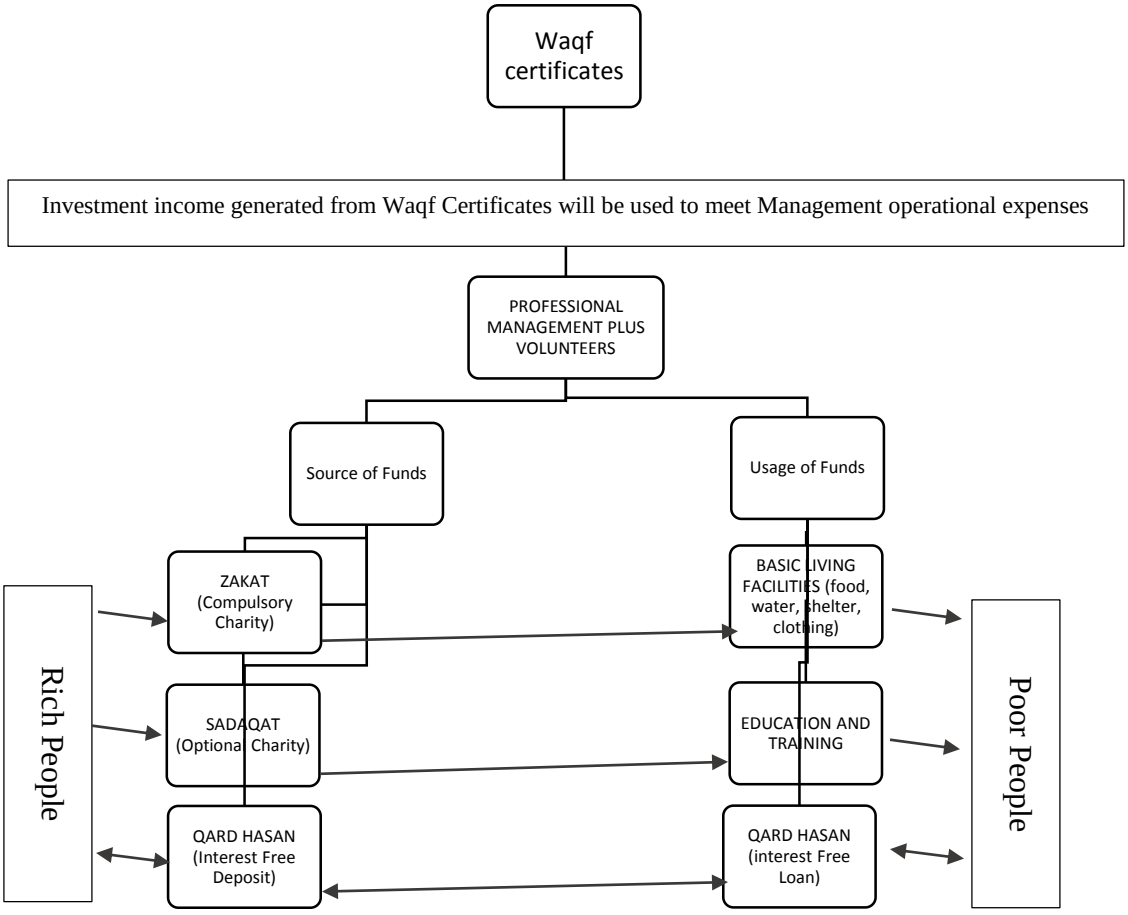


Figure 5.6: *Charity* based Islamic Microfinance Model
Source: Kaleem and Ahmed (2009)

Some other models of Islamic microfinance propose the inclusion of Islamic banks for fund generation that is a good strategy for financial inclusion. The joint-venture of Islamic banks with microfinance will enhance the technical expertise of microfinance through training. However, a possible conflict of interest may come into play if the microfinance's customers directly approach the Islamic banks for borrowing.

5.4.2 A Proposed Mosque-based Islamic Microfinance Model

The model shown in Figure 5.7 shows an Islamic microfinance model that uses the mosque (Islamic prayer place) as a channel for the redistribution of funds.

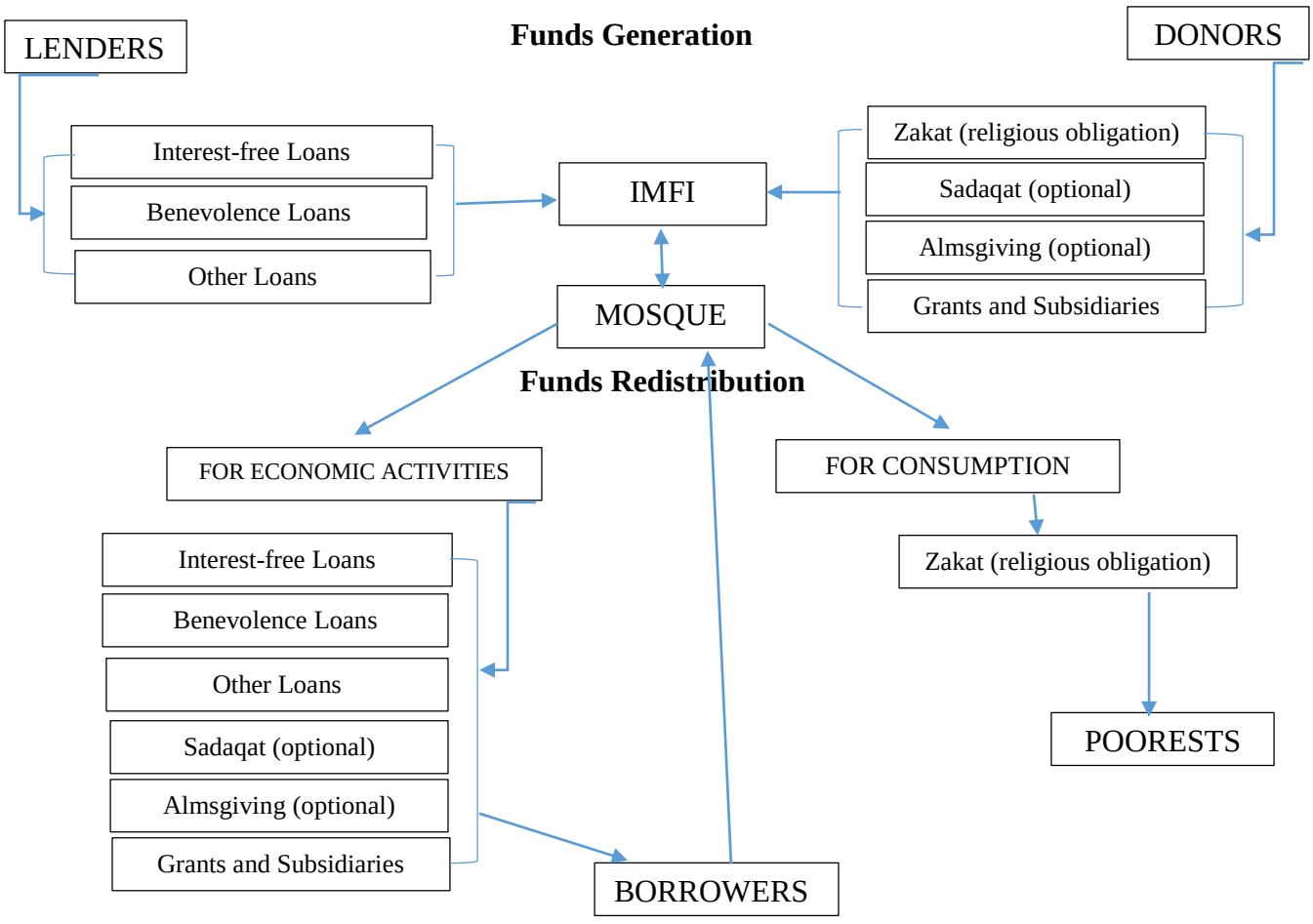
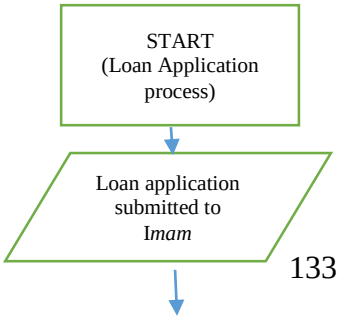


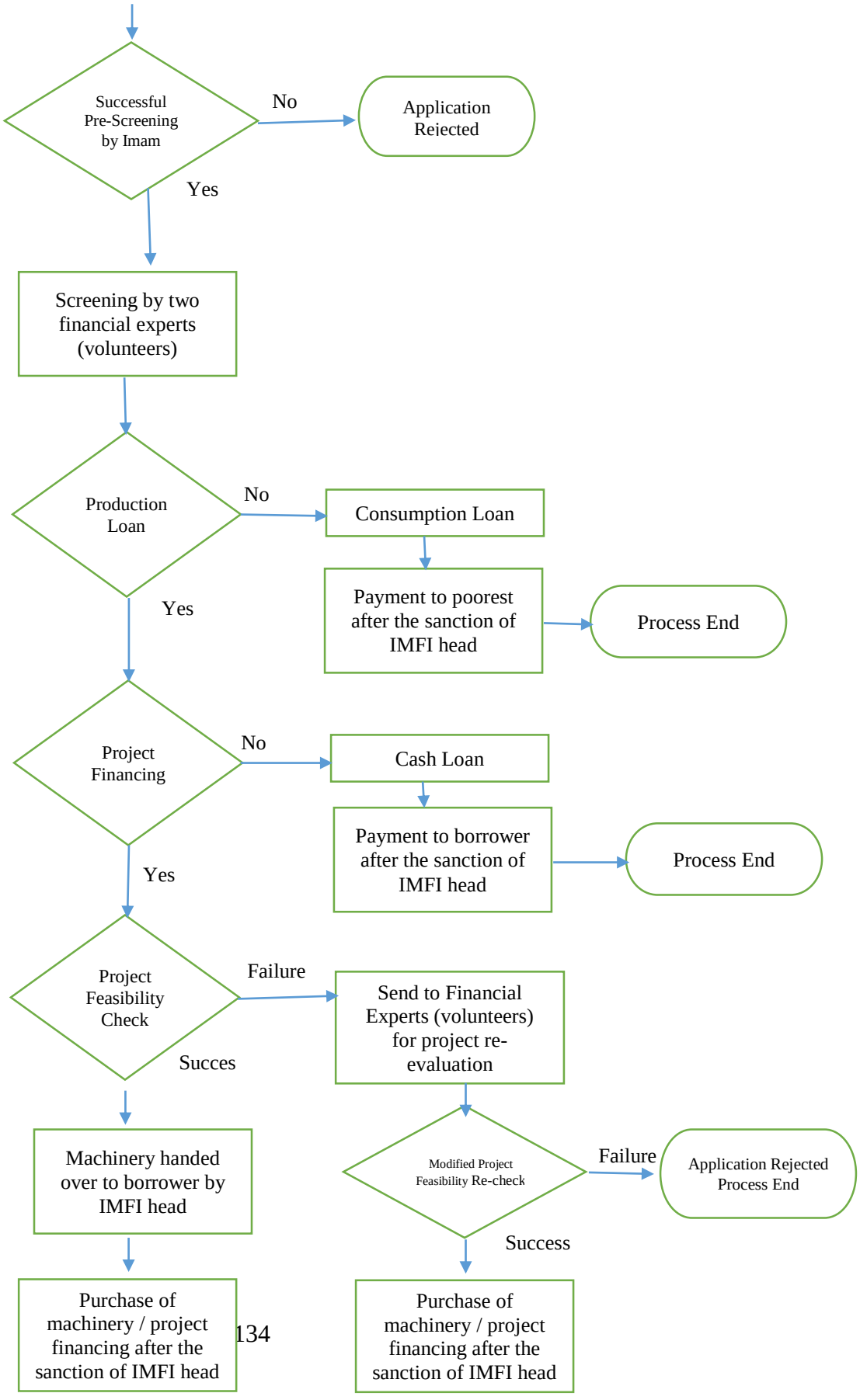
Figure 5.7: Basic Framework of Islamic Microfinance (IMFI) through Mosque
Coded Classification:

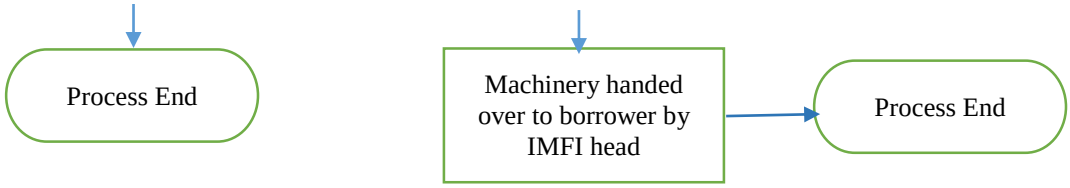
IMFI: Islamic Microfinance Institutes
Mosque: Muslims' worship place (used for channelizing the funds)
Lenders: Funds providers including Government and private sources, Islamic banks, other banks.
Donors: Donations providers including local and international agencies, local individuals.
Borrowers: Small and active entrepreneurs relatively less poor (productive user of funds).
Poorest: Extremely poor, needy and deprived, live below poverty line (consumption loans).

The proposed model has the potential to alleviate poverty because it uses a dual strategy of helping the poorest of the poor through consumption loans and providing loans to the relatively less poor (but active entrepreneurs) who need funds to continue their economic activities. The inclusion of the mosque gives the edge of low transaction cost because the screening and monitoring operations could be performed through the prayer leader (Imam). The backward channel of funds generation includes both Lenders and and Donors. The lenders are the suppliers of funds and who need repayment of their loans, while the donors are those who provide donations on virtuous grounds and, being charity providers, do not demand repayment of donations. The classification of funds is based on *Shariah* compliance as the only fund reserve for the consumption lending to the poor is *Zakat* which is a religious obligation and which cannot be used as an ordinary loan because once given it cannot be taken back according to *Shariah* principles. Nevertheless, other charity funds may be used in a cyclic form to generate economic activities like *sadqat*, *almsgiving*, and other donations. Figure 5.8 shows the process flow diagram of lending through IMFI.

Figure 5.8: Operational Process Flow Diagram




Successful Pre-Screening by Imam
No
Application Reiected
Yes
Screening by two financial experts (volunteers)
Production Loan
No
Consumption Loan
Payment to poorest after the sanction of IMFI head
Process End
Yes
Project Financing
No
Cash Loan
Payment to borrower after the sanction of IMFI head
Process End
Yes
Project Feasibility Check
Failure
Send to Financial Experts (volunteers) for project re-evaluation
Succes
Machinery handed over to borrower by IMFI head
Modified Project Feasibility Re-check
Failure
Application Rejected Process End
Success
Purchase of machinery / project financing after the sanction of IMFI head
Purchase of machinery / project financing after the sanction of IMFI head



5.4.3 Project Feasibility Analysis of Islamic Microfinance Model

It is pertinent to mention that the following 'project feasibility analysis' of mosque-based Islamic microfinance model specifies the startup-up phase of the project. At this stage, the operating expenses are considered zero in order to keep the initial outlay at a minimum. At a later stage, however, it is recognized that the operating expenditures will increase due to the assignments of salaries to the staff (as proposed in the Business Plan, see Appendix A). Expenditures on office building and furniture are also expected to increase. The startup costs are intentionally kept at a minimum to ensure the possibility of low-cost loans in the wake of interest-free business, and to reduce the potential dependence on high interest charges.

The project feasibility analysis determines the probability of success of the project at hand. It also gives an understating of the cost structure of the project.

Table 5.17: Project Feasibility Analysis of Islamic Microfinance through Mosque

Head of account	Cost	Description
Initial Investment Required	US$ 4,000	Reserve for Loans.
Initial Outlay	0 (Zero)	Regular office and buildings are not required and a bank account will be used for operations.
Office Building and Furniture	0 (Zero)	Mosque will be used for processing.

Total staff[7] at startup	5 person	Project Head (1), Imam[8] of Mosque (1), Financial Experts cum regular volunteer (2), Financial Expert cum reserve volunteer (1).
Staff salaries and allowances[9]	0 (Zero)	Services will be rendered as religious duties.
Operational Expenses	0 (Zero)	Operations will be performed after regular prayers at mosque.
Number of Consumption Loans (Initial)	Tentative	Subject to the collection of *Zakat* during the preliminary phase before the startup of actual project.
Number of Production Loans (Initial)	30	20 loans of $50 = $1,000 10 loans of $100 = $1,000.
Funds Reserve for Backup	US$1,500	Reserve fund will be used for further loans after initial evaluation of the project.
Funds Reserve for Miscellaneous Expenditures	US$500	Reserve for unforeseen expenditures.
Expected Time of Loan Recovery	12 months	First two months will be exempted for instalment; 10 equal instalments of monthly payments.

[7] At the startup the team comprises five members i.e. The Head of IMFI, Imam (Prayer leader), two financial experts, and a reserve financial expert. The idea behind the formation of this team is that the members must have the knowledge of microfinance operations. For example, the IMFI's Head or financial experts would possibly be the person(s) from banking and finance sector preferably the retired person (s). The involvement of Imam is just to ensure the help in borrower's selection which is quite difficult in microfinance business. The Imam would be given the task to assess the borrower's moral character like integrity, piety, religiosity, etc. these elements are important to determine at first in order to ensure the repayment of the loans. Secondly, the Imam would distinguish the classification of loan whether the borrower falls in the category of 'extremely poor or deprived' (suitable for consumption loan) or in the category of relatively less poor (suitable for production loan).

[8]The Imam is a highly educated person who has normally completed an 8-years course of Daras-e-Nizami or Fazil e Arabic that consists of about 20 different courses. The course of Daras-e-Nizami requires eight year of extensive study and equivalent to Bachelors of Theology (Honors) (AliGarh Muslim University, 2016). Daras-e-Nizami covers some 20 subjects which fall into two categories: al-uloom annaqliya (transmitted sciences) and al-uloom al-aqliya (rational sciences). Half of the curriculum includes subjects that are strictly religious in nature. The remaining subjects include medicine, mathematics, astronomy, history, philosophy, prosody, and polemics and were included in the 19th century to both equip the students for civil service jobs and to help them understand religious texts 8 (United States Institute of Peace, p. 2-3) (Pl refer to http://108.179.255.30/~christi4/pubs/trip_report.pdf.). The appointments of Imams in Pakistan is made on monthly salary basis and they serve under the jurisdiction of the constitutional settings of the Ministry of Religious Affairs and Inter Faith Harmony (www.mora.gov.pk) and their appointments were made in accordance with Rule No. 4 (l)-Auqaf O.S.D./66 section 21 of the West Pakistan Waqf Properties Ordinance, 1961 (Ordinance XXVIII of 961). The clause II (7): B-III exclusively urged the compulsory qualification required for the post of Imam must be equivalent to Daras-e-Nizami or Sanad of Fazil-i-Arabi8 (1968, p.4).

[9] The salaries and allowance are intentionally kept to a minimum during the startup phase. However, in phase two the salaries and allowance will be paid to all staff (please see the details in the Business Plan, Appendix-A).

Expected Loan Loss Rate	5% (five percent)	Probability of pre-screening errors of projects and borrower's selection.
Interest Charges on Loans	0 (Zero)	Interest free project because the interest is prohibited in Islamic *Shariah.*
Financial self-sufficiency (FSS)	Expected	Will be attained in second phase of the project through amalgamation with Islamic banks.
Operational self-sufficiency (OSS)	Expected	Will be attained with zero operational cost and low transaction cost (cost per loan = zero).

The feasibility analysis of the above mentioned project reveals that the initial outlays are reduced to nearly zero because of the inclusion of the mosque in the system. In general, the project's initial cost increases due to some huge expenditures on office buildings and furniture but this project does not require formal office buildings and furniture (based on mosque). Secondly, the operational costs are reduced by minimizing the staff salaries with the appointment of field expert volunteers (retired government officers can be hired as volunteers). The transaction costs will be reduced by involving the mosque's Imam for borrower's selection and project evaluation without incurring additional costs. (The detailed analysis on Mosque-based Islamic Microfinance is provided in the Business Plan; see Appendix-A).

Finally, this project addresses the following issues that have constrained conventional microfinance projects: (1) adverse selection and moral hazard; (2) exorbitant interest charges; (3) women/family empowerment; (4) double bottom line objectives; (5) high transaction costs; and (6) information asymmetry.

5.4.3.1 Adverse Selection and Moral Hazard

The probability of adverse selection is minimized in this project due to its mechanism for the selection of borrowers. The central authority is given to the mosque's prayer leader (Imam) who is considered a well-informed and an honest person in Islamic society. If the borrowers are selected on merit (honest and active entrepreneurs), then the issues of adverse selection and moral hazards could be resolved.

5.4.3.2 Exorbitant Interest Charges

The project is an interest-free project and does not demand extra charges on any account (processing fees and etc.) on loans. Such provisions allow the poor to work actively on their projects without getting an extra burden of interest charges. It is viewed in conventional microfinance that some MFIs charge exorbitant interest and use harsh recovery practices that exploit the poor. Such exploitation is not only ineffective in poverty alleviation but throws the poor into a deeper poverty trap. The proposed project resolves the issue of poor exploitation and provides the services to the poor.

5.4.3.3 Women Empowerment / Family Empowerment

A vast majority of conventional microfinance targets poor women as their potential customers, but Islamic Microfinance targets the head of the household as a customer to support the whole family without gender discrimination. The Islamic *Shariah* believes in social development, and the concept of welfare state (discussed in above sections) demands that the whole family is to be empowered rather than just focus on women. The selection

of the household head for loans gives an advantage over women-only projects because it is highly likely that the loans to women would be used for family consumption than some economic activities. In most of the patriarchal societies in South Asia, women are not involved in household decision-making process due to male-chauvinistic approaches. It is highly probable that a woman borrower might use the loan for family consumption in case a family member is in dire need. The project resolves the issue by targeting the family head as a customer without any gender discrimination.

5.4.3.4Double Bottom Line Objectives

One of the main issues in the prevailing practice of conventional microfinance is a balance between financial sustainability and social outreach which is difficult to maintain. To achieve the target of double bottom line, efforts are made to acquire financial sustainability while serving the poorest strata of the society. The project of Islamic microfinance resolves the issue by distinguishing these two groups into poorest and borrowers. The former group can acquire loans for consumption purposes that will be funded through Islamic religious obligation *(Zakat)*, while the latter group can borrow for the economic activities. Financial sustainability will be achieved through the profit-generating economic activities, while social outreach will be achieved through serving the poorest people.

5.4.3.5 High Transaction Costs

The project of Islamic microfinance is a highly cost effective project in which the transaction cost is kept at a minimum (nearly zero) due to the inclusion of the mosque and the Imam. The proponents of conventional microfinance always put forward the issue of high transaction cost against the exorbitant interest charges. They charge sky-high interest rates on loans to cover the high cost per loan, thus seriously hurting the microfinance objective of serving poorest. The project has a low transaction cost because the funds are autonomously generated and IMFI does not borrow the loans on interest from other sources due to the restrictions imposed by the Islamic *Shariah.* The project's low-cost loans do not require exorbitant interest charges to cover its cost; therefore, the issue of high transaction cost is resolved in this project.

5.4.3.6 Information Asymmetry

One of the main issues in existing conventional microfinance is information asymmetry which creates further complications of double-dipping (loans from multiple sources) and borrower's indebtedness. If the scale of such issues is large, then it might shake the whole system of microfinance and the repayment crisis might occur as has happened in the past in a number of countries (see details in Chapter 3 above). Such issues are handled in this project as the borrower's selection and monitoring are done through the sanctions provided by the prayer leader (Imam). The performance monitoring will be performed at the mosque where the borrower can be consulted at any time after prayer as the Muslims are bound to pray five-times a day in mosque.

5.4.4 Probability of Successful Implementation of Islamic Microfinance in Pakistan

This section empirically investigates the probability of successful implementation of Islamic microfinance in Pakistan. The binary dependent regression (Probit) is used with dummy independent variables to get the possible probability of success / failure. The functional form can be written down as:

$$P_i = p(y_i = 1) = \beta o + \beta_1 x_{2i} + \beta_2 x_{3i} + \beta_3 x_{4i} + \ldots\ldots + \beta_k x_{ki} + \varepsilon_i \quad \ldots\ldots (5.1)$$

And for binary random variable

P (Y=1 / X) is equal to E (Y/ X)

The alternative approaches of Logit and Probit are preferred to avoid such estimation issues, therefore, this study uses Probit model instead of linear probability model. The functional form of Probit is written down as:

$$P(y_i = 1/x_i) = \varphi(x'_i\beta) \ldots\ldots (5.2)$$

(where $\varphi$is cumulative density function)

I use the questionnaire survey data which were collected to ascertain the people's perception about conventional microfinance and Islamic microfinance in Pakistan. The data are primary in nature and the data collection was held in July to October'2014, in all districts of Karachi, Pakistan. A total of 332 survey questionnaires are used to gather the data for this study.

The likelihood is investigated by using the variables that determine the awareness of Islamic microfinance in our respondents. For the independent variables, five categorical variables are transformed into dummy variables by assigning the values of 1 for 'agree' and 'strongly agree' Likert-scale categories, and 0 otherwise. The dependent variable 'success' is transformed into dummy by using the variables that gives the awareness that Islamic microfinance is a better tool for poverty alleviation.

The following model is developed for this study:

$$P\ (Sx_i = 1/x_i) = \varphi\{(IMFI_{EMR}.\beta_1 + IMFI_{GOV}.\beta_2 + IMFI_{HELP}.\beta_3 + IMF_{SH}.\beta_4 + IMF_{UN}.\beta_5 + \varepsilon_1))$$

Where,

Sx is 1 in case of positive response that IMFI serves poorest of the poor and 0 otherwise.

IMFI.EMR is 1 in case of positive response that IMFI emerges due to Islamic Banks and 0 otherwise.

IMFI.GOV is 1 in case of awareness that the government support can catalyze the poverty alleviation efforts through IMFI and 0 otherwise.

IMFI.HELP is 1 in case of awareness that it IMFI lifts poor out of the poverty and 0 otherwise.

IMFI.SH is 1 in case of awareness that IMFI works within *Shariah* boundaries and 0 otherwise.

IMFI.UN is 1 in case of awareness that IMFI doesn't use unethical practice and 0 otherwise.

MFI.POOR is 1 in case of awareness that conventional MFI serves the poorest of the poor.

The details of the variables[10] are presented in summary statistics in Table-5.18.

Table 5.18 Summary Statistics

	IMFI_EMR	IMFI_GOV	IMFI_HELP	IMFI_SH	IMFI_UN	SX
Mean	0.7199	0.7018	0.6175	0.3946	0.4518	0.7289
Median	1.0000	1.0000	1.0000	0.0000	0.0000	1.0000
Maximum	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Minimum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Std. Dev.	0.4497	0.4582	0.4867	0.4895	0.4984	0.4452
Skewness	-0.9793	-0.8823	-0.4834	0.4314	0.1937	-1.0299
Kurtosis	1.9590	1.7784	1.2337	1.1861	1.0375	2.0608
Jarque-Bera	68.0560	63.7156	56.0888	55.8124	55.3528	70.8996
Probability	2E-15	1E-14	7E-13	8E-13	1E-12	4E-16
Sum	239	233	205	131	150	242
Sum Sq. Dev.	66.9488	69.4789	78.4187	79.3102	82.2289	65.6024
Observations	332	332	332	332	332	332

5.4.4.1 Regression Results

Table 5.19 shows the empirical results from the Probit regression used for this study.

[10] The limitation of the model used here is that it mainly uses variables that are based only on people's perceptions, and lacks those variables that can assess the risk factors, i.e. possibility of default, general interest rates in the economy, borrower's indebtedness, cost overrun etc.). Caution must therefore be used in generalizing the results of this regression analysis. The analysis only determines a probabilistic estimation or the feasibility of the success as it was estimated on the basis of available data. Since the actual project is not initiated yet, the collection of actual data relevant to this scheme is not possible at this stage. All the variables used in this estimation are selected from the survey data. The main idea behind the selection of those variables is that the Islamic microfinance is yet to be launched in Pakistan because the people are not well aware about its effectiveness. We therefore assume that if the people are highly aware about Islamic microfinance, then the probability of the project's success will be high. The risk factor variables or the exogenous variables are intentionally not included to avoid the issues of heteroscedasticity and multicollinearity that are quite possible if we unnecessarily increase the explanatory variables in the binary regression model.

Table 5.19: Regression results of LPM

Binary Dependent Variable: SX Independent Variables	Coefficients	Standard Error
Intercept	-1.044*	(0.18273)
IMFI_SH	0.690*	(0.24035)
IMFI_EMR	0.541**	(0.21148)
IMFI_GOV	0.981*	(0.22061)
IMFI_HELP	0.719*	(0.19739)
IMFI_UN	0.355	(0.24346)
Average	0.577	-
McFadden R Square	0.392	-
LR Statistics	152.427	(0.000)
No. of observations	332	-

*, **, *** exhibit significance level at 1%, 5%, and 10%

The prediction rule is y=1 if the probability of prediction is greater than 0.5, and zero otherwise (Dollar and Svensen, 2000, p. 902). Table-5.19 shows the results of Probit regression for the assessment of probability of successful implementation of Islamic microfinance in Pakistan. It is evident from the results that the awareness about Islamic microfinance can increase the probability of successful implementation. We use five variables for the awareness and all variables are significant except IMFI_SH. The other variables are significant at 1% level of significance except IMFI_EMR which is significant at 5% level of significance. The model's overall significance is indicated by McFadden Pseudo R-Square which is about 39 percent.

CHAPTER 6
Conclusions and Recommendations

This study investigated the limits and prospects of microfinance for poverty alleviation in Pakistan. The dissertation is focused on four segments, and various methodological techniques are applied in different segments. The first segment evaluated the performance of microfinance institutions in Pakistan through the use of DEA and financial ratios. The second segment compared the people's perceptions of conventional microfinance and Islamic microfinance based on survey data. The third segment proposed a new model of Islamic microfinance for poverty alleviation in Pakistan. The fourth segment tested the probability of successful implementation of Islamic microfinance in Pakistan, using regression analysis based on a linear probability model.

6.1 Conclusions

The study noted that like many countries in the developing world, Pakistan has adopted microfinance as a means of poverty alleviation. Unlike in Bangladesh where microfinance has achieved some success, the viability and usefulness of microfinance in Pakistan remain unclear. The current portfolio of conventional microfinance shows that it just covers 2.8 million borrowers which is just a 7% of potential borrowers (SBP, 2011) and "taking into account the magnitude of 45 million poor households, the level of microfinance deepening is still low" (Suzuki and Miah, 2015, p. 470). In this context where conventional microfinance has not been successful, the prospect of an Islamic-oriented microfinance has been raised. The study, therefore, asked several interrelated questions in order to determine the performance of conventional microfinance, compare how

conventional and Islamic microfinance are perceived, explore the components of an Islamic model of microfinance, and estimate its probability of successful implementation.

How efficiently has conventional microfinance in Pakistan achieved the goal of social development? This study found that conventional microfinance has not been able to achieve the "double-bottom line" objectives of financial stability and social outreach. Their performance evaluation revealed that some MFIs are financially sound and efficient but less efficient at social development, while others are socially efficient but lack financial self-sufficiency. A number of cultural and socio-political factors (e.g. domestic violence, terrorism, unfriendly business circumstances, and strict religiosity) can account for the underserving of conventional microfinance. From the financial performance view, microfinance in Pakistan performed below the par value of microfinance in South Asia. The average cost per loan in Pakistan is higher (US$31.25) than the average in the region (US$26.81). It seems that the cost per loan is affected by high operating expenses ratio in Pakistan as it could only be maintained at 21.25 (on average) which is the second highest in the region after Afghanistan (37.82) and higher than the South Asian industry average (17.09). The average ROA for Pakistan is negative (-2.86) and is lower than the average ROA in the region (0.95). The average for the depth of outreach is 11.97% which shows that on average, the percentage of serving the poorest is around 12% in the gross loan portfolio. The results thus support our hypothesis that conventional microfinance is skewed towards financial commercialization rather than social value creation. A majority of microfinance practitioners except RSPs do not serve the poorest of the poor who actually deserve microfinance services. The analysis revealed that only a few MPs serve the poorest

people: not one of five MFBs, only three out of 19 MFIs, and only one out of 3 RSPs consider serving poorest of the poor. A majority of MPs serve the moderately poor and low income poor in order to maintain their GLP that is an indication of skewed behavior towards financial commercialization Regarding the social development, a majority of microfinance practitioners target women customers to assure high repayment rates for their financial sustainability (split ratio is 58:42 for women: men). Secondly, the expansion of outreach is considered with increased GLP and increased number of borrowers, but the objective list shows that the ultra-poor are not in the priority list of all market players in Pakistan's microfinance industry. Moreover, the methodology of interest calculation is a prime factor in possible exploitation of the poor due to high incidence of exorbitant interest charges. A majority of MPs use flat rate interest calculation method (60%) that puts evidently higher incidence than the declining balance method that is used by only (40%) of total microfinance practitioners in Pakistan.

How do the people of Pakistan perceive conventional microfinance and Islamic microfinance? Survey results indicate that a majority of people in Pakistan understand the fundamental differences between these two types of microfinance. Also, the respondents expressed disagreement with the overly emphasized claims of conventional microfinance, i.e. empowering the poor (57% disagree), serving the poorest of the poor (94% disagree), and lifting the poor out of the poverty abyss (62% disagree). A majority of respondents (76%) choose Islamic microfinance as a source of potential borrowing in the future because it works within the *Shariah* boundaries and charges no interest on loans. Islamic microfinance is considered a better tool for poverty alleviation because of its welfarist

genre and working-boundaries of Islamic *Shariah.* In case of default, the scheduled repayments are extended without using the coercive practices for recovery that provides an additional time for poor people to accumulate sufficient funds. If the borrowers are completely deprived, then the loans are considered as written-off (Qard-e-hasna loans). According to peoples' perception, Islamic microfinance could be used effectively in poverty alleviation efforts if it is aligned with modern financial environment. The emergence of Islamic banking in Pakistan provides a baseline for Islamic microfinance that can favorably be used to garner Islamic financial products in an integrated manner. In summary, the survey results and findings to the length showed that Islamic microfinance is positively perceived and preferred over conventional microfinance by the people of Pakistan.

The study thus suggests that the scope of microfinance can be enhanced through a dual approach. First, the banking industry can be used to channel the funds through Islamic microfinance; and second, government support can enhance the effectiveness of such programs. Direct subsidies and swift loans by local and international donors can enhance the financial sustainability of Islamic microfinance. The funds allocated by the government can be used to catalyze the poverty alleviation efforts in Pakistan through cross-subsidization. This complementation will enhance the efforts to achieve the sustainable development goals (SDGs) of poverty eradication.

Can Islamic microfinance be used as a replacement of conventional microfinance in Pakistan? The study proposed a new model of Islamic microfinance based on religious

principles with an inclusion of the mosque (the Muslim's prayer place). A mosque-based system integrates financial services with religious practice and addresses a number of existing issues of conventional microfinance. It is elaborated that the Islamic microfinance model can break the vicious circle of poverty with the injection of funds through entrepreneurial loans and consumption loans. The favorable opinions about Islamic microfinance by the people of Pakistan induced me to go one step further and test the probability of its successful implementation.

What is the probability of Islamic microfinance being successfully implemented in Pakistan? Using the binary probability model (Probit) after recoding the peoples' responses into dummy variables, the study revealed some significantly positive probabilities for the implementation of Islamic microfinance in Pakistan for poverty alleviation. The results confirm the hypothesis that the probability of Islamic microfinance's successful implementation is high and that Islamic microfinance can be used as a replacement of existing microfinance to achieve the long-term goals of poverty alleviation in Pakistan.

6.2 Recommendations

In light of the study's findings, the following policy recommendations are proposed to make microfinance a more effective tool for poverty alleviation in Pakistan:

i The State Bank of Pakistan's Prudential Regulations {clause 4 (ii)} for MFBs demands the minimum paid up capital requirement of PKR 1 billion for national level

operations and PKR300 million for District level operations (SBP Prudential Regulations, 2011). Such Regulation ensures the financial self-sufficiency of MFBs and provide provisions for solvency issues. However, the Prudential Regulations do not address the assurance of social value creation like minimum outreach expansion, minimum number of small loans etc. These regulations are necessary to model in order to increase the social efficiency of conventional microfinance in Pakistan.

ii. An effective mechanism of proper monitoring of MFIs is needed to ensure borrowers' protection as well as MFIs' financial protection against double-dipping and Non-Performing Loans (NPLs). The existing Prudential Regulations {clause 11(i)} requires that the MFBs should devise their own internal mechanism to safeguard against the potential risks. Such regulations should be monitored at Centralization level or the State Bank of Pakistan. This provision will increase the financial efficiency of Conventional Microfinance in Pakistan.

iii. In order to catalyze poverty alleviation efforts, the mosque-based Islamic microfinance should be implemented in rural and agricultural areas to support the farmers and poor peasants throughout the country. The soft loans to 'Small and Medium Enterprises' (SMEs) should also be provided because the lending to SMEs is reportedly declining. As reported by the Islamabad Chamber of Commerce and Industry (ICCI) to the State Bank of Pakistan (SBP), lending in the second quarter of financial year 2015-16 had declined by 9 percent from Rs.287.8 billion to Rs.261.75 billion. Lending to SMEs in effect declined to 5.8 percent as compared to 6.7 percent in the previous year.

iv. The selection committees consisting of volunteers at the union council level should be formed to increase the effectiveness of mosque-based Islamic microfinance. Such committees can be helpful in the selection of potential borrowers of Islamic microfinance.

v. Inasmuch as the prayer leaders have a central role in mosque-based Islamic microfinance model, training and awareness programs on financial lending and borrowing are proposed.

vi. A team of union council members should be formed that can be headed by any government officer (acting or retired) to monitor the mosque-based Islamic microfinance model's applicability and viability in order to improve and enhance its effectiveness in poverty alleviation.

vii. The successful implementation of Islamic Microfinance in Pakistan requires some revolutionary changes in the banking system. The prevailing banking system in the country is based on interest which is completely forbidden in the Islamic *Shariah*. The current constitution adopted in 1973 (article 38 (f)} demands the authorities to completely eliminate interest (*Riba)* from the whole banking system but the existing banking does not comply with the constitutional demands. Out of 52 banks only five (5) have declared themselves fully Islamic banks, while six conventional banks have Islamic branches, and 3 banks have sub-branches of Islamic banks (Saeed, 2012). A complete overhauling of the

existing banking system is required to institutionalize an interest-free banking and finance environment in Pakistan.

viii. Follow-up and monitoring studies should be carried out after the mosque-based Islamic microfinance model is implemented. These studies will help identify the shortcomings of the model, the issues faced by the borrowers, and the overall effectiveness of such projects, among others. Ethnographic investigations would be particularly useful in understanding the everyday life experiences of the poor and how they are affected by microfinance interventions.

6.3 Proposed Islamic Microfinance based Poverty Alleviation Model

The prime objective of microfinance is poverty alleviation and all the efforts are made in microfinance to achieve this noble goal. Islamic microfinance extends this goal one step further by attaching the goal of establishing welfare state. Active participation of all actors in the society is required to achieve such goals and a huge responsibility rests upon the rich or elite class who usually dominate in the society in terms of the occupation of economic resources. The following effort is an attempt to establish a model that can efficiently be used to break the vicious circle of poverty. The model presented in Figure-6.1 shows the intervention of Islamic microfinance in breaking the vicious circle of poverty and transforming that into a virtuous circle of prosperity.

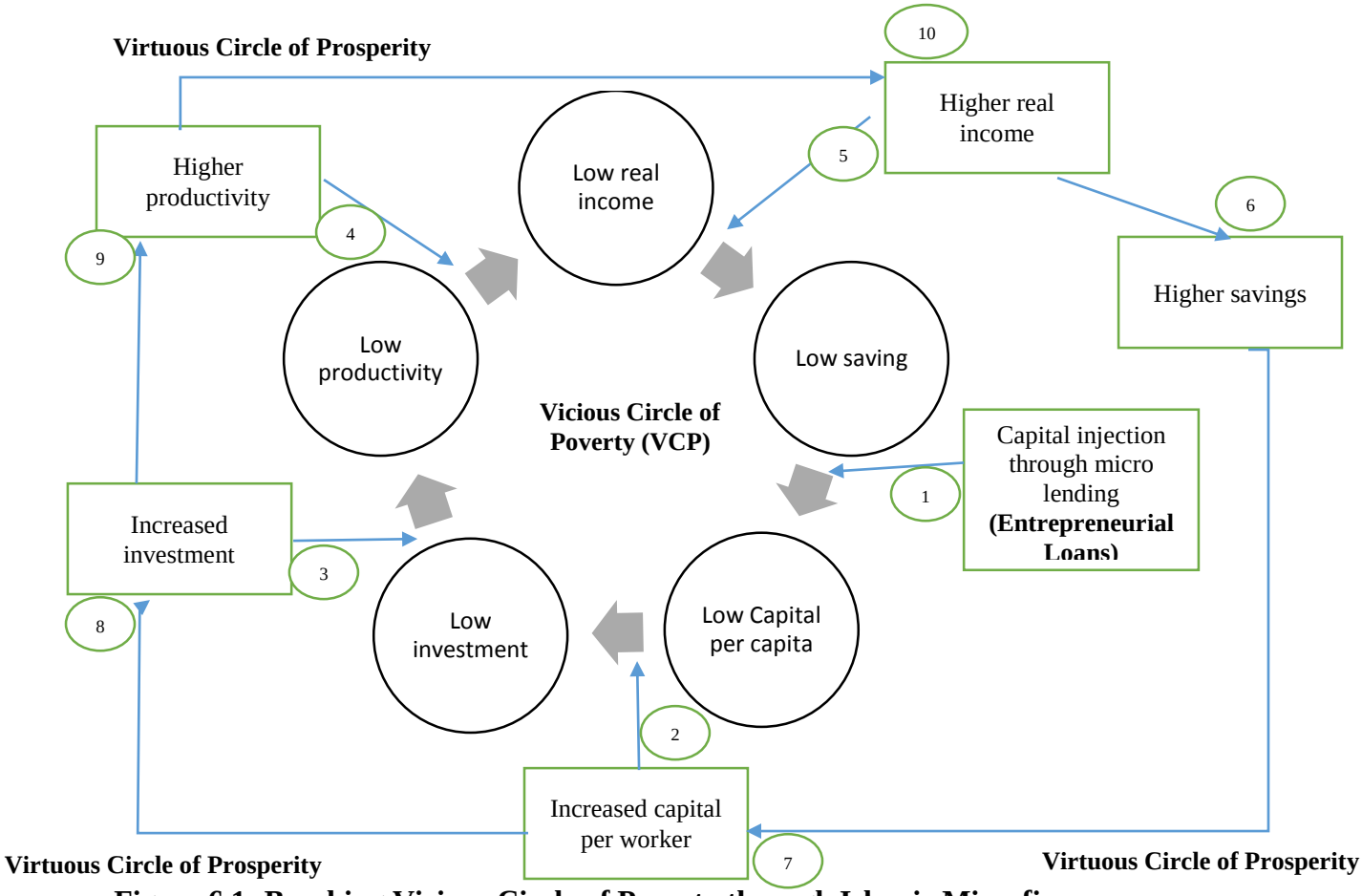


Figure 6.1: Breaking Vicious Circle of Poverty through Islamic Microfinance (Supply Side Model)

Figure-6.1 explains the model that breaks the vicious circle of poverty by using microfinance lending specifically the lending for entrepreneurial activities. As a first step, we inject the loans in the existing system (1) which increase the capital per worker (2) implicitly assuming that the loans will be used for economic activities. The increased capital per worker will trigger to increase the investment (3) that will be used for a higher production (4). The higher production will increase the opportunities for the worker to earn high real income (5) and eventually the savings will be increased (6). The higher savings will again trigger the capital per worker (7) which will increase the investment (8) and productivity (9) and finally a higher level of income (10). This hypothetical model shows how the vicious circle of poverty can be transformed into a virtuous circle of prosperity by the help of Islamic microfinance.

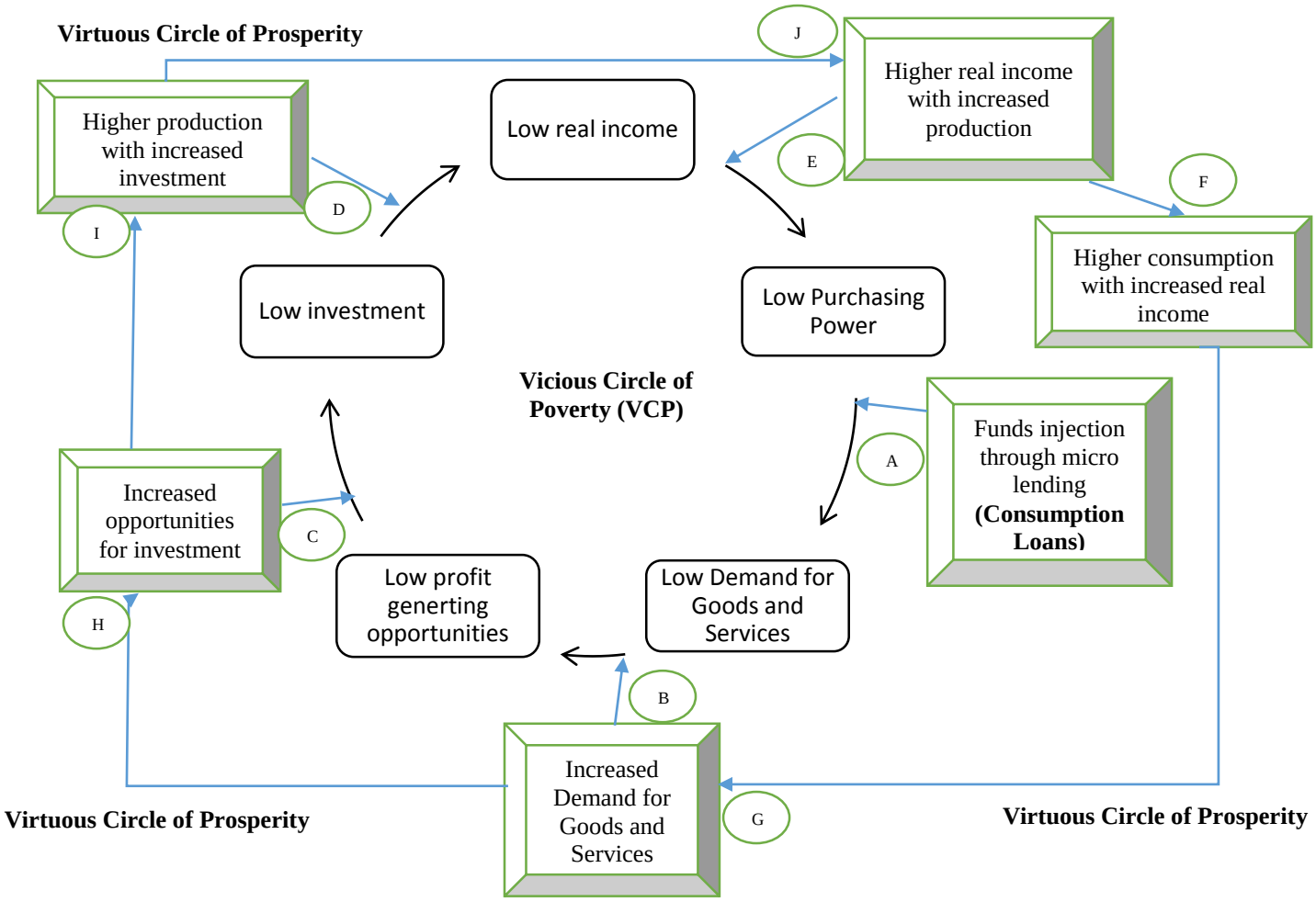


Figure 6.2: Breaking Vicious Circle of Poverty through Islamic Microfinance (Demand Side Model)

Figure-6.2 shows the model that breaks the vicious circle of poverty through Islamic microfinance. It is pertinent to mention that the proposed model of Islamic microfinance (mosque-based) allows two different types of loans, i.e. loans for consumption and loans for entrepreneurial activities. The consumption loans are used to inject the funds in the system (A) that increase the demand for goods and services (B), such increase in quantity demanded triggers the inducement for investment (C) which forces the investors to invest more in search of higher profits. The higher investment leads to a higher

level of production (D) that eventually increases the real income (E). The consumption increases (F) with a higher level of real income. In the second phase of this cycle, increased consumption triggers the demand for goods and services to increase (G), the ripple effect continues and opportunities for investment increase (H) that increase high investment and production (I) and eventually a higher level of real income (J). These models show how the vicious circle of poverty can be transformed into a virtuous circle of prosperity. However, some cautions must be taken in interpreting the results because to keep the models simple, we implicitly assumed that the leakage of funds will be zero in both the models. The leakage of funds could disturb the models to some extent because it directly affects the income-generating activities. These leakages in the system could happen due to some exogenous shocks like catastrophic events as well as deaths, disease, and disasters. The study emphasizes the need for more empirical investigations in order to validate the proposed model and its viability.

References

Abdouli, A.H. (1991). Access to Finance and Collaterals: Islamic Versus Western Banking. *JKAU. Islamic Econ.* Vol. 2. pp. 55-62.

Abdul-Rahman, A.R. (2007). Islamic Microfinance: A Missing Component in Islamic Banking. *Kyoto Bulletin of Islamic Area Studies,* 1-2.pp. 38-53.

Adam, S., and Lahsasna, A. (2013). Cash endowment as source of fund in Islamic micro-Financing. In *4th International Conference on Business and Economic Research (4th ICBER 2013).*

Adams, R. H., and Page, J. (2005). Do international migration and remittances reduce poverty in developing countries? World development, 33(10), 1645-1669.

ADB (2002). Poverty in Pakistan: Issues, causes and institutional responses. Source: https://www.adb.org/sites/default/files/institutional-document/33464/files/poverty.pdf (accessed on January 12, 2015).

Aghion, B.A.D., and Jonathan, M. (2010). The Economics of Microfinance. (2nd Ed). London: The MIT press.

Ahmad, A. U. F., and Ahmad, A. R. (2008). Islamic microfinance: A case study of Australia. *Journal of Islamic Economics, Banking and Finance*, 4(2), 59-80.

Ahmed, H. (2002). Financing microenterprises: An analytical study of Islamic microfinance institutions. *Islamic Economic Studies*, 9(2), 27-64.

Ahmed, H. (2007). Waqf-based microfinance: realizing the social role Of Islamic finance. *World Bank*.

Akhavein, J. D., Berger, A. N., and Humphrey, D. B. (1997). The effects of megamergers on efficiency and prices: Evidence from a bank profit function.*Review of industrial Organization*, *12*(1), 95-139.

Akula, V. (2010). A big split over Microfinance. *Forbes*. Source: http://www.forbes.com/global/2010/1011/companies-akula-yunus-iskenderian-clinton-global-big-split.html (accessed on March 15, 2014).

Al-Bukhari, M. (1987). *Sahih al-Bukhari*. Hamdaan Publications.

Ali, A. J. (2015). *Handbook of Research on Islamic Business Ethics.* Cheltenham: Edward Elgar Publishing Limited.

Ali, S. (13 June 2014). Rising Poverty in Pakistan [blog post] retrieved from http://www.dailytimes.com.pk/opinion/14-Jun-2014/rising-poverty-in-pakistan.

Ali, K. (2013, May 17). Islamic Microfinance in Pakistan: The Experience so Far. [web log comment]. Retrieved from http://www.cgap.org/blog/islamic-microfinance-pakistan-experience-so-far.

Ambe Shu, C., and Oney, B. (2014). Outreach and performance analysis of microfinance institutions in Cameroon. *Economic Research-Ekonomska Istraživanja*, *27*(1), 107-119.

Appah, E. B. I. M. O. B. O. W. E. I., John, M. S., and Wisdom, S. O. R. E. H. (2012). An analysis of microfinance and poverty reduction in Bayelsa State of Nigeria. *Kuwait* Chapter of Arabian Journal of Business and Management Review, 1(0): 7.

Arif, G. M., and Farooq, S. (2012). Dynamics of rural poverty in Pakistan: Evidence from three waves of the panel survey. Pakistan Institute of Development Economics, Islamabad.

Armendáriz de Aghion, B., and Morduch, J. (2000). Microfinance beyond group lending. *Economics of transition*, *8*(2): 401-420.

Armendariz-de-Aghion, Beatriz and Morduch, Jonathan. (2005).*The Economics of Microfinance*. The MIT Press, Cambridge, Massachusetts, London, England.

Armendáriz, B., and Szafarz, A. (2009). *Microfinance mission drift?*. Working paper No. 09-015RS, Université Libre de Bruxelles, Solvay Brussels School of Economics and Management, Centre Emile Bernheim (CEB).

Armendáriz, B., and Morduch, J. (2010). The economics of microfinance. MIT press.

Ashta, A., Khan, S., and Otto, P. E. (2011). Does microfinance cause or reduce suicides? Policy recommendations for reducing borrower stress. Source: http://www.arabic.microfinancegateway.org/sites/default/files/mfg-en-paper-does-microfinance-cause-or-reduce-suicides-policy-recommendations-for-reducing-borrower-stress-mar-2011.pdf (accessed on March 22, 2014).

Asian Development Bank. (2002). *Poverty Reduction in Nepal: Issues, Findings and Approaches.* Source: http://www.adb.org/sites/default/files/publication/27926/poverty-analysis.pdf (accessed on January 2, 2015).

Asian Development Outlook. (2015). Source: http://www.adb.org/sites/default/files/publication/154508/ado-2015.pdf (accessed on June 29, 2016).

Aslam, M. (2009). Poverty. *Economic Survey of Pakistan 2009-10. pp 127-143. Source:* http://www.finance.gov.pk/survey/chapter_10/09_Poverty.pdf (accessed on June 15, 2014).

Athanassopoulos, A. D. (1997). Service quality and operating efficiency synergies for management control in the provision of financial services: Evidence from Greek bank branches. *European Journal of Operational Research*, *98*(2), 300-313.

Autor, D. (2010). Private Information, Adverse Selection and Market Failure. MIT Lecture Note 17.

Bain, J. (1951). Relation of Profit Rate to Industry Concentration: American Manufacturing 1936-1940. *Quarterly Journal of Economics*, 65, 293-324.

Barrios, S., Huizinga, H., Laeven, L., and Nicodème, G. (2012). International taxation and multinational firm location decisions. *Journal of Public Economics*, *96*(11), 946-958.

Bass, H. H. (2009). Ragnar Nurkse's Development Theory: Influences and Perceptions. Ragnar Nurkse (1907-2007): Classical Development Economics and its Relevance for Today, 183-202

Bateman, M. (2011). Microfinance as a development and poverty reduction policy: is it everything it's cracked up to be? Overseas Development Institutes, Background Note. Source:http://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/6291.pdf (accessed on April 14, 2015).

Bateman, M. (2014). The Rise and fall of Muhammad Yunus and the Microcredit Model. *International Development Studies*, working paper# 01.

BBC News. (December 16, 2010). India's micro-finance suicides epidemic. Source: http://www.bbc.com/news/world-south-asia-11997571 (accessed on March 14, 2014).

Beatriz, A., and Jonathan, M. (2005). *The Economics of microfinance.* London: The MIT Press.

Berger, A. N., DeYoung, R., Genay, H., and Udell, G. F. (2000). Globalization of financial institutions: Evidence from cross-border banking performance. Brookings-Wharton papers on financial services, 2000(1), 23-120.

Berger, A. N., and Hannan, T. H. (1998). The efficiency cost of market power in the banking industry: A test of the "quiet life" and related hypotheses. *Review of Economics and Statistics*, *80*(3), 454-465.

Bernardi, F., and Radl, J. (2014). The long-term consequences of parental divorce for children's educational attainment. *Demographic research*, *30*, 1653-1680.

Bertrand, M., Black, S. E., Jensen, S., and Lleras-Muney, A. (2014). *Breaking the glass ceiling? The effect of board quotas on female labor market outcomes in Norway* (No. w20256). National Bureau of Economic Research.

Boone, J. (2004). A New Way to Measure Competition: *The Economic Journal*, 18, 1245-1261.

Brau, J. C., and Woller, G. M. (2004). Microfinance: A comprehensive review of the existing literature. *Journal of Entrepreneurial Finance, JEF*, *9*(1): 1-27.

Breckland Council. (2012). Source: https://www.breckland.gov.uk/sites/default/files/Uploads/planning_building_control/2013%20SHMA.pdf (accessed on March 12, 2014).

Brockett, P. L., Charnes, A., Cooper, W. W., Huang, Z. M., and Sun, D. B. (1997). Data transformations in DEA cone ratio envelopment approaches for monitoring bank performances. European Journal of Operational Research, 98(2), 250-268.

Business Insider. (February 24, 2012). Hundreds of Suicides In India Linked To Microfinance Organizations. Source: http://www.businessinsider.com/hundreds-of-suicides-in-india-linked-to-microfinance-organizations-2012-2 (accessed on January 26, 2014).

Butler, Sarah. (2008). Mall intercept survey. In P.J. Lavrakas, ed., Encyclopedia of Survey Research Methods. Sage Publications.

Catena, M. (2000). Efficiency Structure Hypothesis: An Application to the Argentine Banking Sector, Central de la República Argentina, *Area de Economía y Finanzas No. 12*.

CGAP. (1996). Microcredit Interest Rates. Occasional paper No. 1. Retrieved from http://www.jointokyo.org/mfdl/readings/CGAPocc1.pdf.

CGAP. (2006, April 14). The History of Microfinance. *Global Envision: exploring market driven solutions to poverty* [Web log comment]. Retrieved from http://www.globalenvision.org/library/4/1051.

CGAP. (2007). Measuring Results of Microfinance Institutions Minimum Indicators That Donors and Investors Should Track. Source: https://www.cgap.org/sites/default/files/CGAP-Technical-Guide-Measuring-Results-of-Microfinance-Institutions-Minimum-Indicators-That-Donors-and-Investors-Should-Track-Jul-2009.pdf (accessed on 12 January 2016).

CGAP. (2015). South Asia. Source: http://www.microfinancegateway.org/region/south-asia (accessed on August 15, 2015).

Chapra, M. U. (1979). *The Islamic welfare state and its role in the economy*. Islamic Foundation.

Charnes A, Cooper WW and Rhodes E (1978). Measuring the efficiency of decision making units. Eur J Opl Res 2: 429–444.

Cheema, A. R., and Sial, M. H. (2012). Poverty, income inequality, and growth in Pakistan: A pooled regression analysis.

CIA World Fact Book. (2014). Source: https://www.cia.gov/library/publications/rss-updates/world-factbook-updates-january-9-2014.html (accessed on March 14, 2015).

Conroy, J. D. (2003). *The challenges of micro financing in Southeast Asia*. Foundation for Development Cooperation. Singapore.

Cook, W. D., Hababou, M., and Tuenter, H. J. (2000). Multicomponent efficiency measurement and shared inputs in data envelopment analysis: an application to sales and service performance in bank branches. Journal of productivity Analysis, 14(3), 209-224.

Cooper, W. W., Seiford, L. M., and Zhu, J. (2004). Data envelopment analysis. In Handbook on data envelopment analysis (pp. 1-39). Springer US.

Copestake, J. (2007). Mainstreaming microfinance: Social performance management or mission drift? *World Development*, *35*(10), 1721-1738.

Dharmapala, D., and Hines, J. R. (2009). Which countries become tax havens? *Journal of Public Economics*, *93*(9), 1058-1068.

Dhumale, R., and Sapcanin, A. (1999). An application of Islamic banking principles to microfinance. *Technical Note, A study by the Regional Bureau for Arab States*, UNDP, in cooperation with the Middle East and North Africa Region, World Bank.

Dichter, T. (2006). Hype and hope: the worrisome state of the microcredit movement. The Microfinance Gateway: Source: http://www.microfinancegateway.org/p/site/m/template.rc/1.26.9051 (accessed on April 13, 2014).

"Difference Principle." International Encyclopedia of the Social Sciences. Retrieved December 18, 2016 from Encyclopedia.com: http://www.encyclopedia.com/social-sciences/applied-and-social-sciences-magazines/difference-principle

Dobusch, L., Mader, P., and Quack, S. (Eds.). (2013). *Governance across borders: Transnational fields and transversal themes*. E-publi GmbH.

Drake, D., and Rhyne, E. (2002). *Commercialization of Microfinance: balancing business and development.* Accion International (Organization), Stylus Pub LLC.

Dunford C (2000). The holy grail of microfinance: 'Helping the poor' and 'sustainable'? Small Enterprise Dev 11: 40–44.

Dunford Chris, What wrong with loan size? Freedom From Hunger, 2002Gendron C., ISO 26000: Towards a Social Definition of Corporate Social Responsibility, Chair of Social Responsibility and Sustainable Development, UQAM, 2009.

Durrani, M. K. K., Usman, A., Malik, M. I., and Shafiq, A. (2011). Role of micro finance in reducing poverty: A look at social and economic factors. International Journal of Business and Social Science, 2(21).

El-Sheikh, S. (2011). Islamic Economics and Finance, Then and Now: A Fiqhi-conomic perspective on its Doctrines and Debates. *International Journal of Economics, Management and Accounting*, *19*(1), 77.

Economic Survey of Pakistan. (2014-15). Source: http://www.finance.gov.pk/survey_1415.html (accessed on August 3, 2015).

Ferro-Luzzi, G., and Weber, S. (2006). Measuring the performance of microfinance institutions. *Available at SSRN 918750*.

Financial Times. (16 December 2010). Microfinance isn't the 'silver bullet' to end poverty. Source: https://www.ft.com/content/4f258ab6-08b0-11e0-b981-00144feabdc0 (accessed on 28 October 2016).

Gebreselassie, S., and Ludi, E. (2007). Agricultural commercialization in coffee growing areas of Ethiopia. *Ethiopian Journal of Economics, 16*(1), 89-118.

Ghosh, J. (2013). Microfinance and the challenge of financial inclusion for development. *Cambridge journal of economics*, bet042.

Ghosh, S., and Van-Tassel, E. (2011). Microfinance and competition for external funding. *Economics Letters,* 112(2), 168-170.

Ghosh, S., and Van-Tassel, E. (2013). Funding microfinance under asymmetric information. *Journal of Development Economics, 101:* 8-15.

Giorgio, S. (2007). 'Two Nations': The Religious and Secular Dimensions of Muslim Nationalism in Colonial India. *Ritsumeikan International Affairs*, 5, 69-84.

Global Financial Development Report (2014). Source: http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTGLOBALFINREPORT/0,,contentMDK:23492074~pagePK:64168182~piPK:64168060~theSitePK:8816097,00.html (accessed on October 15, 2014).

Gonzalez-Vega, C. (1998). Microfinance: Broader achievements and new challenges. *Economics and Sociology*, Occasional paper 2518.

Grameen Bank. (2012). What is Microfinance? Source: http://www.grameen-info.org/what-is-microfinance (accessed on March, 15, 2014).

Grigorian, D., and Manole, V. (2002). Determinants of commercial bank performance in transition: An application of data envelopment analysis. World Bank Policy Research Working Paper, (2850).

Gutiérrez-Nieto, B., Serrano-Cinca, C., and Molinero, C. M. (2009). Social efficiency in microfinance institutions. *Journal of the operational research society*, *60*(1), 104-119.

Hassan, M. K. (2010). An integrated poverty alleviation model combining zakat, awqaf and microfinance. In *Seventh International Conference-The Tawhidi Epistemology: Zakat and Waqf Economy, Bangi, Malaysia*.

Hausman, J. A., and Taylor, W. E. (1981). Panel data and unobservable individual effects. *Econometrica: Journal of the Econometric Society*, 1377-1398.

Hay, D. A., and Liu, G. S. (1997). The efficiency of firms: what difference does competition make? *The Economic Journal*, *107*(442), 597-617.

Healy, P. M., and Palepu, K. G. (2001). Information asymmetry, corporate disclosure, and the capital markets: A review of the empirical disclosure literature. *Journal of accounting and economics*, *31*(1), 405-440.

Helms, B. (2006). Access for all: Building inclusive Financial Systems. USA: The International Bank for Reconstruction and Development/The World Bank's Consultative Group To Assist the Poor (CGAP).

Henry, C., M. Sharma, C. Lapenu and M. Zeller. (2003). Microfinance Poverty Assessment Tool. Washington DC: CGAP (Consultative Group to Assist the Poor)/ International Bank for Reconstruction and Development (The World Bank).

Hiatt, S. R., and Woodworth, W. P. (2006). Alleviating poverty through microfinance: Village banking outcomes in Central America. *The Social Science Journal*, *43*(3): 471-477.

Hollingworth, S. (2014). No Silver Bullet: While microfinance alone won't end poverty, it is making an impact – so let's re-focus it to serve the poor. Source: http://nextbillion.net/no-silver-bullet/ (accessed on 28 October 2016).

Hossain, F., and Knight, T. (2008). Financing the poor: can microcredit make a difference? Empirical observations from Bangladesh. *Empirical Observations from Bangladesh (September 9, 2008). Brooks World Poverty Institute Working Paper*, (38).

Hsiao, C. (2007). Panel data analysis-advantages and challenges. *Test*, 16(1*)*, 122.

Hudon, M. (2011). Ethics in Microfinance. In Beatriz Armendariz and Marc Labie (Ed.). *The Handbook of Microfinance.* (pp. 123-141), Singapore, World Scientific Publishing Co. Pte. Ltd.

Hulme, D. (2000). Is micro-debt good for poor people? A note on the dark side of microfinance. *Small Enterprise Development, 11*(1): 26-28.

Hulme, D., and Mosley, P. (1996). *Finance against Poverty.* Vol-2. New York NY: Routledge.

Human Development Report. (2015). Source: http://hdr.undp.org/sites/default/files/2015_human_development_report.pdf (access on January 12, 2016).

Hussain, I. (2005). Poverty Reduction Strategy of Pakistan. Source: http://ishrathusain.iba.edu.pk/speeches/povertyReduction/PovertyReduction-13-Oct-05.pdf (accessed August 15, 2015).

IBN KHALDON, WALL AD-DIN 'ABD-AR-RAHMAN. [Muqaddimah.]*Prolegomenes d'Ebn-Khaldoun.* Texte Arabe par *E.* Quatremere. *Notices etExtraits des manuscrits de la Bibliotheque Imperiale* (Academie desInscriptions et Belles-Lettres), vols. xvI-xviIi. Paris, 1858. For Urdu translation,*see* ALLAHABAD. Turkish, *see* PIRI ZADEH. French, *see* SLANE (6), (7).English, *see* ROSENTHAL, F. (4).

IFAD. (2015). Source: Investing in Rural People in Pakistan. Source: https://www.ifad.org/documents/10180/1bdd3995-0f13-477b-8526-e029e41a4dd0 (accessed on 12 January 2016).

IMF. (2005). *Bangladesh: Poverty Reduction Strategy Paper.* IMF country report No. 05/410.

Iqbal, J. (2012). *Limited Dependent Variable Model.* A presentation at Applied Economics Research Centre (AERC), Karachi, Pakistan.

Iqbal, M., Ahmad, M., and Abbas, K. (2003). The Impact of Institutional Credit on Agricultural Production in Pakistan. *The Pakistan Development Review* 42:4(2): pp. 469–485.

Jacobs, L. (1995). *The Jewish Religion: A companion.* Oxford University Press.

Jegede, C. A., Kehinde, J., and Akinlabi, B. H. (2011). Impact of microfinance on poverty alleviation in Nigeria: An empirical investigation. *European Journal of Humanities and Social Sciences,* 2(1): 97-111.

Jiménez, G., Lopez, J. A., and Saurina, J. (2013). How does competition affect bank risk-taking?. *Journal of Financial Stability*, *9*(2), 185-195.

Johnson, S., and Rogaly, B. (1997). *Microfinance and poverty reduction*. Oxfam.

Kabeer, N. (2001). Conflicts over credit: re-evaluating the empowerment potential of loans to women in rural Bangladesh. *World development*, *29*(1): 63-84.

Kaleem, A., and Ahmed, S. (2009). The Quran and poverty alleviation: A theoretical model for charity-based Islamic microfinance institutions. *Nonprofit and Voluntary Sector Quarterly*.

Kamali, M.H. (2008). *Shari'ah Law: An Introduction.* Oxford: Oneworld Publications.

Kanak, S., and Iiguni, Y. (2007). Microfinance programs and social capital formation: The present scenario in a rural village of Bangladesh. *The International journal of applied economics and finance*, *1*(2), 97-104.

Karachi Metropolitan Corporation. (2016). Source: http://www.kmc.gos.pk/Contents.aspx?id=2 (accessed on July 18, 2016).

Kernani, A. (2007). Microfinance Misses Its Mark. Source: https://ssir.org/articles/entry/microfinance_misses_its_mark (accessed on 28 October, 2016).

Karnani, A. (2007). Employment, not microcredit, is the Solution. *Ross School of Business Paper Series 1065.*

Khan, A. (2008). Tackling the failure of microfinance efforts through amalgamating microfinance with charity: two viable alternatives in the context of Pakistan. *Australasian Accounting Business and Finance Journal*, 2(2): 2.

Khan, F. (2001). Waqf: an Islamic Instrument of Poverty Alleviation-Bangladesh Perspective. *Abdul Ghafar Ismail Mohd Ezani Mat Hassan Norazman Ismail Shahida Shahimi*, 65.

Khan, M. H., (1999), "Agricultural Development and the Changes in Land Revenue and Land Tenure Systems in Pakistan," in ed. S. R. Khan, Pakistan's Economy: Traditional Topics and Contemporary Concerns (Oxford: Oxford University Press).

Khandker, S.R. (2001, February). Does micro-finance really benefit the poor? Evidence from Bangladesh. Presented in Asia and Pacific Forum on Poverty: Reforming Policies and Institutions for Poverty Reduction, The Asian Development Bank, Manila (p. 5-9).

Khandker, S. R. (2005). Microfinance and poverty: Evidence using panel data from Bangladesh. *The World Bank Economic Review*, 19(2), 263-286.

Kumar, S., Gulati, R., (2008): "An Examination of Technical, Pure Technical and Scale Efficiency in Indian Public Sector Banks using Data Envelopment Analysis", Eurasian Journal of Business and Economics, Vol.1 (2), Pp:33-69.

Lauer, J. M., and Asher, J. W. (1988). *Composition research: Empirical designs*. Oxford University Press.

Ledgerwood Joanna, Julie Earne and Candace Nelson, eds. (2013). *The New Microfinance Handbook: A Financial Market System Perspective*. Washington, DC: World Bank. doi: 10.1596/978-0-8213-8927-0.

Leikem, K. (2012). Microfinance: A Tool for Poverty Reduction? *Seniors Honors Projects.* Paper 300.

León, P. (2001). *Four pillars of financial sustainability*. Nature Conservancy.

Lewis, J. C. (2008). Microloan sharks. *Stanford Social Innovation Review*, *6*(3), 54-59.

Lipton, M., and Ravallion, M. (1993). *Poverty and policy,* (Vol. 1130). World Bank Publications.

LSE. (2014). Source: http://www.lse.ac.uk/newsAndMedia/news/archives/2014/11/SDGsWillNotSucceedWithoutEconomicGrowth.aspx (accessed on January 14, 2015).

Luo, X. (2003). Evaluating the profitability and marketability efficiency of large banks: An application of data envelopment analysis. *Journal of Business research*, *56*(8), 627-635.

Mago, S. (2013). Microfinance in Zimbabwe: A historical overview. Mediterranean Journal of Social Sciences, 4(14), 599.

Mahajan, V., and Ramola, B. G. (2003). Microfinance in India: Banyan Tree and Bonsai. *A review paper for the Banco Mundial Washington, DC.*

Malik, S., Chaudhry, I. S., and Hanif, I. (2012). Analysis of Rural Poverty in Pakistan; Bi-Model Estimation of Some Selected Villages. International Journal of Humanities and Social Science, 2(8), 73-80.

Mamuta, M. (May 11, 2012). Exorbitant Interest Rates: A Response from the Russian Microfinance Industry [Web log comment]. Retrieved from http://www.cgap.org/blog/exorbitant-interest-ratesa-response-russian-microfinance-industry.

Manandhar, R., and Tang, J. C. (2002). The evaluation of bank branch performance using data envelopment analysis: A framework. The Journal of High Technology Management Research, 13(1), 1-17.

Marakkath, N. (2013). *Sustainability of Indian Microfinance Institutions: A Mixed Methods Approach*. Springer Science & Business Media.

Marulanda, B., and Otero, M. (2005). The profile of microfinance in Latin America in 10 years: Vision & Characteristics. ACCION International.

Marotta, D.J (2013, February 24). What is Rent-Seeking Behavior? [Web log post]. Retrieved from http://www.forbes.com/sites/davidmarotta/2013/02/24/what-is-rent-seeking-behavior/#5a9f0c9a7f24

Mason, E.S. (1939). Price and Production Policies of Large-Scale Enterprise, *American Economic Review* (29), 61-74.

McCulloch, N., and Baulch, B. (2000). Simulating the impact of policy upon chronic and transitory poverty in rural Pakistan. *The Journal of Development Studies, 36*(6): 100-130.

McGee, J.S. (1988). *Industrial Organization.* New Jersey, Prentice Hall Higher Education.

Mercan, M., Reisman, A., Yolalan, R., and Emel, A. B. (2003). The effect of scale and mode of ownership on the financial performance of the Turkish banking sector: results of a DEA-based analysis. Socio-Economic Planning Sciences, 37(3), 185-202.

Merriam-Webster. (2016). Source: http://www.merriam-webster.com/dictionary/silver%20bullet (accessed 28 October 2016).

Mersland, R., and Strøm, R. Ø. (2010). Microfinance mission drift?. *World Development*, *38*(1), 28-36.

Micro capital. (January 9, 2006). Microfinance Interest Rates as a Function of Transaction Costs [Web log comment]. Retrieved from: http://microcapitalmonitor.com/cblog/index.php?/archives/129-Microfinance-Interest-Rates-as-a-Function-of-Transaction-Costs.html.

Microfinance Information Exchange. (2013). Source: http://www.mixmarket.org/mfi/region/South%20Asia (accessed on August 12, 2015).

Microfinance Information Exchange Market. (2014). Source: http://www.mixmarket.org/profiles-reports (accessed on December 25, 2012).

Miller, S. M., and Noulas, A. G. (1996). The technical efficiency of large bank production. Journal of banking & finance, 20(3), 495-509.

Morduch, J., and Haley, B. (2001). Analysis of the Effects of Microfinance on Poverty Reduction. *NYU Working paper No. 1014.*

Munir, K. (2012). Akhuwat: Making Microfinance Work. *Standford* SOCIAL INNOVATION REVIEW. Source: http://www.ssireview.org/blog/entry/akhuwat_making_microfinance_work (accessed on February 1, 2015).

Musa, A.S.M., Couchoro, M., and Ashta, A. (2013). Microfinance: An innovation for entrepreneurship. *4th Joint Research Conference.* Conference Paper. June 24th 2013 Dijon.

Mushuku, A., and Mayisa, J. (2014). Unlocking the Door from Poverty through Rotating Savings and Credit Associations: A Study of Group Based Savings in Ward 14 of Gutu District, Zimbabwe. *Bangladesh e-Journal of Sociology*, *11*(2): 118.

Navajas, S., Schreiner, M., Meyer, R. L., Gonzalez-Vega, C., and Rodriguez-Meza, J. (2000). Microcredit and the Poorest of the Poor: Theory and Evidence from Bolivia. *World development*, 28(2), 333-346.

Noland, B., and Whelan, C.T. (1996). *Resource Deprivation and Poverty*. London: Clarendon Press.

Nteziyaremye, A., and MkNelly, B. (2001). Mali poverty outreach study of the Kafo Jiginew and Nyesigiso Credit and Savings with Education Programs. *Research Paper*, (7).

OEC. (2015). Source: https://atlas.media.mit.edu/en/profile/country/pak/ (accessed on June 26, 2015).

Onakoya, A.B., and Onakoya, A.O. (2013). Islamic microfinance as a poverty alleviation tool: Expectations from Ogun State, Nigeria. *Scholarly Journal of Business Administration* vol. 3(2) pp. 36-43.

Orangi Pilot Project. (1995). *Environment and Urbanization* 7(2) pp. 227-236.

Orshansky, M. (1969). How poverty is measure. *Monthly Labor Review* 92(2): 37-41.

Otero, M. (1999). Bringing Development Back Into Microfinance. *Journal of Microfinance/ESR Review*, 1(1): 8-19.

Oxford English Dictionaries. (2016). Source: https://en.oxforddictionaries.com/definition/silver_bullet (accessed 28 October, 2015).

Ozier, O. (2011). The impact of secondary schooling in Kenya: A regression discontinuity analysis. *Berkeley manuscript*.

Pakistan Economic Survey (2014-15). Source: http://www.finance.gov.pk/survey_1415.html (accessed on August 16, 2015).

Pakistan Microfinance Review. (2013). Annual Assessment of the microfinance industry. Source: http://www.microfinanceconnect.info/assets/articles/5cfb122011df790b3f0a13791b75373d.pdf (accessed on November 6, 2014).

Pakistan Microfinance Review. (2014). Source: http://microfinanceconnect.info/assets/articles/6a6d84c7346aa2f278887b911b1fe1d7.pdf (accessed on March 26, 2015).

Pakistan Microfinance Review. (2015). Source: http://www.pmn.org.pk/assets/articles/a7248cfa411a34074d03aafd4ed7cd6c.pdf (accessed on April 12, 2016).

Pakistan & Gulf Economist. 2014. Source: http://www.pakistaneconomist.com/database2/pakbanks.asp (accessed on January 22, 2015).

Pastor, J. T., Lovell, C. K., & Tulkens, H. (2006). Evaluating the financial performance of bank branches. *Annals of Operations Research*, *145*(1), 321-337.

Pitt, M. M., Khandker, S. R., Chowdhury, O. H., and Millimet, D. L. (2003). Credit programs for the poor and the health status of children in rural Bangladesh. *International Economic Review*, 44(1): 87-118.

Population Census Organization of Pakistan. (2013). Source: http://www.census.gov.pk/Statistics.php (accessed on July 6, 2013).

Pollard, J., and Samers, M. (2007). Islamic banking and finance: postcolonial political economy and the decentering of economic geography. *Transactions of the Institute of British Geographers*, *32*(3): 313-330.

Pollin, R. (2007). Targeting Development Finance for Employment Expansion in Sub-Saharan Africa: A Synthesis of Microfinance and the East-Asian Model. *Presented at REBELLIOUS MACROECONOMICS: MARX, KEYNES & CROTTY. A conference in honor of James Crotty.*

Panzar, J.C., and Rosse, J.N. (1987). Testing for "Monopoly" Equilibrium, *the Journal of Industrial Economics*, 35(4), 443-456.

Population Census Organization of Pakistan: http: //www.census.gov.pk/Statistics.php (accessed on July 6, 2013).

Qudrat-I Elahi, K., and Lutfor Rahman, M. (2006). Micro-credit and micro-finance: functional and conceptual differences. *Development in Practice*,*16*(5), 476-483.

Quinones, B., and Remenyi, J. (2014). *Microfinance and poverty alleviation: Case studies from Asia and the Pacific*. Routledge.

Qureshi, S. K. (2001). An Overview of Government's Poverty Alleviation Policies and Programmes. (MIMAP Technical Series No. 12.).

Rahim Abdul Rahman, A. (2010). Islamic microfinance: an ethical alternative to poverty alleviation. *Humanomics*, *26*(4), 284-295.

Rahman, A. R. A., and Rahim, A. (2007). Islamic microfinance: a missing component in Islamic banking. *Kyoto Bulletin of Islamic Area Studies*, *1*(2), 38-53.

Rajesh, K., Aggarwal, and Yousef, T. (2000). Islamic Banks and Investment Financing. Journal of Money, Credit and Banking, 32(1): 93-120.

Ravallion, M. (2001). Growth, inequality and poverty: looking beyond averages. World development, 29(11), 1803-1815.

Rhyne, E., and Otero, M. (2006). *Microfinance through the next decade: Visioning the Who, What, Where, When and How*. ACCION International.

Robinson, M.S. (2001). *The Microfinance Revolution: Sustainable Finance for the Poor*. New York, NY: World Bank Publications.

Robinson, M. (2016). What is social justice? [web log comment]. Source: http://gjs.appstate.edu/social-justice-and-human-rights/what-social-justice (accessed on 4 November 2016).

Roodman, D. (2012, February 15). The Lessons of Microfinance History [Web log comment]. Retrieved from http://www.cgap.org/blog/lessons-microfinance-history.

Rosenberg, R., Gongalez, A, and Narain, S. (2009). Are Microfinance Interest Rates Excessive? CGAP.

Rosenberg, R. (1996). Microcredit Interest Rates. *CGAP Occasional Paper 1*.

Rosenberg, R. (2009). Does Microcredit Really Help Poor People. CGAP.

Rosenberg, R. (2009). Measuring Results of Microfinance Institutions: Minimum Indicators that Donors and Investors Should Track. A Technical Guide. Source: https://www.cgap.org/sites/default/files/CGAP-Technical-Guide-Measuring-Results-of-Microfinance-Institutions-Minimum-Indicators-That-Donors-and-Investors-Should-Track-Jul-2009.pdf (accessed on June 12, 2014).

Rothbard, M. N. (1974). *Egalitarianism as a Revolt against Nature, and Other Essays*. Ludwig von Mises Institute.

Saeed, K.A. (2012). Islamic Banking in Pakistan. *Proceedings of 2nd International Conference on Business Management.* (ISBN: 978-969-9368-06-6).

Saha, A. (2005). *Poverty Alleviation Progremmes in India.* The Independent Commission on Development and Health in India. New Delhi: VHAI press.

Sarker, D. (2013). Pressure on Loan Officers in Microfinance Institutions: An Ethical Perspective. *Journal of Economics and Sustainable Development* 4(12), 84-88.

Schaeck, K., & Čihák, M. (2008). How does competition affect efficiency and soundness in banking? New empirical evidence.

Schwarz, E. (2003). His Word Our Guide. Biblical origins of Christian Beliefs and Practices. IUniverse Inc. USA.

Sealey, C. and Lindley, J. (1977). Inputs, Outputs and a Theory of Production and Cost at Depository Financial Institutions. Journal of Finance. 32(4): 1251-1266.

Sen, A. (1976). Poverty: An Ordinal Approach to Measurement. *Econometrica* 44(2):219-231.

Seiford, L.M. and Zhu, J. (1999). Profitability and marketability of the top 55 U.S. commercial banks. Mngt Sci 45: 1270–1288.

Sherman, H. D., & Ladino, G. (1995). Managing bank productivity using data envelopment analysis (DEA). Interfaces, 25(2), 60-73.

Shirazi, N. S. (1995). Determinants of poverty in Pakistan. Pakistan Economic and Social Review, 91-101.

Short, K. (2014, December 20). Re: A Very Brief History of Pakistan [Web log comment]. Retrieved from https://jkeeneshort.wordpress.com/2014/12/20/a-very-brief-history-of-pakistan/.

Simanowitz, A. (2000). Client exit surveys: A tool for understanding client drop-out. *Journal of Microfinance/ESR Review, 2*(1): 112-137.

Smirlock, M. (1985). Evidence on the Relationship between concentration and profitability in banking, *Journal of Money, Credit and Banking,* 17(1), 69-83.

Sontag-Padilla, L., Staplefoote, B. L., and Gonzalez Morganti, K. (2012). Financial Sustainability for Nonprofit Organizations.

South Asian Association of Microfinance Networks. 2015. State of Financial Inclusion in South Asia. *A bi-annual update on the latest microfinance trends in South Asian.* Issue 1 (July-December 2014).

South Asia. Map of South Asia. Source: www.mapsofworld.com (accessed on July 29, 2015).

Spooner, L. (1846). *Poverty: Its Illegal Causes and Legal Cure: Part First.* Boston: Bella Marsh.

State Bank of Pakistan, KAP Study report. 2014. Source: http://www.sbp.org.pk/press/2014/Kap-Study-03-Oct-14.pdf (accessed on February 9, 2015).

State Bank of Pakistan. (2011). Prudential Regulations for Microfinance Banks. Source: http://www.bu.edu/bucflp/files/2012/01/Prudential-Regulations-for-Microfinance-Banks.pdf (accessed on November 8, 2014).

State Bank of Pakistan, Microfinance Department. Strategic Framework for Sustainable Microfinance in Pakistan. (2011). Source: http://www.sbp.org.pk/MFD/Strategic-Framework-SM-24-Jan-2011.pdf (accessed on November 8, 2014).

State Bank of Pakistan, Islamic Banking Bulletin. (2014). Source: http://www.sbp.org.pk/ibd/bulletin/2014/IBB-Jun-2014.pdf (accessed on February 27, 2015).

State Bank of Pakistan, KAP Study report. (2014). Source: http://www.sbp.org.pk/press/2014/Kap-Study-03-Oct-14.pdf (accessed on February 9, 2015).

Stiglitz, J. E., and Weiss, A. (1981). Credit rationing in markets with imperfect information. *The American economic review*, 393-410.

Suzuki, Y., and Miah, M. D. (2015). A New Institutional Approach in Explaining the Underdevelopment of Islamic Microfinance. Islam and Civilizational Renewal (ICR), 6(4).

The Atlas of Economic Complexity Index. (2014). Source: http://atlas.cid.harvard.edu/rankings/ accessed on June 2, 2015).

The Economist. (2011). Defining poverty Measure by measure. Source: http://www.economist.com/node/17961878 (accessed on March 2, 2014).

The Economist. (2012). Source: http://www.economist.com/blogs/newsbook/2012/04/economist-0 (accessed on April 12, 2014).

The Guardian. (January 5, 2007). *Credit is a Basic Human Right.* Source: http://www.theguardian.com/world/2007/jan/05/outlook.development (access on January 10, 2014).

The Millennium Development Goals Report (2010). United Nations Department of Economic and Social Affairs, ISBN 978-92-I-101218-7.

The Nation Masters. (2013). Source: http://www.nationmaster.com/graph/peo_per_liv_in_rur_are-people-percentage-living-rural-areas (accessed on July 6, 2013).

The Punjab Agriculturists' Loans Act. (1958) (West Pakistan Act XVII of 1958. Source: http://punjablaws.gov.pk/laws/81.html (accessed on November 6, 2014).

The World Bank Group, Independent Evaluation Group. (2014). Source: http://lnweb90.worldbank.org/oed/oeddoclib.nsf/DocUNIDViewForJavaSearch/13E9C77C195A1136852567F5005D8177 (accessed on November 6, 2014).

The US Department of State. (2010). Pakistan. Source: http://www.state.gov/documents/organization/171759.pdf (accessed on August 1, 2014).

Thomas, P. (1980). *Karl Marx and the Anarchists.* New York: NY: Routledge.

Thornton, J. (2001). The Kuznets inverted-U hypothesis: panel data evidence from 96 countries. Applied Economics Letters, 8(1), 15-16.

Townsend, P. (1979). *Poverty in the United Kingdom A survey of Household Resources and Standard of Living*. Middlesex: Penguin Books Ltd.

Tulchin, D. (n.d.). *Microfinance & the Double Bottom Line: Measuring Social Return for the Microfinance Industry & Microcredit with Education Programs*. Source: http://www.eldis.org/vfile/upload/1/document/0708/DOC19305.pdf (accessed on 12 August 2015).

Uddin, H., and Barai, M.K. (2016). Islamic Microcredit: The Case of Bangladesh. *Journal of Accounting, Finance and Economics*, 6(1): 49-64.

Ul-Hassan, M. (2007). People's Perceptions towards the Islamic Banking: A Fieldwork Study on Bank Account Holders' Behaviour in Pakistan. *OIKONOMIKA* 3, 153-176.

UNCDF. (2005). *Building Inclusive Financial Sectors to Achieve the Millennium Development Goals, concept paper*. Source: http://www.gdrc.org/icm/iym2005/uncdf-concept-paper.pdf (accessed on January 15, 2014).

UNDP. 2015. *Poverty Reduction.* Source: http://www.lk.undp.org/content/srilanka/en/home/ourwork/povertyreduction/overview.html (accessed on July 15, 2015).

UNHCR. 2015. *UNHCR Country operations profile-Pakistan.* Source: http://www.unhcr.org/pages/49e487016.html (accessed on July 15, 2015).

USAID. 2015. *Economic Growth.* Source: http://www.usaid.gov/afghanistan/economic-growth (accessed on July 15, 2015).

Vengroff, R., and Creevey, L. (1994). Evaluation of Project Impact: ACEP component of the community enterprise development project (Report to USAID/Dakar).

Warner, B. (2015). *Sharia Law for Non-Muslims*. CSPI International.

Weisberg, H. F., Krosnick, J. A., & Bowen, B. D. (1989). *An introduction to survey research and data analysis.* Scott, Foresman & Co.

Woller, G. M., Dunford, C., & Woodworth, W. (1999). Where to microfinance. *International Journal of Economic Development*, *1*(1), 29-64.

World Bank. (2005). *Attaining the Millennium Development Goals in Sri Lanka: How Likely and What Will It Take To Reduce Poverty, Child Mortality and Malnutrition, and to Increase.* Source: http://siteresources.worldbank.org/INTSRILANKA/Resources/Sri-Lanka-MDG-Final.pdf (accessed on April, 12, 2014).

World Bank. (2014). Source: http://www.worldbank.org/en/country/pakistan (accessed on June 22, 2015).

World Bank. GINI index: World Bank estimates. (2015). Source: http://data.worldbank.org/indicator/SI.POV.GINI (accessed on July 17, 2015).

World Bank. South Asia. (2015). Source: http://data.worldbank.org/region/SAS (accessed on July 15, 2015).

World Islamic Banking Competitiveness Report (2013-14). Source: http://www.ey.com/Publication/vwLUAssets/World_Islamic_Banking_Competitiveness_Report_201314/$FILE/World%20Islamic%20Banking %20Competitiveness%20Report %202013-14.pdf (accessed on November 6, 2014).

World Population Review. (2016). Source: http://worldpopulationreview.com/world-cities/karachi-population/ (accessed on August, 23 2016).

Wrenn, E. (2007). Perceptions of the Impact of Microfinance on Livelihood Security. Kimmage Development Studies Centre, Dublin.

Yaron, J. (1994). Successful rural finance institutions. Finance and Development, 31(1), 32.

Yaron, J. (1994). What makes rural finance institutions successful? *The World Bank Res Observer* 9: 49–70.

Yeh, Q. J. (1996). The application of data envelopment analysis in conjunction with financial ratios for bank performance evaluation. Journal of the Operational Research Society, 47(8), 980-988.

Yunus, M., and Julis, A. (1999). *Banking to the Poor*, New York: Public Affairs.

Yusuf, M.M. (2010). The Concept of Borrowing Money in Islam. Source: http://www.croydonmosque.com/pdf/The_Concept_of_Borrowing_Money_In_Islam.pdf (accessed on June 23, 2015).

Zeller, M., Sharma, M., Henry, C., & Lapenu, C. (2006). An operational method for assessing the poverty outreach performance of development policies and projects: Results of case studies in Africa, Asia, and Latin America. World Development, 34(3), 446-464.

Appendix-A

Business Plan of Mosque Based Islamic Microfinance

Name of the proposed NGO

A POOR FRIEND

(First ever Islamic Microfinance Institution in Pakistan)

BUSINESS PLAN

1. Executive Summary

A Poor Friend is a tax-exempted non-government non-profit organization which provides the interest free microfinance loans to deprived, extremely poor, and low income poor entrepreneurs. Our goal is to alleviate poverty through interest free microfinance services in Pakistan. The organization is focused to provide such services with the involvement of mosque in order to create social value creation in the society. Currently we provide two types of interest free microfinance loans i.e. consumption loans and production loans. We receive financial and social support from the donor agencies, charitable organizations, and individuals. The donations mainly consist Zakat, Sadaqat, and Almsgiving.

Out of 58% poor living below the poverty line, the organization aims to target approximately 20% for its microfinance services. The target group includes extremely poor and deprived households, as well as the less income entrepreneurs who are eager to play their part in the society. It is estimated that the number of poor people who need our services will be increased in next five to ten years.

The organization's clientele base is estimated to increase due its flexible loan terms with no interest charges on loans. A Poor Friend is an important startup for these poor who lack financial assistance in the absence of physical collateral that is usually requires for the loan from the formal banking channels. Our services will improve the living standard of poor families without hurting their self-esteem and dignity. Although the present setup of 'A Poor Friend' is not as large as to cover the entire poor population, the services we provide, trigger an ambition to do something for the society in poor people.

1.1 Mission Statement

The mission of 'A Poor Friend' is to alleviation poverty in Pakistan by creating a web of poor entrepreneurs who able to generate funds to support their families. The mission is to help those poor who are deprived and excluded from the financial net. To help them, to train them, and to support them to the extent that they can play an active role in the society.

1.2 Objectives

This new form of interest free microfinance services is designed to cater the financial needs of poor and deprived people. Our main objectives are:

- Establish the donation networks for the collection of Zakat, Sadaqat, and Almsgiving.
- Establish a redistribution of Zakat channel through mosque.

- Create an active forum for the financial help of poor people.
- Collect $4,000 for the pilot project and startup before the initiation of actual project at mass scale. US$10,000 for the first year operation, and increase the collection by 20% per annum.
- Collect US$20,000 Zakat and redistribute it in poor people through consumption loans.

2. Summary of the Organization

A Poor Friend is an interest free microfinance services provider, based in Karachi, Pakistan. The project's focus is to utilize the minimum available resources to provide banking and financial services to extremely poor and deprived people. Currently, the program offers the following assignments:

i. Helps poor people by redistribution of the Zakat through consumption loans.

ii. Provides soft loans to poor and active entrepreneurs who have thirst to play their part in the society.

2.1 Startup Summary

A Poor Friend's startup cost including the pilot project is US$10,000 from which US$4,000 is allocated for project initiation and pilot project. A significant portion is designated as a backup money that will be used in future after a careful scrutiny of the project evaluation. The reminder are the other expenses normally require for opening an

office. The funds will be accumulated through donations mainly from Zakat, Sadaqat, and Almsgiving.

BALANCE SHEET AT STARTUP

S#	Description	Amount (in US$)
1	Startup Expenses to Fund	2,500
2	Startup Assets to Fund	7,500
Total Funds		10,000
Assets		
3	Non-cash Assets	500
4	Cash and equivalent	7,000
5	Additional cash funds	0
6	Cash Balance at start up	7,000
Total Assets		7,500
Liabilities and Capital		
7	Current Borrowing	0
8	Long-term Liabilities	0
9	Accounts Payable (Outstanding Bills)	0
10	Other Current Liabilities (Interest Free)	0
Total Liabilities		0
Capital		
Planed Investment		
11	Zakat	5,000
12	Sadaqat	2,500
13	Almsgivings	2,500
Total Planned Investment		10,000
14	Loss at Startup (Expenses)	(2,500)
Total Capital		7,500
Total Capital and Liabilities		7,500
Total Funding		10,000

3 Marketing Analysis Summary

The population of the district central Karachi is around 2,200,000 out of which 10% are considered poor and qualify for the services of ‘A Poor Friend.’ Those people are mostly low income, and deprived people have no physical collateral to get loans from the

formal financial institutions. It is estimated that nearly half of the population consists on women, so we expect an equal proportion of male: female borrowers.

4 Market Segmentation

The population base is 2,200,000 out of which approximately 10% are low income poor. This represents around 220,000 residents that are potentially in need of services from 'A Poor Friend.' Children represents 45% of the population therefore, 99,000 are excluded from our estimation. This group can be broken down into three segments:

i. Man (60,500)
ii. Women (60,500)
iii. Children (99,000)

Our services are designed to focus the adult borrowers (excluding children) that makes approximately 121,000. It is forecasted that the number of borrowers will be increased by 10% for next three years.

5 Service Psychographics

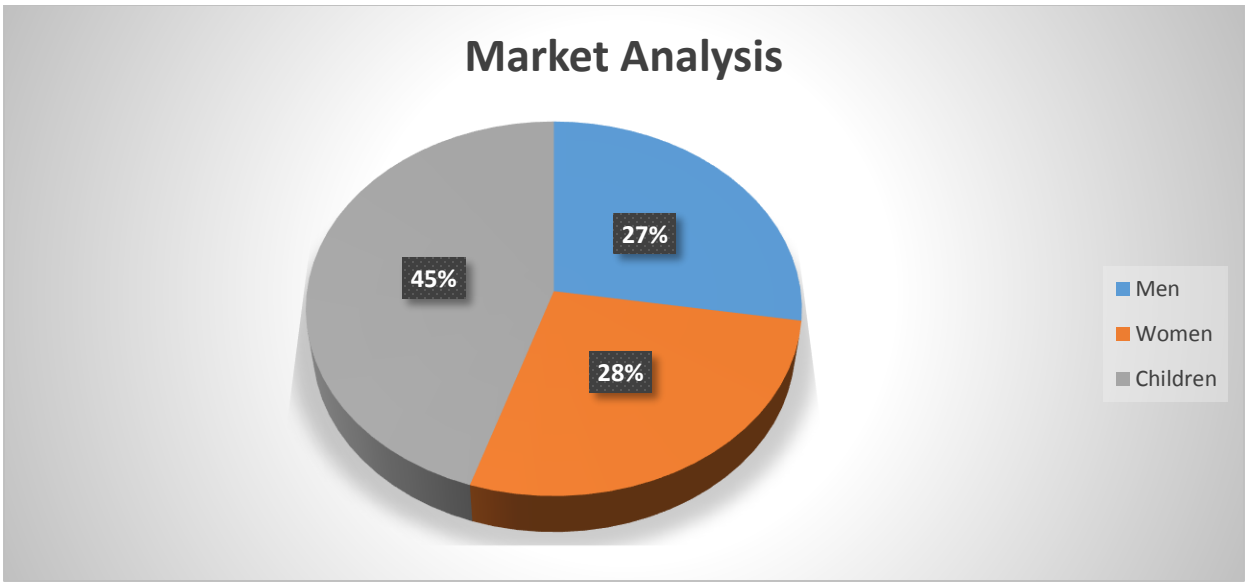
The typical characteristics of the borrower interest in our services can be described as:

a. Families with male-head works full time but having low income.
b. Individual works full time or part time to earn day-to-day living.

c. The average family size is five i.e. parents with 3 children (average family in Pakistan).
d. The individual ambitious to work but lacks financial resources.
e. The woman or a group of woman wish to work independently but lack financial resources and basic training.
f. Families with female head being the only bread earner of the family.
g. The borrowers with good moral character to acquire the services of 'A Poor Friend.'

6. Service Behaviors

A Poor Friend is planning to establish an effective channel of interest free loans for poor and deprived people. A number of conventional microfinance service providers have been working to eradicate poverty but most of their programs are ineffective due to lack of interest by the borrowers. Our program aims to target active entrepreneurs or low income poor who wish to play their part in the society. We also provide consumption loans to extremely poor, destitute, and deprived.



7 Market Analysis

Potential Customers	Growth (forecast %)	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	CAGR
Men	7%	60,500	64,735	69,266	74,115	79,303	7%
Women	7%	60,500	64,735	69,266	74,115	79,303	7%
Total	-	121,000	129,470	138,533	148,230	158,606	7%

8 Target Market Segmentation Strategy

The organization strongly believe that the most of its services are for adult, poor, and active entrepreneurs (Production Loans). These people can be trained and financed to the extent that they can earn not only their own livelihood but can actively participate in helping the other poor in the society. The forecast of 5 years exhibits the potential demand and subsequent requirement of the funds during the said period. It also urged the efforts to

generate sufficient fund to meet the potential demand for the funds through Zakat, Sadaqat, and Almsgiving.

9 Summary of the Strategic Implementation

9.1 Procedure Strategy

A Poor Friend is focused to create an effective channel of funds redistribution among the poor masses of Pakistan. The primary objective is to start interest free microfinance loans to poor people. The main strategy to channelize these fund is to make the mosque its main office and fund distribution place. Involvement of the Imam (Prayer leader) is possibly employed to parse-out the good-borrowers and bad-borrowers. Here the term good-borrower specifically describe the borrowers with honest intention of repayment, while the bad borrower points the one who doesn't want to replay loan. Secondly, the Imam will also be responsible to classify the applicant category i.e. whether he/ she will be appropriate to get consumption loan or production loan on the basis of the applicant's moral character and track record.

9.1 Marketing Strategy

The marketing of the project is largely dependent on community channels. Mosque based system of microfinance will rely on man-to-man campaign or personal campaign. Apart from personal marketing, formal sources will also be used in the later stages after the successful scrutiny of the pilot project. Local newspapers, Television channels, and social media are some of the marketing channels, the organization intended to use in future.

9.2 Funds Accumulation Strategy

A Poor Friend will immediately start a fund raising campaign in order to accumulate sufficient funds for its startup and initial phases. To achieve this target the organization intends to collect funds from a number of sources like personal collection, box collection (fund raising box will be placed at mosque), local donors, friend and family network, and zakat collection.

9.2.1 Funding Forecast

The following are some of the sources the organization target for its funding:

a). Personal Collection: It includes the personal collection made by the IMFI head and other staff through Zakat, Sadaqat, Almsgiving, and Gifts-giving.

b). Box Collection: The box collection will be acquired by placing a box in the mosque for fund-raising.

c). Local Donors: This includes the collection made by the local community.

d). Friend and Family Network: The friend and family network will be used to accumulate the funds through Zakat, Sadaqat, Almsgiving, and Gifts-giving.

e). Zakat Collection: The funds will be generated through Zakat by approaching the Bait-ul-Maal, Zakat Division that is an official source of Zakat collection and redistribution in Pakistan. Besides this, Zakat will also be collected by using friend and family sources.

FUNDING FORECAST (in US$)

Source of Collection	YEAR 1	YEAR 2	YEAR 3
Personal	1,000	1,200	1,440
Box	2,000	2,400	2,880
Local Donors	2,000	2,400	2,880
Friend and Family Networks	5,000	6,000	7,200
Zakat	20,000	24,000	28,000
Total Funding	30,000	36,000	42,400
Direct Cost of Funding			
Personal	50	60	72
Box	100	120	144
Local Donors	100	120	144
Friend and Family Networks	250	300	360
Zakat	1,000	1,200	1,400
Total Cost	1,500	1,800	2,120

9.3 Operational Strategy

9.3.1 Borrowing / Collection

To accumulate sufficient funds for redistribution, the organization intend to use the local community, governmental support like Bait-ul-Mal, Zakat Collection through mosque, charitable organization, local and international donor, and friends and family networks.

9.3.2 Lending Methodology

The organization aims to target poor individual(s) especially women borrowers, and group of borrowers. Unlike group-lending methodology, the organization prefers individual lending especially for extremely poor and deprived people. The application

procedure will be easy for the end users keeping the view that low-income or poor people usually have low literacy rate.

10 Management Summary

A Poor Friend is a mosque-based interest free microfinance service provider. In the startup phase, the organization intend to use the existing coordinator or regular community volunteers. However, in the second phase, additional staff will be employed on either salary basis or commission basis depends upon the financial condition of the organization.

10.1 Personnel Plan

The primary phase or in the startup, we use prayer leader and financial experts solely on the basis of volunteer work. The following staff will be devised in the project initiation phase.

i. The Head of the Organization……01

ii. The Imam (Prayer leader)……..01

iii. Financial Experts having banking experience (retired persons)… 02

iv. Financial Expert (reserved)……01

v. Accountant (volunteer)… (Part time / full time)……01

10.2 Salaries and commissions of Personnel / Volunteers

In the startup phase no salaries to the staff mentioned above are assigned. However, upon successful implementation and accumulation of sufficient funds, the salaries of the staff can be drawn from the Zakat fund. The main reason for not assigning salaries at the startup is the cost consideration e.g. reducing the cost per loan to offset the involvement of interest. In the second phase, the organization intends to pay a commission-based salary as honorarium to the staff / volunteers except the Imam (who is already getting salary from the mosque) and IMFI head. An amount of US$50 per month plus 5% to each financial experts and the Accountant is proposed. The amount for the salaries of the staff will be obtained from the Zakat fund in order to minimize the leakage of funds and to maintain the significant appropriation of inflow and outflow of the funds.

Plan of Personnel Salaries and Commission (in US$)

Staff Description	Status	Year 1	Year 2	Year 3
Financial Expert (volunteer 1)	Active	600	660	726
Financial Expert (volunteer 2)	Active	600	660	726
Financial Expert (volunteer 3)	Reserve	600	660	726
Accountant (volunteer 4)	Active	600	660	726
Total Personnel Expenditures	-	2,400	2,640	2,904

11 Financial Plan

11.1 General Financial Forecast

A Poor Friend generates fund through a number of donations as stated above and it is estimated that the funding will be increased by 20% for next three years. The IMFI's head has given the full authority to monitor, review, and adjust the existing program with

due consultation with the Imam, in order to control the deviation from the existing forecast (if require).

The financial plan is proposed with some assumption at the aggregate level as well as the organizational level. The assumptions are stated below:

i. The pace of economic growth in the economy will be stable.

ii. An increase in the population growth will be accounted for as a positive factor for the organizational goals.

iii. The fund raising will significantly be increased by 20% without unforeseen hurdles.

iv. The services of Interest Free Microfinance will be continued to help the poor without the government intervention.

General Financial Forecast (in %)

Description	Year 1	Year 2	Year 3
Current Interest Rate*	0%	0%	0%
Long Term Interest Rate*	0%	0%	0%
Tax Rate[1]	0%	0%	0%
Other Interest	0%	0%	0%

* Since the operations are based on interest free no interest rate is accounted for

[1] The non-profit organizations are exempted from the taxes.

11.2 Surplus or Deficit Forecast

A Poor Friend's projected surplus or deficit is shown in the following table:

Surplus / Deficit Forecast (in US$)

Surplus/ Deficit	Year 1	Year 2	Year 3
Total Funding	30,000	36,000	42,400

Total Cost of Funding	1,500	1,800	2,140
Other Costs	0	0	0
Gross Surplus (Deficit)	**28,500**	**34,200**	**40,260**
Surplus (Deficit) (%)	95%	95%	94.95%
EXPENSES			
Payroll	2,400	2,640	2,904
Marketing & Advertisement	1,200	1,200	1,200
Depreciation	0	0	0
Rent (inside mosque)	0	0	0
Utilities	1,200	1,200	1,200
Insurance	0	0	0
Payroll Taxes	360	396	436
Total Lending	15,000	18,000	21,000
Total Operating Expenses	**20,160**	**23,436**	**26,740**
Surplus (Deficit) before Interest and Taxes	8,340	10,764	13,520
Earnings before Interest and Taxes after Depreciation	8,340	10,764	13,520
Interest Expenses	0	0	0
Taxes incurred	0	0	0
Net Earnings (Loss)	**8,340**	**10,764**	**13,520**

11.3 Projected Cash Flow

A Poor Friend's projected cash flow is appended below:

Projected Cash Flow (in US$)

PRO FORMA CASH FLOW			
Cash Received	**Year 1**	**Year 2**	**Year 3**
Cash from operations	30,000	36,000	42,400
Sub Total Cash from Operations	**30,000**	**36,000**	**42,400**
Additional Cash Received			

Refund of Taxes (GST/VAT/WHT)	0	0	0
New Current borrowings	0	0	0
New other liabilities	0	0	0
New long term liabilities	0	0	0
Sales of other current assets	0	0	0
Sales of long term assets	0	0	0
New investment received	0	0	0
Sub Total Cash Received	**30,000**	**36,000**	**42,400**
Expenditures			
Expenditures from Operations			
Cash spending	2,400	2,640	2,904
Bills	19,500	23,400	27,560
Sub Total spent on Operations	**21,900**	**26,040**	**30,464**
Additional Spending	0	0	0
Sub Total Cash Spent	**21,900**	**26,040**	**30,464**
Net Cash Flow	8,100	9,960	11,936

[i] Later on replaced by the West Pakistan Agriculturists Loan Act of 1958