Major Project Report

On

Financial Inclusion in India: A Study of Chandigarh

Submitted By

Aditi Gupta

DTU/2K12/MBA/73

Under the Guidance of

Prof. PK Suri

Head, DSM

DELHI SCHOOL OF MANAGEMENT

Delhi Technological University

Bawana Road Delhi 110042

January 2014 – May 2014

CERTIFICATE FROM THE INSTITUTE

This is to certify that the Project Report titled "Financial Inclusion in India", is a bonafide research work carried out by Ms. Aditi Gupta of MBA 2012-14 batch and submitted to Delhi School of Management, Delhi Technological University, Bawana Road, Delhi-42 in partial fulfillment of the requirement for the award of the Degree of Masters of Business Administration.

Signature of Guide   Signature of Head (DSM)

Place: New Delhi   Seal of Head

Date: May 6, 2014

DECLARATION

I, Aditi Gupta, student of MBA 2012-14 batch of Delhi School of Management, Delhi Technological University, Bawana Road, Delhi-42 declare that the Project Report on "Financial Inclusion in India" submitted in partial fulfillment of Degree of Masters of Business Administration is the original work conducted by me.

The information and data given in the report is authentic to the best of my knowledge.

This Report is not being submitted to any other University for award of any other Degree, Diploma and Fellowship

Aditi Gupta

Place: New Delhi

Date: May 06, 2014

ACKNOWLEDGEMENT

My deepest gratitude and appreciation goes to my Project Guide, Prof. PK Suri, Professor & Head, Delhi School of Management, Delhi Technological University, New Delhi for his guidance, support, and encouragement throughout my research work, which led to this report.

I would like to extend my gratitude to Mr. Arun Kumar Agarwal, Assistant General Manager (Corporate Banking), ICICI Bank, Gurgaon who helped me in deciding the topic for my research and also shared his knowledge and experience in the area of my research.

I would also like to thank my Batch Coordinator Mrs. Archana Singh, Assistant Professor, Delhi School of Management, Delhi Technological University, New Delhi for providing me with her knowledgeable comments and suggestions.

My sincere regards goes to the entire faculty for their moral support and continuous encouragement throughout my degree.

I would like to thank all my family members, my father, mother and brother, for their deepest love, understanding and continuous support.

Aditi Gupta

EXECUTIVE SUMMARY

This report focuses on measuring the effectiveness of different initiatives taken by the government and other institutions for the upliftment of the poor people by the means of Financial Inclusion (or, alternatively, financial exclusion) i.e. providing financial facilities to every person. Financial Inclusion has been defined in the literature in the context of a larger issue of social inclusion (or exclusion) in a society. One of the early attempts to define financial exclusion was by Leyshon and Thrift (1995), who defined it as referring to those processes that serve to prevent certain social groups and individuals from gaining access to the formal financial system. Thus, an all inclusive financial system enhances efficiency and welfare by providing avenues for safe and secure practices and by facilitating a whole range of efficient financial services. Through efficient allocation of productive resources, an inclusive financial system increases investment, raises economic growth and promotes capital formation.

The data was collected by developing a questionnaire conducting a survey in the slum area of Chandigarh. Then SPSS and chart technique of MS Excel was used to analyze the data.

This project aims to measure the effectiveness of the initiatives undertaken to enhance Financial Inclusion by analyzing the responses obtained from the survey and then comparing them to the findings of another survey conducted in a different urban slum. The slum area in Chandigarh was chosen and it was compared to the findings of slum area of Delhi.

It was found that the level of implementation of initiatives to enhance Financial Inclusion of underprivileged people in India is not appropriate and requires creation of awareness among the people.

Table of Contents

List of Figures

List of Tables

1. INTRODUCTION

1.1 Introduction to Financial Inclusion

Academic literature has adequately discussed the close relation between financial developments and economic growth. However, the discussion on whether financial development implies financial inclusion is rather limited. It has been observed that even 'well-developed' financial systems have not succeeded to be 'all-inclusive' and certain segments of the population remain outside the formal financial systems. Low financial inclusion impedes economic growth. Access to easy and affordable mainstream financial services by disadvantaged social groups is acknowledged as a key criterion for poverty alleviation and reducing social inequity. Such access enables the financially excluded population to build savings, carry out investments, avail safe and low-cost credit and perhaps most importantly it enables the poor to mitigate risks of income seasonality, illness and employment loss. However despite broad international consensus on the importance of access to finance as a powerful social development instrument, it is estimated that over 2 billion people globally continue to be excluded from the formal financial sector resulting in them languishing in an endless cycle of deprivation and segregation from the mainstream economy. Financial exclusion relegates the poor to a subsistence livelihood and increases the probability of their being dependant on social welfare schemes thereby increasing the burden on the economy. Difficulty in accessing credit from formal financial institutions leads these disadvantaged groups to depend on non-formal sources including local un-regulated credit providers especially for non-productive consumption oriented expenses e.g. medical emergencies, social ceremonies and marriages etc. Financial exclusion also has an adverse national economic impact as it precludes large sections of the population from micro-entrepreneurship opportunities thereby restricting them from becoming economically productive and increasing their contribution to the national GDP in a bigger way. Financial inclusion has particular significance for developing economies as it helps in improving the effectiveness of the social development initiatives by reducing leakages in welfare disbursements. The

importance of an inclusive financial system is widely recognized by policy makers and financial inclusion is increasingly seen as a policy with priority in many countries.

An inclusive financial system is desirable for many reasons:

a) It facilitates efficient allocation of productive resources.
b) It provides access to appropriate financial services that can significantly improve the day-to-day management of finances.
c) It can help reduce the growth of informal sources of credit (such as moneylenders) which often tend to be exploitative.

Thus, an all inclusive financial system enhances efficiency and welfare by providing avenues for safe and secure practices and by facilitating a whole range of efficient financial services. Through efficient allocation of productive resources, an inclusive financial system increases investment, raises economic growth and promotes capital formation. A comprehensive measure of financial inclusion is important in order to take stock of the state of affairs with respect to financial inclusion in an economy and to monitor the progress of the undertaken policy initiatives and design new solutions in order to promote financial inclusion.

1.1.1 Defining Financial Inclusion

Financial inclusion (or, alternatively, financial exclusion) has been defined in the literature in the context of a larger issue of social inclusion (or exclusion) in a society. One of the early attempts to define financial exclusion was by Leyshon and Thrift (1995), who defined it as referring to those processes that serve to prevent certain social groups and individuals from gaining access to the formal financial system. According to Sinclair (2001), financial exclusion means the inability to access necessary financial services in an appropriate form. Exclusion can come about as a result of problems with access, conditions, prices, marketing or self-exclusion in response to negative experiences or perceptions. Carbo et al. (2005) have defined financial exclusion as broadly the inability of some societal groups to access the financial system. The Government of India's 'Committee on Financial Inclusion in India' begins its report by defining financial

inclusion 'as the process of ensuring access to financial services and timely and adequate credit when needed by vulnerable groups such as the weaker sections and low income groups at an affordable cost' (Rangarajan Committee 2008). As banks are the gateway to the most basic forms of financial services, banking inclusion/exclusion is often used as analogous to financial inclusion/exclusion. The Alliance for Financial Inclusion (AFI) is the world's largest and most prominent network of financial inclusion policymakers from developing and emerging economies who work together to increase access to appropriate financial services for the poor. AFI's core mission is to adopt and expand effective inclusive financial policies in developing nations in an effort to lift 2.5 billion impoverished, unbanked citizens out of poverty. AFI was founded in 2008 as a Bill & Melinda Gates Foundation-funded project, supported by AusAid, in order to advance the development of smart financial inclusion policy in developing and emerging countries. The AFI Network has grown to more than 105 institutions from 88 member nations from 2008 to 2013. AFI hosts its landmark, annual Global Policy Forum (GPF) as the keystone event for its membership. During the 2011 GPF, the network adopted the Maya Declaration, a set of common principles and goals for financial inclusion policy development. AFI uses a "polylateral development" model to contrast and compare successful financial inclusion policies, focusing on a peer-to-peer system rather than a top-down or North-to-South learning model.

1.1.2 Financial Inclusion Index

On June 25, 2013, CRISIL, India's leading credit rating and research company launched an index to measure the status of financial inclusion in India. The index- Inclusix- along with a report, was released by the Finance Minister of India, P. Chidambaram at a widely covered program at New Delhi. CRISIL Inclusix is a one-of-its-kind tool to measure the extent of inclusion in India, right down to each of the 632 districts. CRISIL Inclusix is a relative index on a scale of 0 to 100, and combines three critical parameters of basic banking services — branch penetration, deposit penetration, and credit penetration —into one metric. Some key conclusions from the study were:

- The all-India CRISIL Inclusive score of 40.1 is low, though there are clear signs of progress– this score has improved from 35.4 in 2009.
- Deposit penetration is the key driver of financial inclusion–the number of savings accounts (624 million), is almost four times the number of loan accounts (160 million).
- 618 out of 632 districts reported an improvement in their scores during 2009-2011.
- The top three states and Union Territories are Puducherry, Chandigarh, and Kerala; the top three districts are Pathanamthitta (Kerala), Karaikal (Puducherry), and Thiruvananthapuram (Kerala).

1.1.3 Financial inclusion in India

The Reserve Bank of India (RBI) set up the Khan Commission in 2004 to look into financial inclusion and the recommendations of the commission were incorporated into the mid-term review of the policy (2005–06). In the report RBI exhorted the banks with a view to achieving greater financial inclusion to make available a basic "no-frills" banking account. In India, financial inclusion first featured in 2005, when it was introduced by K.C. Chakraborthy, the chairman of Indian Bank. Mangalam became the first village in India where all households were provided banking facilities. Norms were relaxed for people intending to open accounts with annual deposits of less than Rs. 50,000. General credit cards (GCCs) were issued to the poor and the disadvantaged with a view to help them access easy credit. In January 2006, the Reserve Bank permitted commercial banks to make use of the services of non-governmental organizations (NGOs/SHGs), micro-finance institutions, and other civil society organizations as intermediaries for providing financial and banking services. These intermediaries could be used as business facilitators or business correspondents by commercial banks. The bank asked the commercial banks in different regions to start a 100% financial inclusion campaign on a pilot basis. As a result of the campaign, states or union territories like Puducherry, Himachal Pradesh and Kerala announced 100% financial inclusion in all their districts. Reserve Bank of India's vision for 2020 is to open nearly 600 million new customers' accounts and

service them through a variety of channels by leveraging on IT. However, illiteracy and the low income savings and lack of bank branches in rural areas continue to be a roadblock to financial inclusion in many states and there is inadequate legal and financial structure.

In India, RBI has initiated several measures to achieve greater financial inclusion, such as facilitating no-frills accounts and GCCs for small deposits and credit. Some of these steps are:

- **Opening of no-frills accounts:** Basic banking no-frills account is with nil or very low minimum balance as well as charges that make such accounts accessible to vast sections of the population. Banks have been advised to provide small overdrafts in such accounts.
- **Relaxation on know-your-customer (KYC) norms:** KYC requirements for opening bank accounts were relaxed for small accounts in August 2005, thereby simplifying procedures by stipulating that introduction by an account holder who has been subjected to the full KYC drill would suffice for opening such accounts. The banks were also permitted to take any evidence as to the identity and address of the customer to their satisfaction. It has now been further relaxed to include the letters issued by the Unique Identification Authority of India containing details of name, address and Aadhaar number.
- **Engaging business correspondents (BCs):** In January 2006, RBI permitted banks to engage business facilitators (BFs) and BCs as intermediaries for providing financial and banking services. The BC model allows banks to provide doorstep delivery of services, especially cash in-cash out transactions, thus addressing the last-mile problem. The list of eligible individuals and entities that can be engaged as BCs is being widened from time to time. With effect from September 2010, for-profit companies have also been allowed to be engaged as BCs. India map of Financial Inclusion by MIX provides more insights on this.
- **Use of Technology**: Recognizing that technology has the potential to address the issues of outreach and credit delivery in rural and remote areas in a viable manner,

banks have been advised to make effective use of information and communications technology (ICT), to provide doorstep banking services through the BC model where the accounts can be operated by even illiterate customers by using biometrics, thus ensuring the security of transactions and enhancing confidence in the banking system.

- **Adoption of EBT**: Banks have been advised to implement EBT by leveraging ICT-based banking through BCs to transfer social benefits electronically to the bank account of the beneficiary and deliver government benefits to the doorstep of the beneficiary, thus reducing dependence on cash and lowering transaction costs.

- **GCC**: With a view to helping the poor and the disadvantaged with access to easy credit, banks have been asked to consider introduction of a general purpose credit card facility up to `25,000 at their rural and semi-urban branches. The objective of the scheme is to provide hassle-free credit to banks' customers based on the assessment of cash flow without insistence on security, purpose or end use of the credit. This is in the nature of revolving credit entitling the holder to withdraw up to the limit sanctioned.

- **Simplified branch authorization:** To address the issue of uneven spread of bank branches, in December 2009, domestic scheduled commercial banks were permitted to freely open branches in tier III to tier VI centers with a population of less than 50,000 under general permission, subject to reporting. In the north-eastern states and Sikkim, domestic scheduled commercial banks can now open branches in rural, semi-urban and urban centres without the need to take permission from RBI in each case, subject to reporting.

- **Opening of branches in unbanked rural centers:** To further step up the opening of branches in rural areas so as to improve banking penetration and financial inclusion rapidly, the need for the opening of more bricks and mortar branches, besides the use of BCs, was felt. Accordingly, banks have been mandated in the April monetary policy statement to allocate at least 25% of the total number of branches to be opened during a year to unbanked rural centers.

The financially excluded population in India includes landless laborers, marginal farmers, unorganized sector work-force, urban slum residents and socially excluded groups. With 82 percent of India's poor households located in rural locations, vast majority of rural India can be considered as financially excluded. As it exists for many things in India, the rural-urban divide also exists in financial inclusion. At 56 percent, the rate of financial inclusion of urban households is more than double that of rural households at 24 percent (BCG Report on 'The Next Billion Consumers in India'). The case of the urban poor particularly the migrant work-force is particularly serious as they do not fit into any defined category. Lack of any fixed household address due to the migratory nature of their livelihood and an absence of a verifiable identity makes it almost impossible for this section of Indian society to become financially included under the current ecosystem.

While the above statistics number may indicate otherwise, financial inclusion has been on the Government's agenda form the last few decades. The following is a summary of the key national financial inclusion initiatives over the last four decades:

1960s, 70s	• Focus on increasing credit to the neglected economy sectors and weaker sections of society • Development of the rural banking ecosystem including RRBs, rural and semi-urban branches etc • Implementation of the social contract with banks Lead bank scheme launched for rural lending
1980s, 90s	• Branch licensing policy to focus on expansion of commercial bank branches in rural areas • Establishment of National Bank for agriculture and Rural Development (NABARD) to provide refinance to banks providing credit to agriculture. • SHG-Bank linkage program launched by NABARD
2000s	• The term 'Financial Inclusion' introduced for the first time in RBIs Annual Policy Statement for 2005-06. • Banks asked to offer 'no-frills account', General credit card facility at rural and semi-urban branches • Know Your Customer (KYC) norms simplified • Banking Correspondent and Banking Facilitator concept introduced to increase out-reach • 100 percent financial inclusion drive launched • Restrictions on ATMs deployment removed

While many public sector banks in India have launched financial inclusion initiatives, these are often due to RBI mandates rather than a desire to seize a 'blue sky' business opportunity. Unsurprisingly, most of these initiatives continue to remain at a pilot stage

with limited impact on the ground. However the last few years have seen a renewed thrust on financial inclusion in India. Initiatives like the SHG-Bank linkage program have resulted in millions of Indians participating in the formal financial ecosystem resulting in marked improvements in their lives. There has been a huge upsurge in micro finance initiatives with some micro finance institutions (MFI) acquiring national footprints.

Apart from poverty alleviation, increasing financial inclusion may have a multiplier effect on the Indian economy. It will enable the Government to provide social development benefits and subsidies directly to the beneficiary's bank accounts thereby drastically reducing leakages and pilferages in social welfare schemes and leading to a reduction in the subsidy burden. Greater financial inclusion often leads to an increase in economic prosperity which has a positive influence on inclusive growth.

1.1.4 Future

Financial exclusion is often described as a scourge which perpetuates poverty and leads to several social ills. With over 2 billion financially excluded people globally, addressing the complex and deep-seated challenge of financial exclusion does not lend itself to simple solutions.

Achieving sustainable financial inclusion will require a systemic effort which leverages technology, regulatory framework and appropriate business models cohesively. It is not a preserve or responsibility of one sector and will instead require game-changing innovations which more often than not occur at the intersection of different sectors e.g. banking and telecom.

However the financial sector will have to lead the way as many of the current issues exist because of the reluctance of the financial sector to embrace change and innovation. Financial sector institutions which address financial inclusion as an opportunity instead of a social obligation and commit themselves to creating innovative products and services

will find themselves ahead of the curve competitively. The growing ubiquity of IT and proliferation of wireless communication coupled with falling hardware and mobile phone costs provides a unique opportunity to deliver mainstream financial services to the poor at the required scale and affordability by leveraging ICT.

Appropriate and affordable technology accompanied by the right business model can make financial inclusion economically viable for the formal financial sector and transform it from an obligation to an opportunity.

1.2 Objectives of Study

The promotion of an inclusive financial system is a policy with priority in many countries. While the importance of financial inclusion is widely recognized, the literature lacks a comprehensive measure that can be used to measure the extent of financial inclusion across economies. This study attempts to measure the extent of financial inclusion in the urban slums and obtain the following information which may help in the design of a financial inclusion solution:

- Reasons as to why the people don't want to open a bank account or take a loan from a financial institution.
- Reasons as to why the people who want to access financial services get denial by the financial institutions.
- Technology preparedness of the residents of urban slums.
- Effect of region on the various factors of financial inclusion.

2. THEORETICAL BACKGROUND OF PROJECT

The literature on measuring financial inclusion is new but growing. A measure of financial inclusion depends precisely on the way financial inclusion is defined. Some studies have attempted to measure financial inclusion by simply measuring the proportion of adult population or proportion of households (of an economy) having access to formal financial services (i.e., having a bank account). Since such a measure can be obtained only through country-wide primary surveys, and since such surveys on access to financial services are conducted only in a limited number of countries, it is difficult to obtain such a measure of financial inclusion for countries where such surveys are not conducted. Honohan (2008) has attempted to combine survey based information and secondary data on the number of bank accounts to econometrically estimate the proportion of households/adults having access to financial services for as many as 160 countries.

Further, a measure of financial inclusion that is based on the proportion of adults/households with a bank account ignores some other important aspects of an inclusive financial system. These relate to quality and usage of the financial services. Literature has pointed out that merely having a bank account may not imply that the account is utilized adequately (see, eg., Kempson, 2004). In many countries, people having a bank account do not use them enough due to remoteness of bank branches, or other physical or psychological barriers. In this context, Diniz et al. (2011) presents an interesting case study of how the 'banked people' (i.e., people having a checking or savings account) of Autazes (an Amazon county) found it extremely expensive and time consuming to use their bank facilities before 2002 when banking facilities were not locally available. This case study is a peculiar case where the people of Autazes were financially included while Autazes, as a region itself, was financially excluded as there were no banking outlets there prior to 2002. A measure of financial inclusion that only counts number of people having a bank account will not reflect the lack of adequate financial services as in the case of Autazes before 2002. Further, adequate utilization of financial services is also an important aspect of financial inclusion. Kempson et al. (2004) defined the notion of "underbanked" or "marginally banked" people as those who do not make adequate use of their bank accounts, despite having bank accounts. In a large household

level survey of low-income households of Washington D.C. Los Angeles and Chicago in the United States of America, Seidman et al. (2005) reported that two-thirds of the 'banked population' were using informal non-bank services, ranging from "buying money orders and sending remittances from other than a bank to using payday lenders, pawn shops and auto title lenders as primary sources of credit." Thus, in spite of having a bank account, these households were not using the banking facilities and were in fact using informal financial services. These households form a part of so-called 'underbanked' or 'marginally banked' households, which has been discussed in the literature as equivalent to being financially excluded households. This emphasizes "usage" as another dimension of financial inclusion.

An alternate approach, as used by policy makers of different countries, is to use a variety of indicators of financial sector outreach to take stock of the state of financial inclusion. The most commonly used indicators are number of bank accounts (per 1000 adult persons), number of bank branches (per million people), number of ATMs (per million people), amount of bank credit and amount of bank deposit. In Beck et al. (2007), other indicators of banking sector outreach have been used – geographic branch penetration, loan and deposit accounts per capita, loan-income and deposit-income ratios and so on.9 A recent initiative by World Bank, the Global Findex database (Demirguc-Kunt and Klapper, 2012) provide interesting indicators of financial inclusion from a micro (adult individuals) perspectives, based on primary surveys of 150,000 adults in 148 countries during 2011. These indicators include share of adults having an account with a formal financial institution, of adults who saved and borrowed using a formal account, of adults who used informal method to save and informal sources to borrow and shares of adults with credit/debit cards, with mortgage and with a health insurance. These indicators are also provided by income group, gender and education levels of the respondents. These indicators, either at macro level or at the micro level, do provide interesting and useful information on the nature of inclusiveness of a financial system. However, when used individually, they may provide partial and incomplete information on the inclusiveness of the financial system.

3. RESEARCH METHODOLOGY

Research is a quest for knowledge through diligent search or investigation or experimentation aimed at the discovery and interpretation of new knowledge (WHO). Research is an art of scientific investigation.

Research methodology is a systematic way to solve a problem. It is a science of studying how research is to be carried out. Essentially, the procedures by which researchers go about their work of describing, explaining and predicting phenomena are called research methodology. It is also defined as the study of methods by which knowledge is gained. Its aim is to give the work plan of research. It is necessary for a researcher to design a methodology for the problem chosen. Even if the method considered in two problems are same, the methodology may be different. It is important for the researcher to know not only the research methods necessary for the research under taken but also the methodology.

3.1 Significance of a Research Study

In general, the prime objectives of conducting a research study are following:

- To discover new facts.
- To verify and test important facts.
- To analyze an event or process or phenomenon to identify the cause and effect relationship.
- To develop new scientific tools, concepts and theories to solve and understand scientific and non scientific problems.
- To find solutions to scientific, nonscientific and social problems.
- To overcome or solve the problems occurring in our everyday life.

This project is a descriptive study that aims to find out the level of financial inclusion in urban slums. This study is enhanced by comparing the findings of urban slums of two different regions (Chandigarh and Delhi). This study would enable the government and institutions to understand the limitations and thus design better solutions to promote banking facilities among these slums.

3.2 Scope of Study

The scope of the study determines the sample size to be taken or the sample population to be covered. In this study, an urban slum of Chandigarh was chosen.

Description of the slum area: The slum was a compact area with approximately 70 families and 60-70% of the households had poorly congested rooms with inadequate infrastructure, lack of proper sanitation and drinking water facilities. The construction quality was inadequate to withstand heavy rains, high winds, or other local climate and location. Paper, plastic, earthen floors, wood held together by ropes, straw or torn metal pieces as roofs were some of the materials of construction. Overcrowding was a prominent characteristic of that slum. Many dwellings were single room units, with high occupancy rates. Five and more persons shared a one-room unit; the same room was used for cooking, sleeping and living. Overcrowding was also seen near sources of drinking water, cleaning, and sanitation where one toilet served dozens of families. From safe drinking water to electricity, from basic health care to police services, from affordable public transport to fire/ambulance services, from sanitation sewer to paved roads, the slums lacked all of these. Rubbish accumulated in huge quantities in every corner of the slum.

A total of 57 responses were collected. The results of this study were compared to the findings of a study in an urban slum of Delhi.

3.3 Questionnaire Development

Having read the literature and after having discussed with the guide of the study and an expert from the banking industry, a questionnaire was developed. The questionnaire consists of 4 subsections:

1) Demographic Details: Q1a-d and Q2a-b capture information related to family composition and nature of employment.
2) Banking Details: Q3-9 capture information like no. of bank accounts, monthly income and savings etc.
3) Loan Details: Q10-13 capture information related to loan like whether the respondents avail loan and what kind of loans are more prevalent among them.
4) Assess Technology Preparedness: Q14-20 capture information related to access to technology in the slum areas. This will help in designing appropriate solutions for improving financial inclusion in those slums.

3.4 Data Collection and Sample Design

Data is a collection of information. Data collection is the process of collecting data for conducting the study. Data can be collected from various sources. These sources can be primary data sources such as focus group interviews, personal interviews or questionnaires or secondary data sources such as newspapers, magazines and internet.

Firstly, the area where the study was to be conducted was decided. The chosen region was an urban slum near Chandigarh. The chosen slum was visited in order to gather the information by distributing the prepared questionnaires. Data collection was based on personal interactions with the residents of the slum area. Many people were reluctant to reveal their actual details because it involved information related to their financials. Moreover, data had to be collected manually by translating the questions in local languages and then recording their answers. A total of 57 responses were collected in 4 visits.

3.5 Variables under focus

Table 1: Variable Names

Question Number	Question Details	Variable Name
q2a	Nature of Employment	N0
q3	Monthly Income	N1
q4	Monthly Saving	N2

q5	Number of Bank Accounts	N3
q6	Method of Saving	N4
q7	Tried to Open Bank Account	N5
q8	Reasons of Denial	N6
q9	Reasons of Reluctance	N7
q10	Loan Availed	N8
q11	Type of Loan	N9
q12	Source of Personal Loan	N10
q14	Possession of Mobile Phone	N11
q15	Use SMS facility	N12
q16	Possession of Smart Phone	N13
q18	PC at Home	N14
q19	Internet Access at Home	N15
q20	Family Member's Internet Access	N16

3.6 Tools of Analysis

Analysis involves working on the collected and observed data to verify if the objectives of the study are achieved or not. It is done by using various tools. The tools can be Microsoft Excel, Statistical Package for Social Sciences (SPSS) and many others.

The analysis is done using SPSS v16.0 and Microsoft Excel 2013. The analysis is divided into two sections: General Analysis and Statistical Analysis. General analysis consists of frequency count and thus is percentage based analysis of desired questions. This analysis was done using the chart technique of MS Excel and Frequency count feature of SPSS. Statistical analysis involves comparative study of individual samples of Chandigarh and Delhi region. SPSS, using Chi square and t-test, was used to conduct this analysis. Cross tabulation was done using chi-square test on the data collected. to obtain the deviation of the observed values from expected values. On the basis of the significance values observed, the following hypothesis were tested:

Null Hypothesis H0$_i$: There is significant difference in N$_i$ factor of financial inclusion where i belongs to {0 to 16} based on the region.

Alternate Hypothesis H1$_i$: There is no significant difference in the N$_i$ factor of financial inclusion where i belongs to {0 to 16} based on the region.

The variables for which the significance value was less than 0.05 (95% level of confidence) or less than 0.01 (99% level of confidence), null hypothesis was accepted and for others, alternate hypothesis was accepted. The results were verified by applying independent sample t-test.

3.7 Limitations of Study

- Most of the people were reluctant to give the information, although they never gave any reason for not providing the required information.
- The information was manually collected because of low literacy level of the respondents.
- As the data was related to financial background of the respondents therefore there may be personal biasness in the responses.
- Due to time limitation, the data could be collected from a single slum and that slum may not be able to represent the complete population of urban slums of the entire state correctly.

4. DATA ANALYSIS, INTERPRETATIONS AND FINDINGS

The Analysis is divided into two sections i.e. General Analysis and Statistical Analysis. General Analysis consists of frequency counts based on the data collected from the slum area of Chandigarh. Statistical Analysis highlights the effect of region (Chandigarh and Delhi) on major factors of Financial Inclusion.

4.1 General Analysis

Table 2: Descriptive Statistics

Variable Name	N	Minimum	Maximum	Mean	Std. Deviation
N0	57	1	5	2.46	1.390
N1	57	1	4	2.72	.959
N2	57	1	4	2.39	1.192
N4	57	0	4	.53	.889
N5	57	0	2	.81	.766
N6	57	0	4	.58	.925
N7	57	0	3	.49	.947
N8	57	0	2	1.49	.539
N9	57	0	4	1.14	1.355
N10	57	0	6	1.46	1.983
N11	57	0	5	2.33	1.300
N13	57	0	3	.67	.893
N14	57	0	2	.84	.819
N15	57	0	2	1.72	.491
N16	57	1	2	1.63	.487
Valid N (listwise)	57				
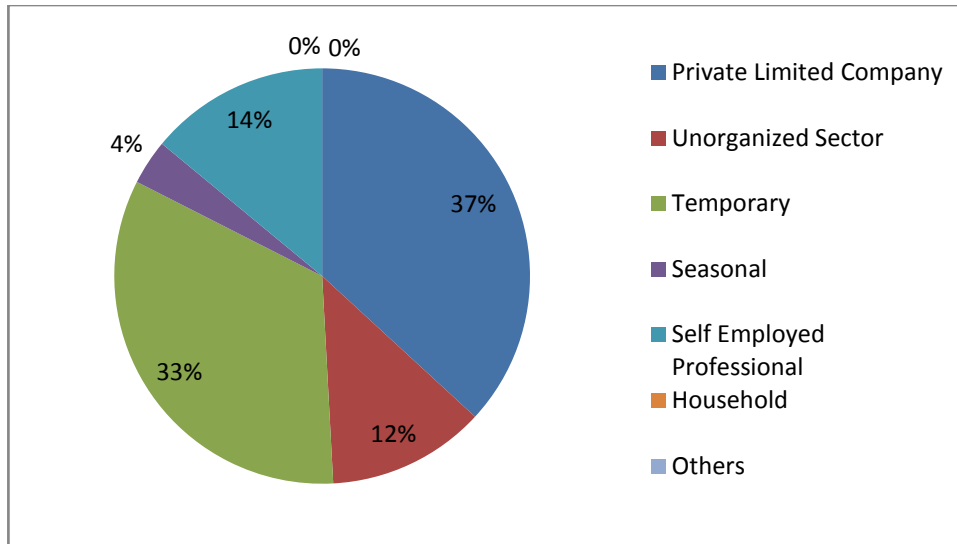
This graph depicts that majority of the respondents of the chosen slum work in private sector or as temporary workers. The mean value for this variable (N0) is 2.46 which show that the average response lies between unorganized sector and temporary workers. The standard deviation is 1.39 which depicts that approximately 56% of the responses lie outside this category therefore showing that 50% of the responses are concentrated in respect of nature of employment (Table 2).
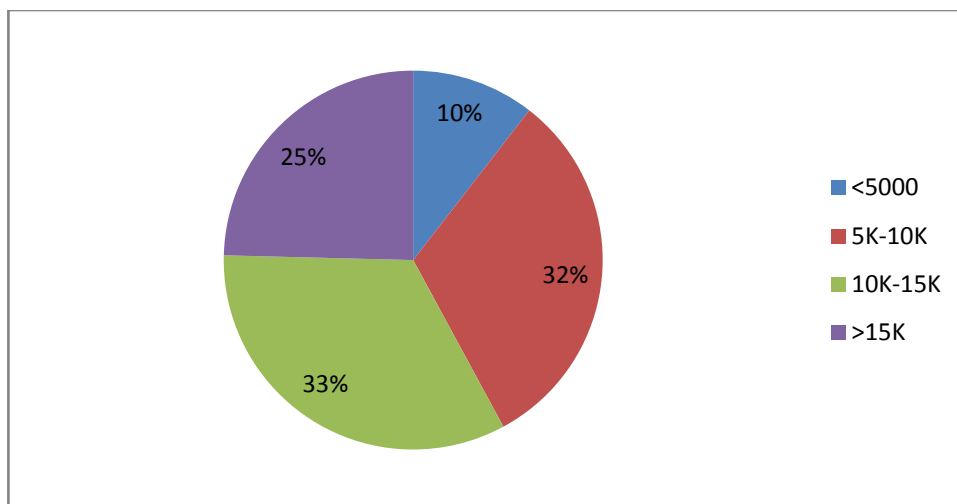
Figure 2: Income Level of Respondents

The above graph shows that majority of the respondents earn between 5K-15K which is quite low as compared to current cost of living. The mean for this variable (N1) is 2.72

which means that the average response lies between 5K-15K. The standard deviation for this variable is 0.959 which depicts that approximately 35% of the responses lie outside this category. Hence, it can be seen almost all the responses are concentrated in the middle range i.e. 5k-15k (Table 2).
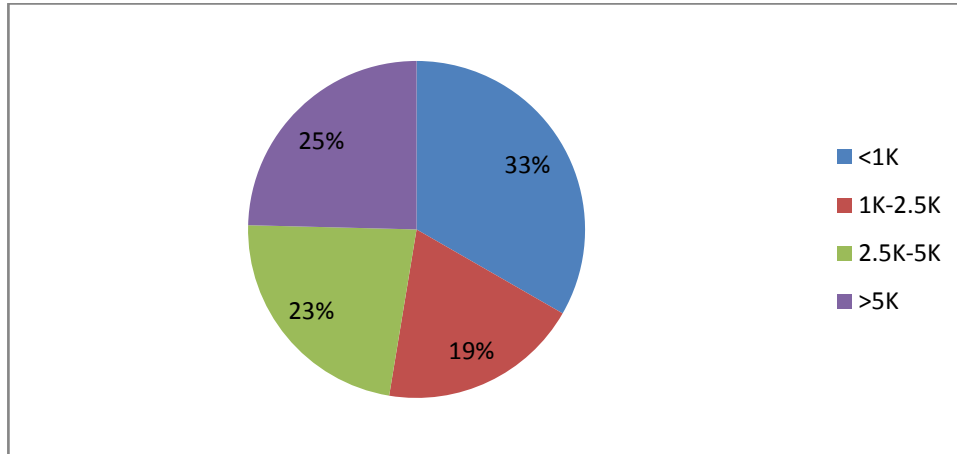
Figure 3: Monthly Savings of the Respondents

The result shows that average monthly savings of the respondents present a uniformly distributed pattern. On the other side, most of the respondents have very low savings. The mean value for this variable (N2) is 2.39 which depicts that the average response for this variable lies in the range 1k-5k. The standard deviation is 1.192 which depicts that approximately 49% of the responses lie outside this category hence showing that the responses for this variable are quite distributed in nature and hence there in difference among the respondents with respect to this variable.
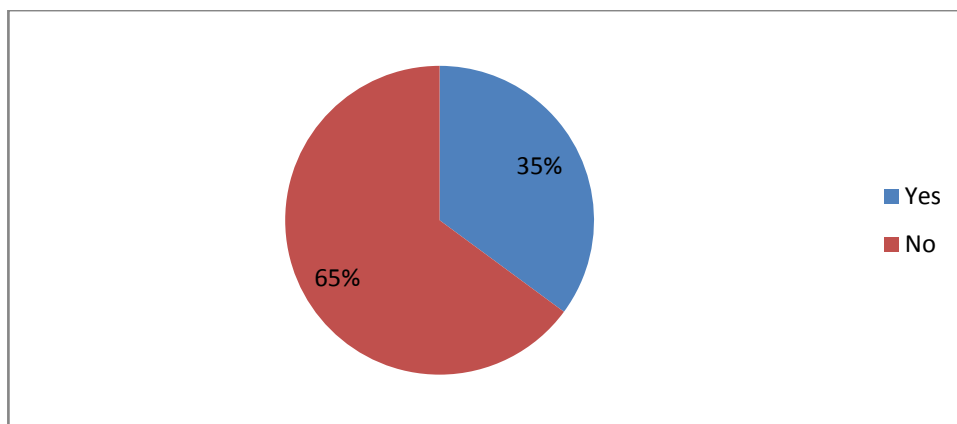
Figure 4: Holder of a Bank Account

This graph depicts that 65% of the respondents do not have a bank account. This shows that either they are not aware of the advantages offered by banks or they are denied by the current financial system.
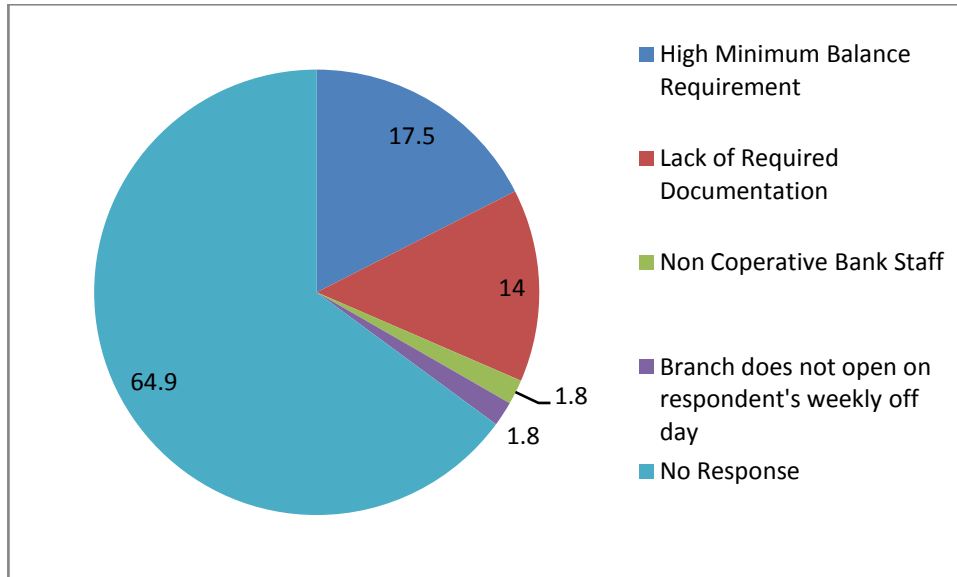
Figure 5 Possible Reasons of Denial by the Banks
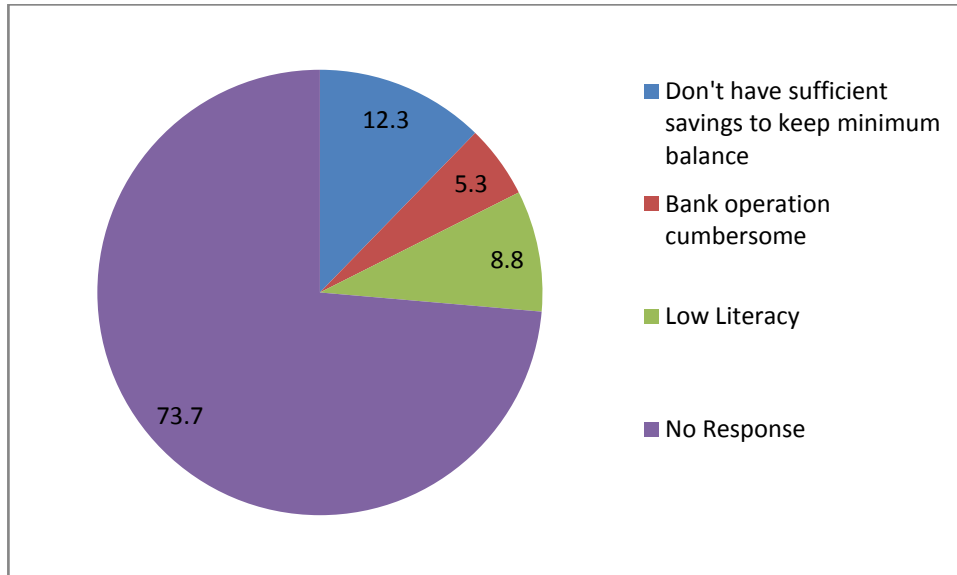
Figure 6: Possible Reasons of Reluctance for not trying to open an account

The above graphs depict that a significant percentage of respondents have given no response to these questions. But no response includes the respondents who already have a

bank account (35%). The results show that minimum balance is the major reason for denial by the banks as well as reluctance of the people.

The average response for denial i.e. variable N6 is 0.58 which depicts that either there is no response for this question i.e. value is zero (0) or the major reason for denial is the minimum balance requirement i.e. value one (1). The standard deviation for this variable is 0.925 which depicts that majority of the responses are concentrated within these two categories (Table 2).

The average response for reluctance i.e. variable N7 is 0.49 which depicts that either there is no response to this question or people don't have sufficient savings to keep minimum balance. The standard deviation is 0.947 which shows that the responses for this variable are also concentrated in the above two categories (Table 2).

In nutshell, it can be observed that for those who do not have a bank account, the minimum balance requirement condition is the major hindrance towards availing banking facilities.
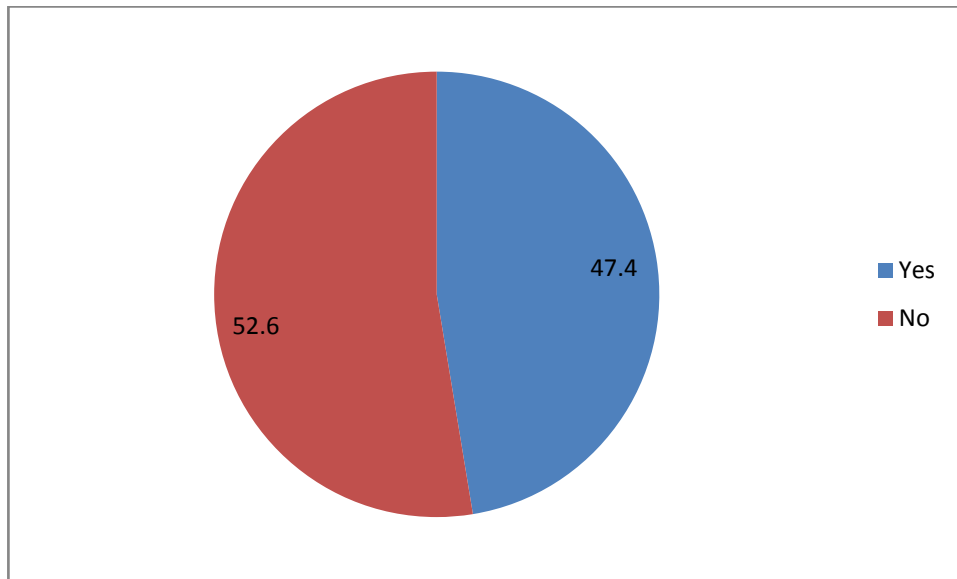
Figure 7: Holder of Loan

The above graph shows that almost half of the respondents don't avail loan facilities. It may be because they are not aware of the process and the advantages of availing loan facilities.
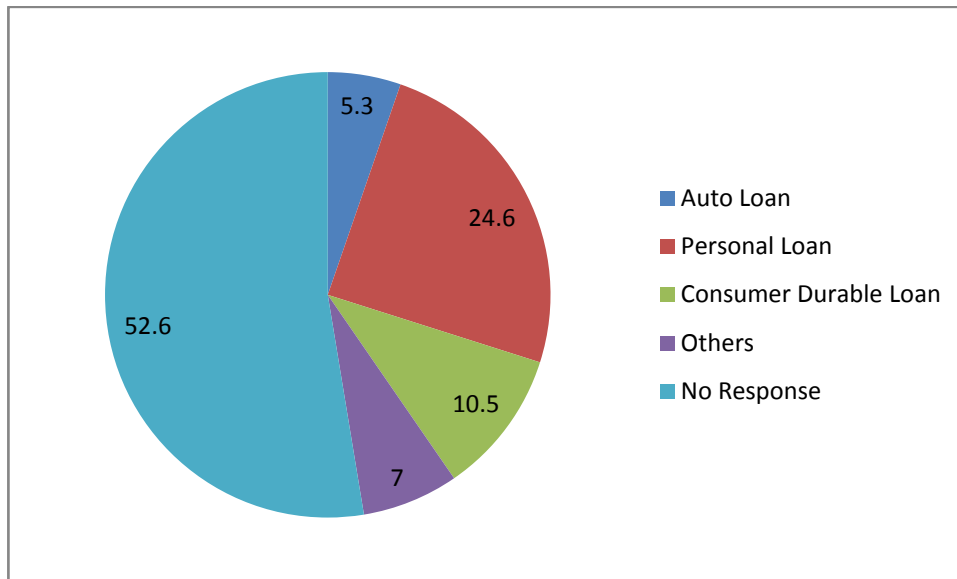
Figure 8: Type of Loan Taken
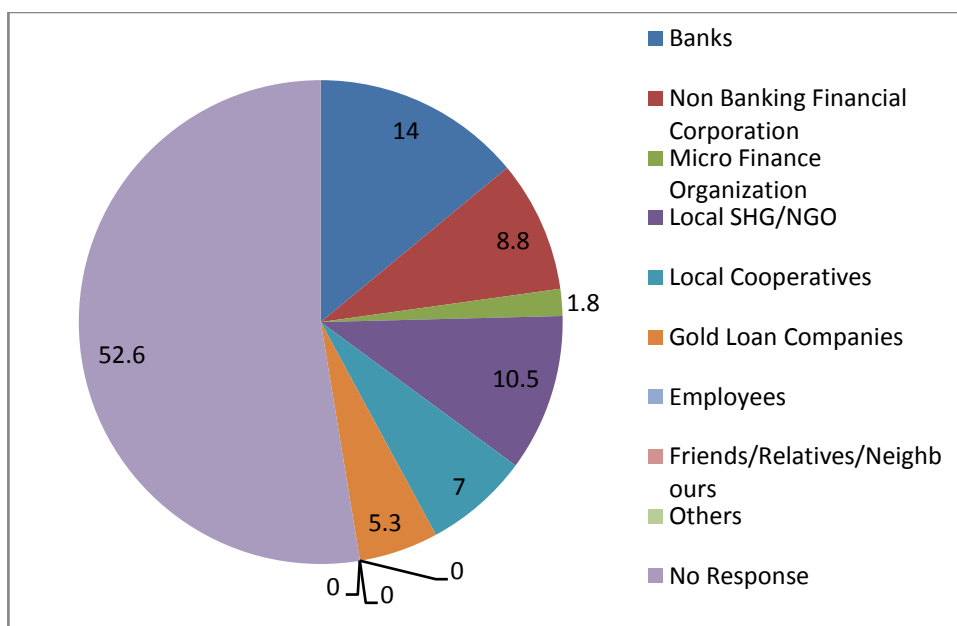
Figure 9: Sources of Personal Loan

Figure 8 shows that the maximum number of respondents have availed personal loans and the major sources of which are banks and local Self Help Groups/Non Government Organizations (Figure 9).

The average response for variable N9 is 1.14 which shows that on an average, the respondents have availed personal loan or an auto loan. But from Figure 8, it is evident that most of the respondents have not responded to this question revealing that they have not availed any of the loans. Therefore, it shows that people are still unaware of these loan facilities and need more education regarding loans. The standard deviation is 1.355 which shows the responses are quite distributed and therefore people in that slum have different requirements with respect to loans. Similarly, the mean value for variable N10 is 1.46 which shows that on an average, people avail personal loans from banks and non-banking financial corporations and the standard deviation is 1.983 which shows that the responses are distributed in nature and therefore the people in the slum area have differing preferences regarding the sources of loans (Table 2).
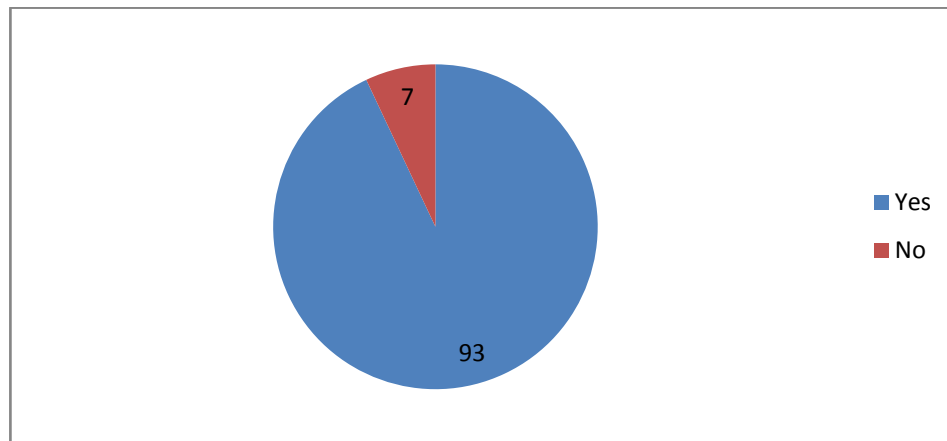
Figure 10: Percentage of Respondents' Families having Mobiles
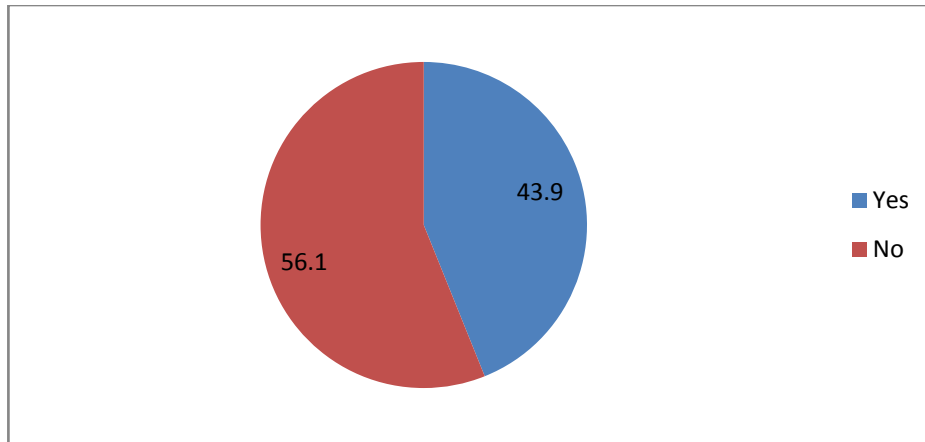
Figure 11: Percentage of Respondents having Smart Phones
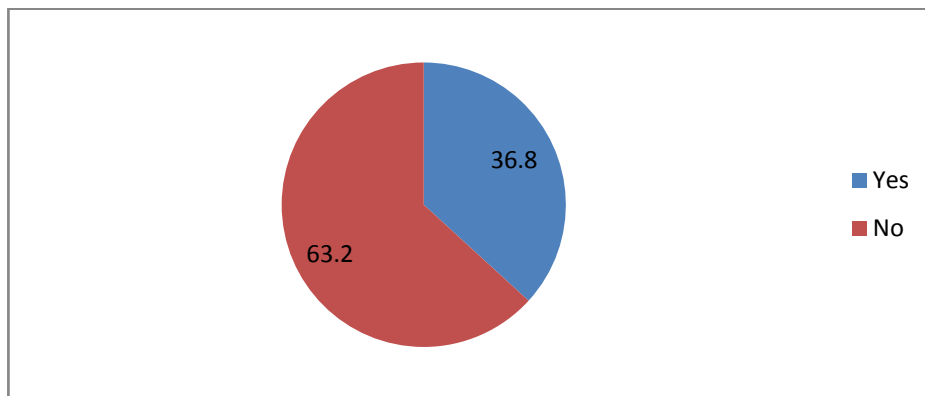
Figure 12 Internet Access

Figure 10, 11 and 12 shows the technology preparedness of the respondents. More than half of the respondents do not even have a smart phone and access to internet. Thus, there is a high requirement of educating the people about the upcoming technologies and their benefits.

It is also observed that the average number of people in each respondent's family is 5.4. Among them, the average number of adults per family is 3.3. Further, the average number of earning adults per family are 1.9 and among them average number of males are 1.1.

4.2 Statistical Analysis

Table 3 Chi Square Comparison Table

Variable Name	Chi Square Value	Significance Value (2-sided)

N0	61.145	.000**
N1	2.923	.404
N2	16.862	.001**
N3	7.234	.300
N4	28.857	.000**
N5	6.782	.148
N6	1.458	.692
N7	1.458	.692
N8	.983	.612
N9	6.337	.175
N10	6.771	.343
N11	10.773	.056
N12	2.187	.702
N13	37.676	.000**
N14	2.579	.275
N15	8.014	.018*
N16	8.014	.018*

*-depicts these factors are significantly affected (p value <.05) by the choice of region at 95% Confidence Level.

** depicts these factors are significantly affected (p value <.01) by the choice of region at   99% Confidence Level.

The hypothesis H0 for variables N0, N2, N4, N13, N15 and N16 is accepted and for other variables, it is rejected.

The reasons for the differences found in the slum areas of Chandigarh and Delhi are as follows:

➢ The people in slum area of Chandigarh prefer to work in private limited companies whereas people in slum area of Delhi are self employed professionals.
➢ The average savings in the slum area of Chandigarh is uniformly distributed whereas the average savings is below 1K in the slum area of Delhi.

➢ Most of the people of slum area of Chandigarh, who don't have a bank account, prefer to store their money in their own house or with their relative while in Delhi, all of them prefer storing in their own houses.

➢ The percentage of people having smart phones is significantly lower in Delhi as compared to Chandigarh.

➢ The percentage of people having access to internet is significantly lower in Delhi as compared to Chandigarh.

➢ The percentage of people having access to internet at home is lower in Delhi as compared to Chandigarh.

Table 4: T-Test Comparison Table

Variable Name	T-Value	Significance Value (2-Tailed)
N0	5.669	.000**
N1	.368	.714
N2	-3.802	.000**
N3	-1.746	.084
N4	-1.196	.234
N5	3.773	.000**
N6	1.752	.083
N7	.200	.842
N8	.365	.715
N9	-.053	.958
N10	-.422	.674
N11	-1.768	.080
N12	-.409	.683
N13	-1.990	.049*
N14	7.452	.000**
N15	1.353	.179

| N16 | 2.138 | .035* |

*-depicts these factors are significantly affected (p value <.05) by the choice of region   at 95% Confidence Level.

** depicts these factors are significantly affected (p value <.01) by the choice of region at 99% Confidence Level.

The hypothesis H0 for variables N0, N2, N5, N13, N14 and N16 is accepted and for other variables, it is rejected.

The reasons for differences found in the slum areas of Chandigarh and Delhi are as follows:

➢ The results obtained for variables N0, N2, N13 and N16 by chi-square test, are verified by t-test.

➢ The majority of respondents in Delhi have tried to open a bank account whereas in Chandigarh, majority of the respondents have not even tried to open a bank account.

➢ The percentage of people having PC at home is lower in Delhi as compared to Chandigarh.

Although, chi-square test shows significant difference in mode of storage adopted by the respondents for storing their money and availability of internet at their homes whereas according to t-test they are not significantly different. Instead t-test shows significant difference in the number of respondents who have tried to open a bank account and availability of PC at home.

5. CONCLUSION

The findings suggest that majority of the respondents of the slum area of Chandigarh work in private sector and most of them are temporary employees. Moreover, there average income per household is around Rs 10,000, which is quite less in order to sustain a family of six (6) members on an average. This means most of them are not able to save even Rs 1,000 per month (Figure3). Therefore, it is very difficult for them to meet the minimum balance requirement conditions of the banks and thus leads to their reluctance in using banking facilities (Figure 5 & 6.). As a result, 65% of the people do not have a bank account (Figure 4).

Further, the loan statistics also reveal that 52.6% of the respondents have never availed a loan facility which is mainly due to unawareness and denial by the system because of lack of security for making regular payments.

Although a significant percentage of people own mobiles and smart phones, but proper usage of technology is still lacking as only 37% of respondents have access to internet (Figure 10, 11 & 12).

On comparing with the findings of Delhi, it is found that people in the slum area of Chandigarh have better access to technology but still have significantly lower number of bank accounts. This shows that if they are given better opportunities and education, they will be in a better position to understand and adapt to the banking scenario.

6. RECOMMENDATIONS

On the basis of the findings, the following recommendations can be made:

- The minimum balance requirement conditions of the banks should be relaxed for the people with income level below Rs 15,000 per month.

- Better job opportunities in private as well as public sector should be provided to these people so that their income levels can increase, which in turn will help them in increasing their savings. Thus, this will also help them in arranging the security required to avail the loans.

- Special technology adoption programs and trainings should be organized for enhancing the level of awareness among these people about the benefits of technology and banking facilities.

- The number of Business Correspondents should be increased to enhance the trust and access of poor people to banking industry.

- More initiatives should be taken by private institutions for upliftment of poor people and enhancement of Financial Inclusion, as a part of their Corporate Social Responsibility.

- For ensuring that the Direct Benefit Transfer scheme is effectively implemented, it is necessary that technology access should reach to the grass root levels. This study reveals the present situation is far beyond the perfect scenario with many people having no knowledge and access to the technology.

7. FUTURE SCOPE

- The study can be extended to include more slum areas in the Union Territory of Delhi so as to increase the sample size that will lead to increase in the accuracy of the findings.

- Further, this study can be extended to other urban and rural regions of India to get an appropriate status of Financial Inclusion at national level.

- Questions related to literacy level like the educational background and computer literacy should be included in the questionnaire so as to have a better understanding of behavioral aspects of these people.

- To enhance and validate the findings of this study, other methods of data collection like interviews and focus groups can be conducted.

8. BIBLIOGRAPHY

1. Beck, T., Demirguc-Kunt, A., and Martinez Peria, M. S. (2007), *Reaching out: Access to and use of banking services across countries. Journal of Financial Economics 85: 234-266.*

2. Carbo S., Gardener E.P., and Molyneux P. (2005), *Financial Exclusion. Palgrave MacMillan.*

3. Demirguc-Kunt, A., and Klapper L. (2012), *Measuring Financial Inclusion: The Global Findex Database. Policy Research Working Paper 6025, The World Bank.*

4. Diniz, E., Birochi, R. and Pozzebon, M. (2011), *Triggers and barriers to financial inclusion: The use of ICT-based branchless banking in an Amazon county. Electronic Commerce Research and Applications, In press, available online at: http://dx.doi.org/10.1016/j.elerap.2011.07.006.*

5. Kempson E, A. Atkinson and O. Pilley (2004), *Policy level response to financial exclusion in developed economies: lessons for developing countries. Report of Personal Finance Research Centre, University of Bristol.*

6. Kempson E., C. Whyley, J. Caskey J, and S. Collard. (2000), *In or out? financial exclusion: a literature and research review. Report, Financial Services Authority.*

7. Leyshon A. and Thrift N. (1995), *Geographies of Financial Exclusion: Financial Abandonment in Britain and the United States Transactions of the Institute of British Geographers, New Series, 20(3): 312-41.*

8. Mandira Sharma, *Index of Financial Inclusion – A measure of financial sector inclusiveness*, July, 2012.

9. Rangarajan Committee (2008) Report *of the Committee on Financial Inclusion. Government of India.*

10. Sinclair S. P. (2001), *Financial exclusion: An introductory survey. Report of Centre for Research in Socially Inclusive Services, Heriot-Watt University, Edinburgh.*

11. Seidman, E., Hababou, M. and Kramer, J. (2005) *Getting to Know Underbanked Consumers: A Financial Services Analysis. Report of the Center for Financial Services Innovation, Chicago.*

12. Rajdeep Sahrawat, *Financial Inclusion-from opportunity to obligation, Tata Consultancy Services, 2010.*

13. Wikipedia*: http://en.wikipedia.org/wiki/Financial_inclusion as on 20 April, 2014.*

9. ANNEXURE A

Questionnaire

Demographic Details:

Name of Neighborhood Area:

Q1. Family Composition:

a) Total family members: _____   b) Adults: _____

c) Earning Adult: _____   d) Earning Males: _____

Q2a. Nature of employment

Private limited company/ unorganized sector/ temporary/ seasonal/ self employed professional (electrician/ plumber etc)/ household jobs/ Others _____

Q2b. Professions of earning members: _____

_____

Banking Details:

Q3. Average monthly income of household:

a) Below Rs. 5,000/-

b) 5K-10K

c) 10-15K

d) 15K and above

Q4. Average monthly savings for household

a) Below Rs. 1,000/-

b) 1K-2.5K

c) 2.5-5K

d) 5K and above

Q5. No. of bank accounts in household: NIL/ _____

If answer to Q above is NIL then

Q6.   Where do the deposit their small savings (tick all applicable)

    a) Safe storage in own house   b) With employers

    c) With relatives   d) With friends

    e) With neighbors   f) Give loans to _____

Q7.   Have they ever tried to open a bank account?   Yes/ No

If Yes:

Q8.   Why they could not open a bank account?

    a) High minimum balance requirement
    b) Lack of required documentation: Address proof/ Photo ID proof
    c) Non cooperative bank staff
    d) Branch does not open on my weekly off day

e) Any other reasons specify _____

_____

If No:

Q9.   Why they have not tried to open a bank account?

   a) Don't have sufficient savings to keep Minimum balance
   b) Find entire bank account operation process very cumbersome
   c) No literacy thus hesitant/ dependent on others
   d) Any other reasons specify _____

   _____

Loan details:

Q10. Any loan product being availed   Yes/No

If Yes:

Q11. What type of loan

   a) Auto Loan   b) Personal Loan   c) Consume durables
   d) Others (pls specify) _____

Q12. Where from they take personal loans? (tick all that is applicable)

   a) Banks   b) Non banking financial corporations

   c) Micro Finance Organizations   d) Local self help groups/ NGOs

   e) Local cooperatives committees   f) Gold loan companies

   g) Employers   (With interest / Without interest)

   h) Friends/ Relatives/ Neighbors   (With interest / Without interest)

i) Any other source _____

If answer to above question is only from g/h/i please ask following questions.

Q13. Have they ever tried to take a loan from a bank/ NBFC/ MFO etc? (sources of formal credit)

If yes:

    a) Why they have not been given/taken loan?
        a. Insufficient documentation : Address proof/ Photo ID proof/ Income proof
        b. No acceptable guarantor
        c. Rejected as per lender's policy
        d. Not known
    f) Any other reasons specify _____
    _____

If they have never even tried to take a loan from formal credit sector, please probe for reasons:

    b) Why you have never tried to get a loan from bank/ NBFC/ MFO
        a. Too much documentation
        b. Cumbersome process
        c. Upfront processing fee requirement
        d. Fixed repayment schedule
        e. High interest rates
        f. High penalties if payment is skipped
        g. Others please specify _____
    _____

Assess Technology Preparedness:

Q14. No of persons having cell phones in household: _____

Q15. No of persons who can use sms facility: _____

Q16. No of persons who have smart phones in household: _____

Q17. Name 3 most used applications in smart phone _____

Q18. Do they have a PC at home _____

Q19. Do they have internet at home _____

Q20. Does any member of family accesses internet (Yes/ No)

Q20a. If yes where _____

10. ANNEXURE B

Frequency Tables

q2a

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	21	36.8	36.8	36.8
	2	7	12.3	12.3	49.1
	3	19	33.3	33.3	82.5
	4	2	3.5	3.5	86.0
	5	8	14.0	14.0	100.0
	Total	57	100.0	100.0	

q3

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	6	10.5	10.5	10.5
	2	18	31.6	31.6	42.1
	3	19	33.3	33.3	75.4
	4	14	24.6	24.6	100.0
	Total	57	100.0	100.0	

q4

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	19	33.3	33.3	33.3
	2	11	19.3	19.3	52.6
	3	13	22.8	22.8	75.4
	4	14	24.6	24.6	100.0
	Total	57	100.0	100.0	

q5

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	20	35.1	35.1	35.1
	1	13	22.8	22.8	57.9
	2	16	28.1	28.1	86.0
	3	2	3.5	3.5	89.5
	4	4	7.0	7.0	96.5
	6	1	1.8	1.8	98.2
	8	1	1.8	1.8	100.0
	Total	57	100.0	100.0	

q8

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	37	64.9	64.9	64.9
	1	10	17.5	17.5	82.5
	2	8	14.0	14.0	96.5
	3	1	1.8	1.8	98.2
	4	1	1.8	1.8	100.0
	Total	57	100.0	100.0	

q9

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	42	73.7	73.7	73.7
	1	7	12.3	12.3	86.0
	2	3	5.3	5.3	91.2
	3	5	8.8	8.8	100.0
	Total	57	100.0	100.0	

Q10

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	1	1.8	1.8	1.8
	1	27	47.4	47.4	49.1
	2	29	50.9	50.9	100.0
	Total	57	100.0	100.0	

q11

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	30	52.6	52.6	52.6
	1	3	5.3	5.3	57.9
	2	14	24.6	24.6	82.5
	3	6	10.5	10.5	93.0
	4	4	7.0	7.0	100.0
	Total	57	100.0	100.0	

q12

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	30	52.6	52.6	52.6
	1	8	14.0	14.0	66.7
	2	5	8.8	8.8	75.4
	3	1	1.8	1.8	77.2
	4	6	10.5	10.5	87.7
	5	4	7.0	7.0	94.7
	6	3	5.3	5.3	100.0
	Total	57	100.0	100.0	

q14

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	4	7.0	7.0	7.0
	1	11	19.3	19.3	26.3
	2	19	33.3	33.3	59.6
	3	11	19.3	19.3	78.9
	4	9	15.8	15.8	94.7
	5	3	5.3	5.3	100.0

q14

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	4	7.0	7.0	7.0
	1	11	19.3	19.3	26.3
	2	19	33.3	33.3	59.6
	3	11	19.3	19.3	78.9
	4	9	15.8	15.8	94.7
	5	3	5.3	5.3	100.0
	Total	57	100.0	100.0	

q16

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	32	56.1	56.1	56.1
	1	15	26.3	26.3	82.5
	2	7	12.3	12.3	94.7
	3	3	5.3	5.3	100.0
	Total	57	100.0	100.0	

q20

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	21	36.8	36.8	36.8
	2	36	63.2	63.2	100.0
	Total	57	100.0	100.0	