A STUDY ON FINANCIAL INCLUSION IN URBAN AREAS OF ASSAM

A thesis submitted in part fulfillment of the requirements for the degree of Doctor of Philosophy

Ajanta Phatowali

Registration No. 170 of 1997

Department of Business Administration,

School of Management Sciences,

Tezpur University, Tezpur, Assam

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Dedicated to my beloved parents

Late Gadadhar Phatowali

&

Padma Phatowali

Abstract

Title of the Thesis	:	A study on Financial Inclusion in urban areas of Assam
Researcher	:	Ajanta Phatowali
Principal Supervisor	:	Dr. Subhrangshu Sekhar Sarkar, Professor, Department of Business Administration, Tezpur University, Tezpur, Assam
Periodicity of the Research	:	Periodicity of the secondary data is 21 years during the period 1990-2011. The primary data was collected during the financial year 2010-11.

Introduction :

Financial Inclusion is gaining importance globally in recent times among national policy makers, multilateral institutions and others in the development field. As 'Inclusive Growth' is gaining trust globally as a sustainable growth strategy, financial inclusion is a topic of contemporary significance and relevance. Although the financial sector has made commendable progress in recent years, there are concerns that the banks have not been able to include vast segment of population especially underprivileged sections of the society into the field of basic banking services. In most developing countries financial services are availed by only a minority of population. Such limited use of financial services in developing countries has become an international policy concern. Adopting the goal of building inclusive financial systems, the United Nations designated 2005 as the 'International Year of Micro Credit'. It had given the required fillip in the global platform for financial inclusion.

It is observed that studies on Financial Inclusion globally are mostly general in nature or gives emphasis to the rural areas. There is also a tendency of treating urban exclusion as an extension of rural exclusion. In reality, the factors affecting financial exclusion in urban areas might be very different from those in rural areas.

In India, population in urban areas is growing faster than in rural areas and at a much faster growth than the overall population growth. The contribution of urban sector to national economy is also increasing rapidly. In Assam, growth rate of urban population has been consistently above the national level since 1901. Due to the importance of urban sector, various policy initiatives are being taken for development of urban areas. For making the urban growth an inclusive and sustainable one, financial inclusion of urban population is of immense importance. Financial exclusion in urban areas is more likely to lead to social exclusion as for the financially excluded people; it becomes extremely difficult to integrate with the social systems being driven by intensive use of financial services by majority of population.

From the review of literature, it is observed that no detail study on Financial Inclusion in the state of Assam has been conducted yet. Scope of study of Goyal in 2008 and Rabha in 2012 was very limited. Further, there exists gap in research of Financial Inclusion in the urban areas of the state. This research with a detail analysis of secondary as well as primary data collected from both 'excluded' and the 'providers' is expected to bridge the gap. By bringing insights into the factors affecting financial inclusion, it will be helpful in designing possible solution to meet the unmet needs of the 'excluded'.

Objectives of the Research:

The objectives of the research are –

i) To study the status of Financial Inclusion in Assam with specific reference to urban areas.
ii) To identify demand and supply side factors limiting Financial Inclusion.
iii) To study the usage of non-banking financial services by unbanked.

Research Methodology:

The study involves analysis of both primary and secondary data. For this purpose appropriate statistical tools have been applied. The methodologies followed to fulfil each objective is discussed in brief below -

Objective #(i)

- To study the status of financial inclusion, secondary data is collected and analysed based on a series of alternative measurements. Index of Financial Inclusion developed by Chakravarty and Pal[1] is calculated encompassing various dimensions of inclusion.
- Trend is studied for the possible explanations to observed patterns.

Objective #(ii)

This requires identification of factors hindering financial inclusion. Both demand and supply side factors are studied from primary data collected through sample surveys in the study area with help of questionnaires designed for the purpose. Two separate surveys were conducted among the unbanked urban adults and bank branch managers. A mixture of judgmental and convenience sampling is undertaken. Together with common descriptive analysis, both qualitative and quantitative analysis is made to analyse the primary data. Logistic Regression analysis, specifically Binary Logistic Regression with categorical variables is used to a great extent in the analysis of demand side data. Due to the ordered response nature of questions, for analysis of supply side data non-parametric statistical tools are used viz., Kruskal-Wallis test.

Objective #(ii)

From the primary data collected from surveys as mentioned above, usage of non banking services among urban unbanked adults is studied. Along with common descriptive analysis, binary logistic regression analysis is carried out to identify the factors influencing the choice of a particular saving mode or source of credit.

Objective #(iii)

From the primary data collected from surveys as mentioned above, usage of non banking services (or alternate financial services) among urban unbanked adults is studied. Along with common descriptive analysis, binary logistic regression

[1] Chakravarty, R Satya and Rupayan Pal. "Measuring Financial Inclusion : an Axiomatic Approach". Mumbai. Indira Gandhi Institute of Development Research.

analysis is carried out to identify the factors influencing the choice of a particular saving mode or source of credit.

Scope

The study covers the State of Assam and the urban banking centres of the State viz. Dibrugarh, Guwahati, Nagaon, Silchar and Tinsukia. For comparison purpose, all India scenarios have also been analysed.

Limitations

i) As banks are the gateway to the most basic form of financial services, banking inclusion/ exclusion are most often used as analogous to financial inclusion/exclusion. The study primarily takes into consideration banking inclusion/exclusion as financial inclusion/exclusion.

ii) The study covers individuals only and does not cover households and firms.

iii) The study covers secondary data pertaining to the Scheduled Commercial Banks.

iii) The branch manager or the head of a bank branch has been considered as representative of the branch.

iv) The study suffers from dearth of published information on urban Financial Inclusion

v) The study is subject to common limitations of sample survey.

Findings and Recommendations:

The Study encompasses a very detail analysis of available secondary data for a period of more than two decades. The Study also entails collection and analysis of a wide range of primary data. Primary data is collected from a representative sample of 'unbaked urban adults' as well as 'bank managers'. This results in drawing very significant findings about Financial Inclusion in Assam. Based on the study and its findings, the researcher attempts to provide some recommendations for improvement of Financial Inclusion in the urban areas of Assam.

Declaration

I, hereby, declare that the thesis entitled "**A Study on Financial Inclusion in Urban Areas of Assam**" is a bona fide research undertaken by me under the guidance of **Dr. Subhrangshu Sekhar Sarkar**, Professor, Department of Business Administration, Tezpur University, Tezpur and the thesis has neither been submitted previously nor is currently being submitted elsewhere for the award of any Degree, Diploma or other qualification. The work embodies the result of my original research and reflects advancement in this area of research.

I also certify that, to the best of my knowledge, any help received in preparing this thesis, and all sources used have been acknowledged in this thesis.

(Ajanta Phatowali)

Date : 24/6/2013
Place : Tezpur University, Tezpur.

तेजपुर विश्वविद्यालय
(केंद्रीय विश्वविद्यालय)
नपाम, तेजपुर - 784 028, असम, भारत

TEZPUR UNIVERSITY
(A Central University)
Napaam, Tezpur - 784 028, Assam, India

Certificate from the Principal Supervisor

This is to certify that the thesis entitled **A study on Financial Inclusion in Urban Areas of Assam,** submitted to Tezpur University in the Department of Business Administration under the School of Management Sciences in part fulfillment for the award of the degree of Doctor of Philosophy in Management is a record of research work carried out by **Ms Ajanta Phatowali** under my supervision and guidance.

All help received by her from various sources have been duly acknowledged.

No part of this Thesis has been submitted elsewhere for award of any other Degree.

S. S. Sarkar

Date: 20/06/2013
Place: Tezpur

(Subhrangshu Sekhar Sarkar)
Professor,
Department of Business Administration,
School of Management Sciences

फोन / Phone : 03712-267007 - 9 (3 lines) • फेक्स / Fax : 03712-267005, 267006 • ई-मेल / e-mail : admn@tezu.ernet.in

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With the help of all above, I tried to conduct sincere research on this topic of contemporary relevance to the State. All mistakes in the research are of mine alone.

Phatowali

(Ajanta Phatowali)

Date : 24/6/2013

Tezpur University, Tezpur

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LIST OF ABBREVIATIONS

AAGR	:	Average Annual Growth Rate
ADB	:	Asian Development Bank
AEBA	:	Aadhar Enabled Bank Account
AFS	:	Alternative Financial Sector
APEC	:	Asia Pacific Economic Cooperation
ATM	:	Automated Teller Machine
BC	:	Banking Correspondent
BCG	:	Boston Consultancy Group
BF	:	Banking Facilitator
BM	:	Branch Manager
BoD	:	Beginning of the Day
CBO	:	Community Based Organisation
CBS	:	Core Banking System
CDMA	:	Code Division Multiple Access
CDR	:	Credit Deposit Ratio
CERSAI	:	Central Registry for Securitisation and Security Interest in India
CGAP	:	Consultative Group to Assist the Poor
CGD	:	Centre For Global Development
CRISIL	:	Credit Rating Information Services of India Limited
CSP	:	Customer Service Point
DBT	:	Direct Benefit Transfer
EBT	:	Electronic Benefit Transfer
EoD	:	End of the Day
FD	:	Fixed Deposit
FI	:	Financial Institution
FIF	:	Financial Inclusion Fund
FIP	:	Financial Inclusion Plan
FITF	:	Financial Inclusion Technology Fund
FSI	:	Financial Service Provider
GCC	:	General Credit Card

GDI	:	Gender-related Development Index
GoI	:	Government of India
GPRS	:	Global Pocket Radio Service
GSM	:	Global System for Mobile Communication
HDI	:	Human Development Index
HPI	:	Human Poverty Index
ICT	:	Information and Communications Technology
IBA	:	Indian Banks' Association
IFI	:	Index of Financial Inclusion
INFAST	:	Interoperable Infrastructure for Accounting Small Transactions
JLG	:	Joint Liability Group
KCC	:	Kishan Credit Card
KYC	:	Know Your Customer
LBS	:	Lead Bank Scheme
MGNREGA	:	Mahatma Gandhi National Rural Employment Guarantee Act
MFI	:	Micro Finance Institution
MSE	:	Medium And Small Enterprise
NABARD	:	National Bank For Agriculture And Rural Development
NBFC	:	Non Banking Financial Company
NFC	:	Near Field Communication
NGO	:	Non Government Organisation
NRC	:	National Register for Citizens
OBC	:	Other Backward Class
OD	:	Over Draft
PoS	:	Point of Sale
PSB	:	Public Sector Bank
PSL	:	Priority Sector Lending
PSTN	:	Public Switched Telephone Network
PVSB	:	Private Sector Bank
RBI	:	Reserve Bank of India
RD	:	Recurring Deposit
REMIT	:	Real-time Micro Transactions

ROSCA	:	Rotating Savings and Credit Association
RRB	:	Regional Rural Bank
Rs.	:	Rupees
SAA	:	Service Area Approach
SC	:	Scheduled Cast
SCB	:	Scheduled Commercial Bank
SHG	:	Self Help Group
SIDBI	:	Small Industries Development Bank of India
SMS	:	Short Messaging Service
ST	:	Scheduled Tribe
UID	:	Unique Identification
UIDAI	:	Unique Identification Authority of India
UK	:	United Kingdom
UNDP	:	United Nations Development Program
USA	:	*United States of America*
USSD	:	Unstructured Supplementary Service Data
VIF	:	Variance Inflation Factor

Chapter 1

Introduction and Overview

1. Introduction and Overview

1.1. INTRODUCTION

Financial Inclusion is gaining importance globally in recent times among national policy makers, multilateral institutions and others in the development field. As 'Inclusive Growth' is gaining trust globally as a sustainable growth strategy, Financial Inclusion is a topic of contemporary significance and relevance. Although the financial sector has made commendable progress in recent years, there are concerns that the banks have not been able to include vast segment of population specially underprivileged sections of the society into the field of basic banking services. In most developing countries financial services are availed by only a minority of population (United Nations 1). Such limited use of financial services in developing countries has become an international policy concern. Adopting the goal of building inclusive financial systems, the United Nations designated 2005 as the 'International Year of Micro Credit'. It had given the required fillip in the global platform for Financial Inclusion.

Financial development creates enabling conditions for growth through supply-led or demand-pull factors. The fact that the development of the financial system contributes to the economic development has been established by a large body of empirical research. Developing the financial sector and improving access to finance may accelerate economic growth by reducing income inequality and poverty. As in underdeveloped financial system, access to finance is limited, people and firms are constrained by the availability of their own funds or alternatively, have to resort to high cost informal sources. Lower availability of funds and higher cost of it results in fewer economic activities which ultimately results in lower economic growth. On the other hand, in developed economies where more and more people are financially included, it becomes increasingly difficult for the minority excluded people to integrate with the society. As financial exclusion is concentrated among the marginal sections of the society across countries, it contributes to a much wider problem of social exclusion. Therefore, tackling Financial Exclusion has been a policy concern for all nations – be it developed, developing or underdeveloped.

Many empirical studies have been conducted around the globe to identify the factors limiting 'access to' and 'use of' financial services. A wide range of social, political, structural and economic factors have been identified. However, all these factors are not applicable for all countries. Further, though there are common factors affecting a large number of economies, the extent to which such factors affect varies widely across economies. So, it is very important to conduct domestic country, region specific studies to identify the causes of exclusion and frame policies to tackle them. Such views were also expressed by multilateral organizations by advocating that policies must be designed at the country level (United Nations 3). There is wide range of opinions that such policies should be integrated with overall financial sector development policies rather than confining it as poverty alleviation policy.

There have been Government policies, legislations, voluntary charters as 'codes of practice' towards improving financial inclusion globally. With the change in overall socio-economic scenario, thrust of such policies is also undergoing change. In some countries, the voluntary charters have been converted to legislations and in some other countries Government is considering 'mainstreaming the informal sectors' for effective inclusion. The policy thrust which started with importance of 'access to financial services' gradually shifting towards enabling people to 'use' the accessible services by financial literacy, financial counseling along with designing of services suitable for their use. Further, policy concerns have evolved towards consumer protection, risk mitigation and making Financial Inclusion a viable business proposition in view of greater emphasis given on 'capital adequacy' of banks. Possibility of including other intermediaries such as Banking Correspondents (BC)/ Banking Facilitators (BF) has seen to receive wider recognition among policy makers in recent years. As per *Financial Access 2010* by CGAP, in 90% of economies, at least some aspects of Financial Inclusion agenda are under the purview of the main financial regulator. However, promoting access to deposit and credit services were found to be more likely focus of financial regulators in low and middle income countries.

Although ideally an inclusive financial system should provide access to savings, remittance, transactions, credit, insurance, credit counseling etc, as an operational concept in most developing countries, 'access to a bank account' has been considered as indicator of inclusion. Having a bank account enables an individual to avail a wide range of benefits from a variety of financial products. As these products are provided by banks which are subjected to regulations and supervision, thus they are considered safe. The single gateway of a banking account can be used for several purposes and ultimately it benefits nation's economy by making greater financial resources available in a transparent way which may be efficiently deployed for productive use.

Indian growth process is accompanied by growing inter-regional, intra-regional and inter-personal inequalities in wealth and income (Kelker 56). There has been growing concern that the economic growth has not been inclusive enough which might result in unsustainability. Realising this pressing issue, the Indian Government has given major thrust on 'Inclusive Growth' in its 11th Five Year Plan. Empirical research by Bell and Ronsseau has shown how financial intermediaries have played a leading role in economic performance of India. Burgess and Pandey; Burgess, Pandey and Wong found that the supply-led strategy of rural branch expansion is associated with non-agricultural growth and thereby helped reduction of rural poverty.

India has a long history of financial sector policies with an objective of increasing inclusiveness of the financial sector. It started with the establishment of credit co-operatives, following enactment of Co-operative Act in 1904. This was followed by Bank Nationalisation, establishment of Regional Rural Banks, adoption of Service Area Approach, mandated target for Priority Sector Lending, relaxed branch licensing policy in underbanked regions etc. However, the success has been mixed and not to the level expected. Many regions still remains underbanked and a sizable population is outside the ambit of formal financial services. An important indicator of Financial Inclusion being the number of accounts held as a ratio to the adult population is only 74.73% in India as on March 31, 2010 which is considered to be low compared to any developed country e.g., the same ratio is 202.10% in USA, 292.32% in UK, 106.53% in Brazil and as high as 717.24% in Japan (CGAP, *Financial Access 2009).* As per Reserve Bank of India (RBI), the central bank of the country, 66.9% of the country's population has bank account as on March 31, 2011. The Average Annual Growth Rate (AAGR) of various inclusion indicators during 21 years' period between 1991-2011 shows that both per capita deposit and credit has grown at a very high rate against marginal growth in number of bank branches per million population as well as number of deposit and credit accounts per thousand population. This again is an indicator of concentration of financial services in hands of few and in limited geographical area.

Assam, a State of India located at the North Eastern part of the country spreading over 2.8% of the country's geographical area houses 2.57% of its population. As on March 31, 2011, 1.68% of total bank branches in India are located in the state and these branches together accounts for 1.09% of country's bank deposits and a mere 0.52% of the total bank credit. Traditionally Assam is lagging behind the national average in most of the indicators of Financial Inclusion and the gap between national and State's average is widening with time in absolute terms. The Committee on Financial Sector Plan for North Eastern Region constituted by RBI in its report submitted in July 2006 has made very important observations that in the region, the level of Financial Inclusion is not related to poor alone. Gauged by any measure, financial penetration and financial inclusion is very low in the region. Coupled with other important factors, low penetration of bank branches has led to Financial Exclusion. Regulator and Government have been taking steps to boost inclusion in the State specially since 2005. However, situation has not changed much. It calls for in-depth study to identify root causes of exclusion so that effective measures can be taken to tackle them. On the other hand, prevalence of thriving informal saving mechanisms in the State reflects the need and demand of saving services. Likewise, credit is also being provided increasingly by informal and semi-formal sources. This demonstrates significant potentialities for credit and savings services in the State. Need of the hour is to tap this potential by formal institutions by ensuring safety of the deposits and making use of such deposits for development activities and asset creation. Being isolated from the mainland, geographical and social diversity of the State always necessitate a different approach to its problems and solutions thereof.

1.2. Review of Literature

In this section, review of existing literature has been placed in a logical manner. Relevant literature and concepts drawn out of it is categorized in important phenomena of the study. The broad categories are namely Definition of Financial

Inclusion/ Exclusion; Relation between Financial and Social Exclusion; Nature, causes and consequences of exclusion; Measurement of Inclusion/Exclusion; Role of banks; Significance of micro finance; Policy level responses; various area specific research and urban phenomenon of the issue.

1.2.1. Financial Inclusion / Exclusion

The literature on access to financial services and economic growth begins with Walter Bagehot who has noted in 1873 the important role of the financial sector in England's economic growth when financial markets were able to mobilize savings to finance the implementation of new technologies in England (Caskey, Durán and Solo 3). The term 'Financial Exclusion' has been used for the first time in 1993 by geographers who were concerned about closure of bank branches in USA and UK due to the recession of early 1990s which led to problem of economic development in communities excluded from financial system (European Commission 9). The initial deliberations and analysis of financial exclusion are focused mainly on geographical access to services and to banking outlets in particular. Throughout 1990s there has been a growing body of research relating to the difficulties faced by some sections of societies in gaining access to financial services including banking, credit and insurance. In 1999, Kempson and Whyley in their widely recognized book viz., *Kept out or opted out?,* seem to have used the term Financial Exclusion in a broader sense to refer to people who had constrained access to mainstream financial services. A completely new dimension to the exclusion debate is added by Kempson and Whyley by defining exclusion as a dynamic process with many households moving in or out of using financial services and sometimes lacked access to it mostly depending on their income levels and other personal and social characteristics. Since then, a number of commentators have added their views on how financial exclusion or financial inclusion should be defined. These include both academics and policy makers e.g., Kempson et al in 2000; Sinclair in 2001; Anderloni in 2003, Carbo, Gardener and Molyneux in 2004; Gloukoviezoff in 2004; Anderloni and Carluccio in 2006; Asian Development Bank in 2000; Chant Link and Associates in 2004; H M Treasury in 2004; Scottish Government in 2005; Treasury Committee in 2006; United Nations in 2006; European Commission in 2008 and the World Bank in 2008. Review of literature shows that most of the operational definitions are context specific, originating form country-specific problems of financial exclusion and socio-economic conditions. Along with time, focus and technological advancements, the definitions have also undergone changes. The initial definitions are based on physical and geographical access to bank branches or financial services. Gradually, along with 'access', 'use' of such financial services are gaining importance in the definition as 'access' alone cannot resolve exclusion unless the accessible services are 'used' whenever required.

The United Nations in 2006, in its landmark research titled *Building Inclusive Financial Sector for Development*, popularly known as the Blue Book, for the first time defines 'exclusion' to include situations where 'bankable' or 'insurable' persons or a firm remains 'unbanked' or 'uninsured'. This definition is different from all others in clearly segregating exclusion situation from the general access or exclusion. Another school of thought considers financial exclusion as both the consequence of market failure (sub-optimal and reduced choice of services) and also due to other factors that limit access to financial services in efficient markets. It is mainly advocated by Molyneux in 2007.

In 2008, the World Bank in its far reaching publication *Finance for all: Policies and Pitfalls in Expanding Access,* has discussed the importance of distinguishing between 'access to', 'possibility of use' and 'actual use of financial services' while defining Financial Inclusion. It also emphasises in distinction between 'voluntary' and 'non-voluntary' exclusion as it believes that failure to assess the distinction may complicate the efforts of measuring and tackling exclusion.

In the Indian context, the most widely recognized initial definition of Financial Inclusion is by the Committee on Financial Inclusion under the chairmanship of C. Rangarajan.[1] It defines Financial Inclusion as a process of ensuring access to financial services and timely and adequate credit at affordable cost to the underprivileged sections of the society. While defining this working definition, the Committee emphasized having a bank account as a very important

[1] In order to address the issues of financial inclusion, the Government of India constituted "Committee on Financial Inclusion" under the Chairmanship of Dr. C. Rangarajan. The Committee submitted its final report to Hon'ble Union Finance Minister on 04 January 2008.

aspect of inclusion as it provides access to the national payment system besides conferring a sense of identity, status and empowerment of the account holder.

Delivery of 'banking services' at an affordable cost to the vast sections of disadvantaged and low income groups is defined as Financial Inclusion by Leeladhar and subsequently this definition has received wide acceptance and seen to be used by many policy makers and researchers e.g. Mahendra Dev in 2006; Sarma in 2008 and may more.

The Committee on Financial Sector Reforms under the chairmanship of Raghuram Rajan[2] adds a new phenomenon of 'wealth creation' to the definition of access in a financially inclusive system by providing access to a range of savings and investment products depending on individual's level of financial literacy as well as their risk perception.

1.2.2. Financial Exclusion as a consequence of Social Exclusion and vice-versa

As Financial Inclusion is gaining importance globally, Financial Exclusion has become an increasingly prominent aspect of the social exclusion debate. Though there is a general feeling that financial exclusion is deeply interrelated with social exclusion, there is very little research empirically establishing this fact. Although some studies have been conducted mostly in Europe to research links between financial exclusion, poverty, social exclusion and over indebtedness, however, most studies investigate the type of population more akin to be involved in such exclusion.

Some researchers emphasise the casual link between financial exclusion and broader phenomenon of social exclusion (Kempson and Whyley 22; Kempson et al. 9 etc.). Two schools of thought has emerged – i) financial exclusion as 'cause' of social exclusion and ii) Financial exclusion as a 'consequence' of social exclusion. European Commission states that there is a circularity of cause and effect between financial and social exclusion (50).

[2] With a view to outlining a comprehensive agenda for the evolution of the financial sector, the Government of India constituted a High Level Committee on Financial Sector Reforms in August 2007. Committee submitted its report on 08 September 2008.

Further researchers express that when more and more people are financially included, risk of social exclusion of the financially excluded ones increases and it becomes increasingly difficult for them to integrate with the society (Hajaj). As Financial Exclusion is not evenly distributed throughout the society and it is concentrated among the marginal sections of the society, it contributes to a much wider problem of social exclusion (Reserve Bank of India, *Report on Currency and Finance* 294- 348).

1.2.3. Nature of exclusion

A number of 'dimensions' or 'forms' of Financial Exclusion have been identified by various authors. However, dimensions identified by Kempson and Whyley are the most widely recognized and used dimensions globally till date. It groups various dimensions into five groups viz., access, condition, price, marketing and self exclusion. Subsequently many authors have deliberated on these dimensions specific to their scope of study.

1.2.4. Causes of exclusion

The factors limiting access to formal financial services have been identified in many researches. However, the most comprehensive details of the factors affecting inclusion globally have been captured in the Blue Book of the United Nations. It provides a detail analysis of factors that influence use of financial services by poor and low-income people such as personal and cultural characteristics, location, impact of national financial developments as well as attractiveness of the products.

Carbo, Gardener and Molyneux co-authored book *Financial Inclusion* shows association of Financial Exclusion with other social and economic factors viz., low household income, expensive credit, no savings and no access to the cheapest fuels etc. The book also highlights that Financial Exclusion in the developing countries are linked to the poverty levels and absence of capital resources and pre-dominant rural based economy. Same view is also expressed by Reserve Bank of India which states that a higher share of population living below the poverty line results in lower demand for financial services (*Report on Currency and Finance* 346).

The barriers to financial inclusion has been logically categorized into three categories viz., societal, supply and demand factors and subsequently analysed by European Commission (44). It states that the reasons of exclusion are complex and they do not act in isolation. Also states that all reasons do not necessarily apply to any one country, importance of these factors varies from country to country.

By narrowing down from 'Financial Exclusion' to 'Banking Exclusion', Kempson, Atkinson and Pilley in 2004 identifies the causes of Financial Exclusion as refusal by banks, identity requirements, terms and conditions of bank accounts, bank charges, physical access, psychological and cultural barriers and non-routing of social security payments through banks.

Various country specific/ region specific studies identify the causes of Financial Exclusion such as Collard, Kempson and Whyley in 2001 for an area based approach for Barton Hills, Bristol; Johnson and Nino-Zarazua in 2007 for Uganda; Financial Sector Deepening- Kenya in 2008 for Kenya; European Commission for Europe in 2008; Sinclair et al in 2009 for United Kingdom. Among such regional studies, European Commission identifies and analyses in detail the causes of exclusion in 14 European countries. It also identifies along with the traditional reasons, some new reasons such as demographic changes (age, migrants, minority etc), bad past experience and fear of seizure etc.

Lack or low level of education resulting low level of awareness and over-indebtedness are identified as reasons for exclusion in few recent studies.

In India, most of the studies are on evaluating the status of exclusion or inclusion rather than empirical finding of the causes. Most of the researches analyse the reasons stated in studies done elsewhere mostly UK. Literature review reveals that only a few studies discuss about the reasons of exclusion. Thorat in 2007 has listed out both demand and supply side factors separately and has showed that these factors together result in high transaction cost apart from procedural hassles (Financial Inclusion: The Indian Experience). Mohan in 2006 has discussed causes of relatively low extension of institutional credit in rural areas (Economic Growth, Financial Deepening and Financial Inclusion). With the changes in the environment, new causes have been identified. Ramesh and Sahai in 2007 has identified the main cause of Financial Exclusion to be 'lack of financial education and advice'.

1.2.5. Consequences of Financial Exclusion

Although Financial Exclusion was always there, the consequences of not having access to key financial products are much more now than the past (Kempson and Whyley 22). These consequences are further studied by grouping them between financial and social consequences by European Commission (53-56). Gloukoviezoff deliberates more on the social consequences of low self-esteem, self-isolation etc among people who are excluded or marginally excluded. RBI also discusses the loss of business opportunities for banks as a consequence of Financial Exclusion (*Report on Currency and Finance Report on Currency and Finance* Vol.V 302). Another important consequence of exclusion is identified as proliferation of high cost alternate providers of financial services (Kempson, Atkinson and Pilley 11). Impact of exclusion on communities is discussed by many commentators. Due to its wide spread consequences on communities and societies, the issue of Financial Exclusion have gained more importance from policy makers in recent times globally.

1.2.6. Measuring Inclusion /Exclusion

Although there has been high number of researches on quantification of many aspects of inclusion/ exclusion, there is growing concern that availability of information on access and use of financial services is barely enough to measure the extent of inclusion/ exclusion.[3] Due to non-availability of 'demand side data', most of the studies use 'supply side data' collected mostly from the regulators, to measure inclusion/ exclusion. However, major limitation of such data is that they cover only regulated financial system excluding informal and semi-formal financial services which also include a larger client base specially in the developing countries (CGAP, *Financial Access 2009* and *Financial Access 2011*). The CGAP in its recent publication *Financial Access 2011: An Overview of the Supply-side Data Landscape* describes the difficulty in measuring Financial Inclusion as inclusion does not mean the mere availability of services but rather whether various dimensions of the financial system are working effectively to extend demand-driven services to clients.

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[3] As expressed by Kumar, *Access to financial services in Brazil 1-11;* RBI, *Report on Currency and Finance Report on Currency and Finance*. Vol.V 318 and CGAP, *Financial Access 2009*

Various determinants of access and usage are used in various researches. Beck, Thorsten, Asli Demirguc-Kunt and Maria Soledad Martinez Peria in 2005 has presented a comprehensive series of new indicators of banking sector penetration across 99 countries based on a survey of bank regulatory authorities. Subsequently, these indicators have been widely used by many researchers depending on the availability of data. A wide ranging report 'Monitoring poverty and social exclusion' (Howarth, Catherine, Peter Kenway, Mohibur Rahman and Guy Palmer) proposes 46 different indicators of Social Exclusion, three of which also relate to Financial Exclusion.

It is observed that in most of the studies researchers use cross tabulation and regression analysis to identify the factors and its effect on various indicators of access and usage of financial services e.g., Kumar in 2005; Johnson and Nino-Zarazua in 2007; FSD –Kenya in 2008; Finney and Kempson in 2009. Further development in the measurement technique has also need to restrict itself of using only supply side data as demand side data is not generally available. Sarma in 2008 has developed an Index of Financial Inclusion (IFI) using supply side data, which has received wide application. Another index has been developed by Chakravarty and Pal in 2010. An increasing number of countries have started collecting useful data on access and usage of financial services either as a part of general survey/census or by undertaking specific financial inclusion survey.

1.2.7. Policy level responses

There is increasing recognition that financial regulation and supervision have an important impact on access to financial services in addition to their importance for financial stability and protection (United Nations 139-152). Various literatures discuss about Government policies, laws and regulations, voluntary charters and codes of practice of financial inclusion and its effects. Kempson, Atkinson and Pilley discuss the policy level responses in developed economies and derived significant lessons from it for the developing countries. It concludes that an appropriate approach among 'voluntary agreement', 'legislation' or a 'mix of two' depends largely on the culture and legal system of the country concerned. Although Government policies, laws and regulations can bring desired focus on the issue of financial inclusion, some of them might also constrain building inclusive financial system (Kempson and Whyley 46-47; United Nations 139-154). So, many advocate a minimalistic role for Government intervention. They suggest that Government should adopt a 'do no harm' approach to ensure that laws, regulations and supervisions do not impede the development of an inclusive financial sector. Kempson and Whyley also observe that sometimes Government policies can create new market for financial services. Although various studies had been done discussing about policies and regulations and its effect on Financial Inclusion, a new dimension to the debate is added by European Commission which emphasized development of 'appropriate indicators' to measure and assess the policies implemented.

Gloukoviezoff emphasises that to make regulations effective, a precise target on Financial Inclusion to be assigned and an independent assessment to be carried out on the policies implemented on the targets adopted.

A very wide research on the financial inclusion mandates across 142 economies has been conducted by CGAP in 2010.[4] It observes that Financial Inclusion mandates are on the agenda of many financial regulators and reform efforts are widespread. However, the study observes with concern that implementation capacity of such mandates is limited. The capacity gap is larger in low-income countries though the agenda of these countries are broader. While observing the difference in approaches by high and low income countries, it is established that low and medium-income countries tend to focus on promoting access to deposit and credit services whereas for high-income countries focus has gradually increased on issues like consumer protection and financial literacy.

Another very important study in this regard has been conducted by Alliance for Financial Inclusion in 2010 through a survey on financial inclusion policies in developing countries.[5] It captures current trends and a multiplicity of approaches taken by developing countries towards financial inclusion. The key lessons learned

[4] *Financial Access 2010: The state of Financial Inclusion through crisis*

[5] *The AFI survey on financial inclusion policy in developing countries : Preliminary findings*

from policymakers and regulators in developing countries are also documented so that it helps policymakers around the world to make effective plans.

'Mainstreaming the informal sector' and importance of promoting micro finance as agenda for financial inclusion has received continuing importance in recent years.[6] Bearing the differences of commercial banks and micro finance providers, studies advocate different policy or regulatory initiatives for both (Gong and Zhou 495-520).

In the Indian Context, most of the literatures on Financial Inclusion / Exclusion discuss about policy initiatives starting since 1960s such as bank nationalization; establishment of Local Area Banks and Regional Rural Banks; Local area approach for channelizing credit for equitable growth etc. The Committee for Financial Sector Reforms has assessed the strategies of credit (including micro-credit) and insurance in India to form a new strategy for inclusion encompassing new organization structure, focus on risk mitigation, use of technological advancement, improving infrastructure and financial literacy as well as rethinking on targets, subsidy and public goods.

1.2.8. Role of banks

Role of banks in combating Financial Exclusion is discussed in many literatures. The role of German Savings Banks in preventing financial exclusion is studied by Bresler, Natalia, Ingrid Größl and Anke Turner in 2000. It establishes that the public mandates of the banks had strong tie with access to financial services in the community and expresses concerns about the increasing pressure on the profitability of the banks that might lead to weaken banks' ability to maintain the public mandate thereby increasing exclusion.

Caskey in 2000 has advocated an outreach strategy for banks for effectively bringing unbanked households in to banking system. This strategy includes opening special branch offices, called 'outlets' that are conveniently located for lower income households. The five elements of his strategy have received wide acceptance from policy makers across the globe. Most of the policies towards Financial

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[6] AFI 7; Gong and Zhou 495-520; RBI, *Report on Currency and Finance* Vol.V 294-348; Conroy 53-78

Inclusion adopted by developing countries invariably include some elements of these five elements of Caskey's outreach strategy. These five elements are viz., 'outlets', 'starter bank account', 'accumulation of savings', 'deposit secured loan' and 'association with community based organisations'.

There are two schools of thought in analyzing the role of banks in Financial Inclusion, one as a part of bank's social responsibility and the other as a profitable business proposition. Prior and Argandona in 2008 while analyzing the importance of banks' social responsibility specially in eradicating poverty and promoting Financial Inclusion, emphasizes that all decisions should take both dimensions of 'economic' and 'social' into account. Approaching the goal of financial inclusion by the financial service providers (includes banks) in a profitable way is gaining importance. The World Bank is of the opinion that efforts to improve financial inclusion should also make business sense to the providers to have a lasting effect (*Finance for All – Policies and Pitfalls in Expanding Access).* Some research has empirically established that innovations in finance may turn banking services to poor as a profitable business proposition (Prahlad 289-318). Kochhar in 2009 has identified that 'not for profit' mandate for providing financial access as a serious shortcomings in the current efforts towards Financial inclusion in India.

Leeladhar's definition of Financial Inclusion as delivery of 'banking services' had received wide recognition in India. Chakrabarty had identified banks as the key driver for inclusive growth specially to mitigate the supply side processes that prevent underprivileged from gaining access to the financial system (*Banking – Key driver for financial inclusion*). Role of banks in tackling Financial Exclusion in India has been analysed by Vats in 2007 and Ramakumar in 2007.

1.2.9. Significance of Micro Finance

Likewise, role and significance of Micro Finance Institutions (MFI) and Micro Finance in Financial Inclusion had been discussed in numerous literatures. Role of Micro Finance as an instrument to eradicate Financial Exclusion in APEC countries has been studied by Conroy in 2005 who also critically examines the distinction between 'microfinance' and 'microbanking'. Almost all literatures on Financial Inclusion/ Exclusion on India invariably discuss the significance of Micro Finance in Financial Inclusion in the country. RBI has identified Micro Credit as the most significant contributor to Financial Inclusion during 1990s and 2000s. From the Invest India Income and Saving Survey 2007, it is evident that an increase in Micro Credit is associated with a lower incidence of borrowing from high cost money lenders specially in the lower-income segment. Committee on Financial Sector Reforms also recognises Micro Finance as the fastest growing 'non-institutional' channel for financial inclusion in India. Sa Dhan[7] in its publication *Expanding outreach to underserved regions: Microfinance in the North East Region* discusses the importance of Micro Credit in the remote and unbanked areas of North Eastern region of India to bring larger sections of population in to the ambit of formal financial services.

However, some evidence of the reverse has been proved empirically by Barman, Mathur and Kalra as their research had proved that indebtedness to informal sources increase among the borrowers of MFIs if loan from MFIs are used for non-productive purpose. MFIs lending without sufficient information on the credit worthiness of the borrowers may contribute to over indebtedness and gradual exit from formal financial services. Over indebtedness as a cause of Financial Exclusion has been widely discussed and established in many literatures globally.

1.2.10. Geographical Area Specific Research

There are literatures available for various geographical area specific studies in the topic. Most of the studies have used supply side data due to its availability. Few major studies which involve demand side data are mentioned here.

One of the pioneering studies has been conducted by Caskey in 1997 in three geographic locations in USA among 900 respondents of low income group using high cost financial services from Alternative Financial Sector (AFS). This study is considered as one of the most comprehensive study on AFS which encompasses both opinions of the customers as well as the suppliers of financial services in the AFS. The study observes that people were using relatively high cost services of AFS suppliers due to tailored products, convenience of location and business hours and also due to unawareness of the fact that expenses are high compared to credit unions and banks. However, the risk screening procedure at credit unions and banks used to

[7] Sa Dhan is the apex networking body of MFIs in India

screen most of these low income people as not eligible for credit. The study also observes that the AFS suppliers with its sale practices encourage their patrons to remain in a perpetual state of debt with little prospect of improving their economic wellbeing. The author concludes that the thriving AFS presents credit unions with business opportunities and chances to tap the demand for their services among low income households. Further, credit unions by emphasizing savings and customer education on financial planning and budgeting can help the poor households in their economic upliftment.

Collard, Kempson and Whyley in 2001 has studied about Barton Hill in Bristol through in depth interview of users, providers including commercial bodies, voluntary sectors and local and central Governments. This study approaches the problem from a different standpoint that of the financially excluded people living in a community where many of their peers are also excluded. The study provides a range of possible solutions by presenting local people's assessment of the best ways to tackle them. It emphasizes the importance of genuine partnership between national providers and the local organizations as it is felt that local people should be involved in implementation of the initiatives.

Jones in 2001 has undertaken an in depth study in Liverpool through a survey of 59 people of low income households on how people on low income access and use consumer credit. Majority of participants did not use mainstream or bank credit, instead go for a range of alternative sources. Factors influencing the choice of source of credit have been found as accessibility, ease and flexibility in repayment, affordability, tradition and culture.

A path breaking study has been conducted in Brazil in 2005 by Kumar involving survey of enterprises as well as urban individuals (*Access to financial services in Brazil).* The study first identifies the socio economic characteristics of the respondents and then mapped it with access to financial services through an econometric analysis of the determinants of access.

Carbo, Gardener and Molyneux in 2007 have discussed nature, causes and extent of Financial Exclusion in Europe. The study observes that the critical issues of Financial Exclusion have not received proper policy attention; rather policies have been adopted in ad-hoc basis. Authors advocate legislation that sets standards and obliges banks to open basic bank accounts and follow non-discriminatory lending practices.

In Australia, Roy Morgan Research undertakes one of the most detailed studies on Financial Inclusion by interviewing over 50,000 respondents per annum. Centre for Social Impact in 2011 has studied the situation in Australia which includes reasons and status of Financial Exclusion; relation of exclusion to the cost of assessing the services etc. The study advocates development of a 'national financial exclusion indicator' that possesses the potential to be measured and compared on an annual basis.

In Uganda, FinScope Uganda survey has been undertaken by Steadman Group in 2006. It has comprised a national representative sample of 2959 adult respondents. Using this survey data, Johnson and Nino-Zarazua in 2007 has analysed the financial service use to have insight in to the financial exclusion in Uganda. After analysing a wide range of socio-economic, demographic and geographic factors, the study concludes that education, age, product design and gender have significant influence on Financial Exclusion in the country.

Likewise in Kenya, Financial Access Survey has been conducted by Steadman Group in 2006, comprising a national representative sample of 4418 adult respondents. FSD- Kenya in 2008 has analysed the survey findings. Many non-economic factors are found to have significant bearing on exclusion. Analysis establishes that employment or main source of income, education, gender have significant influence on use of financial services. Informal financial services are found to be the single category through which most people are included.

Gloukoviezoff has studied Financial Exclusion and over indebtedness situation in Ireland in 2011. The study also provides an assessment of strategies that had been implemented in Belgium, France and UK to examine what policies could suit the needs of Ireland.

In India, Prahlad in 2005 has studied the case of ICICI Bank Ltd catering to the needs of the vast and emerging segment of rural population in a socially responsive and profitable way. Ramji in 2009 has studied Financial Inclusion in Gulbarga district of Karnataka through collection of primary data from 999 respondents spread over 50 villages. However, this study suffers with the limitation of studying only BPL households. The study establishes that opening bank accounts in a mission drive to receive Government benefits without making the people aware about the use of the same has not served any good. Rather it has resulted in additional costs to banks without any benefits to the bank and the society. Such drive could not change the saving behavior of the poor households who continued to save in SHGs mostly due to convenience and compulsory nature of savings.

In a case study of Financial Inclusion in West Bengal by in 2011 by Chattopadhyay, rural survey in three districts of the state has been undertaken. Analysis of the survey results reveals that money lenders are still prominent players in the survey areas as rural people are largely unaware about the banking services. The IFI developed by Sarma has been calculated for the districts of the State as well as for other states of the country by using supply side data.

In 2008, Goyal has made a comparative analysis of the status of financial inclusion in Assam, North Eastern States and India by using supply side information. His study suggests that for effective financial inclusion in the region, proper linkage between banks and community based organizations is required as well as use of advanced technologies to reduce the transaction costs on use of financial services. Bhanot, Bapat and Bera in 2012 explore the factors which are critical in determining the extent of Financial Inclusion in the North Eastern Region. These factors are identified through logistic regression analysis of primary data collected from 411 households in the states of Assam and Meghalaya.

Financial Inclusion in the State of Assam has been studied by Rabha in 2012 with special reference to the status in the Udalguri district of Assam. Rabha uses both secondary and primary data collected in the survey area to calculate IFI developed by Sarma and suggests for effective financial inclusion in her study area.

1.2.11. Urban phenomenon

Review of literature reveals that most of the studies done as well as policy initiatives undertaken so far are either general or rural based – specially in Indian context. However, it is also observed that gradually a concern is growing for focused attention on urban financial inclusion due to rapid urbanization of the country.

A study of the urban unbanked in Mexico and the United States has been conducted in 2006 which examined the ways in which lower-income households obtain basic financial services in urban communities and the efforts of private and Government organizations in making to lower the cost and improving the quality of these services. Finally it assesses the rationale and challenges facing the strategies that both countries were adopting. This study has been undertaken by Caskey, P. John, Clemente Ruíz Durán and Tova Maria Solo.

One of the most important researches on urban inclusion has been by Kumar in Brazil which has been discussed in §1.3.10 already.

In India, Ramanathan Foundation in 2002 has discussed various issues of access to money for the urban poor by using Paradigm Group's survey data in Bangalore. Rupambara has conducted a demand side survey in Delhi in 2007. From the analysis of the survey data and secondary data, it concludes that product design, Business Correspondents and Financial Literacy needs to be given importance so that Financial Inclusion in urban areas turn to be a successful business model rather than just a step under Corporate Social Responsibility of banks. The untapped business opportunity for micro finance in urban India has been highlighted by Devaprakash in 2007. His study observes that in spite of availability of adequate delivery channels in the urban areas, the players are yet to tap the full potentiality of the market mainly due to lack of focus. The study also recommends different approach to be adopted for urban areas from rural areas. Jagan Mohan in 2008 has discussed the importance of metro and non-metro urban centres in banking in India through statistically comparing the contribution of urban centres to the overall banking business in the country. By analyzing only supply side data, it was established that urban centres have registered exponential growth in business during 2005-2008. The study suggests establishment of local area banks with mandate of financial inclusion subjecting to relaxed regulations, classification of all small loans irrespective of purpose as priority sector advance as some measures to foster the inclusion initiative.

1.3. Statement of the Problem

It is observed from the literature review that studies on Financial Inclusion globally is mostly based on or gives emphasis to the rural areas. There is also a tendency of treating urban exclusion as an extension of rural exclusion. In reality, the factors affecting financial exclusion in urban areas might be very different from those in rural areas. In India, population in urban areas is growing faster than in rural areas and at a much faster growth than the overall population growth. For the first time since independence, the absolute increase in population is more in urban areas than in rural areas as per the Census 2011. The level of urbanization has also increased from 27.81% in 2001 census to 31.16% in 2011 Census. *State of the World Population 2007 Report* by the United Nations predicts that the urban percentage of the world's population is expected to reach 60% by 2030. India's urban population is expected to reach 433 million by 2021, while total population may reach 1340 million. Thus the urbanization level in the country in the year 2021 is expected to be about 32%.[8]

This rapid growth of urbanization and urban population is necessitating a separate approach to address the problems of the urban poor as well as urban financial exclusion. The urban areas which have adequate infrastructure and good presence of commercial banks also have a large section of needy population which is deprived of the benefits from formal banking sector. The very existence of flourishing informal financial markets offering urban poor convenient access to money at high prices reveal a huge demand unmet by banks or other formal financial services.

From the review of literature, it is also observed that no detail study on Financial Inclusion in the State of Assam has been conducted yet. Scope of study of Goyal in 2008 and Rabha in 2012 was very limited. Further, there exists gap in research of Financial Inclusion in the urban areas of the State. This study with a detail analysis of secondary as well as primary data collected from both 'excluded' and the 'providers' is expected to bridge this gap. Through the primary survey conducted among the 'excluded' population residing in the urban areas of the State, the study brings insights into the factors affecting financial inclusion and recommends few ways to meet the unmet needs of the 'excluded'.

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[8] Report of the Steering Committee on Urban Development for 11th Five year plan

1.4. SCHEME OF CHAPTERS

For studying the financial inclusion in the State of Assam with specific reference to its urban areas, the study has been divided into nine interrelated chapters.

The **first chapter** is introductory in nature which contains introduction to the concept of Financial Inclusion in a global and national platform. After a brief review of existing literature, problem under study has been stated.

Objectives of the study, its scope and limitations have been placed in the **second chapter**. Definitions of various major terms as applied in the study also have been placed in this chapter.

Research methodology has been discussed in detail in the **third chapter**.

Conceptual framework is discussed in detail in the **fourth chapter** which includes various concepts of Financial Inclusion and its evolvement in global and national scenario. Various measurements of Inclusion/ Exclusion and evolvement of such measures have also been placed in the chapter. Various policy initiatives undertaken for improving Financial Inclusion are discussed in this chapter.

In the **fifth chapter**, status of Financial Inclusion in the State of Assam has been studied. Trend in the inclusion scenario of the State for a period of 21 years during 1991-2011 has been discussed. Index of inclusion has been computed and analysed for the State and India. To have a deeper insight into the inclusion scenario in the urban areas of the State, specific analysis of urban inclusion scenario for the same period has been attempted in the chapter for the State as well as for India. Index of inclusion has been computed and analysed for urban areas separately.

Analysis of demand side survey has been placed in the **sixth chapter**. Both descriptive and quantitative analytical methods have been used to analyse the primary data collected through survey and logical conclusions are attempted to derive. Awareness, experience, expectation and perception regarding banking services viz., savings, credit and transaction have been analysed. Brief on the awareness, availability and reasons for access to insurance or otherwise among the respondents has been placed in this chapter.

As the respondents are unbanked, they use various non-banking alternatives. Usage of non-banking services for basic financial services viz. Saving, Credit and Transactions are studied from the primary data collected through the survey among unbanked urban adults. After a series of regression analysis, factors have been identified which have significant influence in predicting respondents' choice of using a particular saving mode or credit source. It is placed in the **seventh chapter.**

As banks are the main drivers of Financial Inclusion in India and branches are the focal points, perception of the Branch Managers regarding various issues of Financial Inclusion are studied in the **eighth chapter**.

The concluding chapter i.e., **ninth chapter** deals with the conclusions derived from the findings of the study. An attempt is also made to put forward recommendations for effective financial inclusion in the State and suggestions for future research in the area.

Further, three published papers of the researcher in various academic journals are placed in the **Appendices**.

Chapter 2

Objectives, Scope and Limitations

2. Objectives, Scope and Limitations

2.1. OBJECTIVES

The objectives of the study are -

i) To study the status of Financial Inclusion in Assam with specific reference to urban areas.
ii) To identify demand and supply side factors limiting Financial Inclusion.
iii) To study the usage of non-banking financial services by unbanked.

2.2. SCOPE

The study covers the State of Assam and the urban banking centres of the State viz. Dibrugarh, Guwahati, Nagaon, Silchar and Tinsukia (refer §2.5.4). For comparison purpose, all India scenarios have also been analysed. Some basic facts about the State are mentioned in the Table 2.1 below.

Table 2.1 : Basic facts about Assam*

Particulars	*Assam*	*Urban Assam*
Population	31,205,576 (1,210,569,573)	4,398,542 (377,106,125)
Sex Ratio (Female per 1000 males)	958 (943)	946 (929)
Literacy Rate	73.18 (74.04)	88.88 (84.98)
Per Capita Income At Constant (2004-05) Prices	Rs. 21,500/- (Rs.35,993/-)	-

Source : Office of the Registrar General & Census Commissioner, India and Directorate of Economics and Statistics, Government of Assam

*Figure in bracket shows corresponding value for India

As on March 31, 2011, there are 1546 number of reporting offices of banks in the State. The total deposit at the Scheduled Commercial Banks operating in Assam constitutes 1.1% of the total deposit in the country and the outstanding credit constitutes 0.5% of outstanding credit in the country.

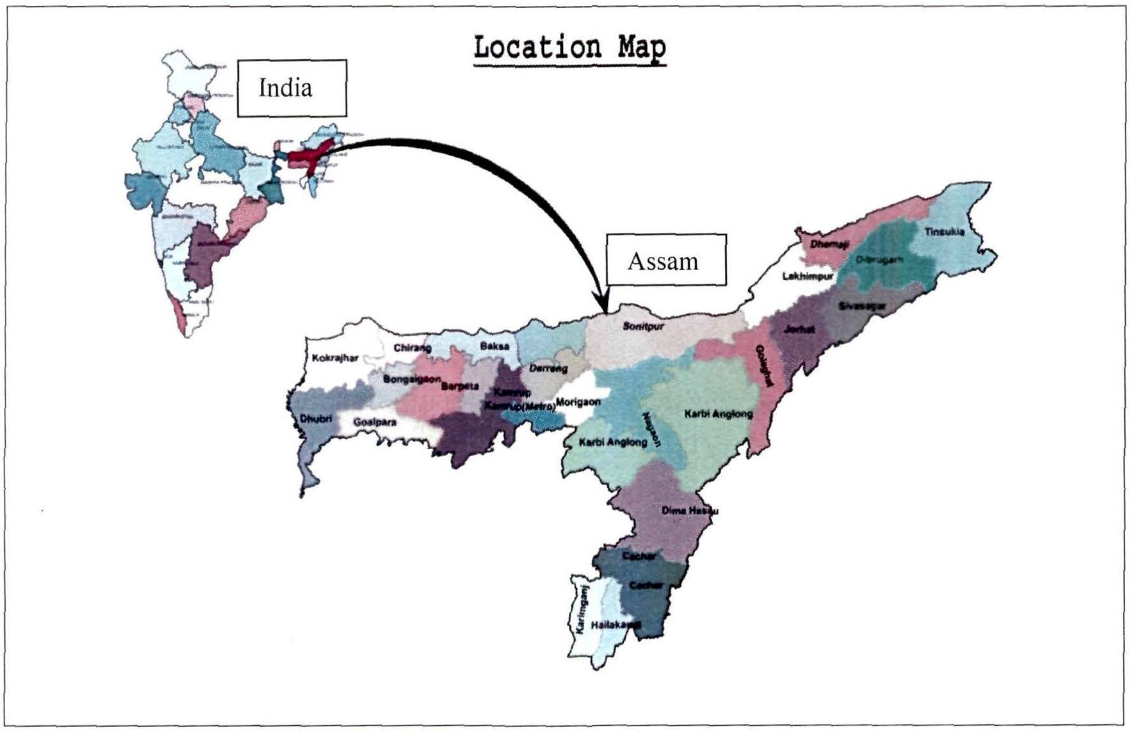

Figure 2.1. Location Map of Assam in India

Source : http://online.assam.gov.in/assammaps

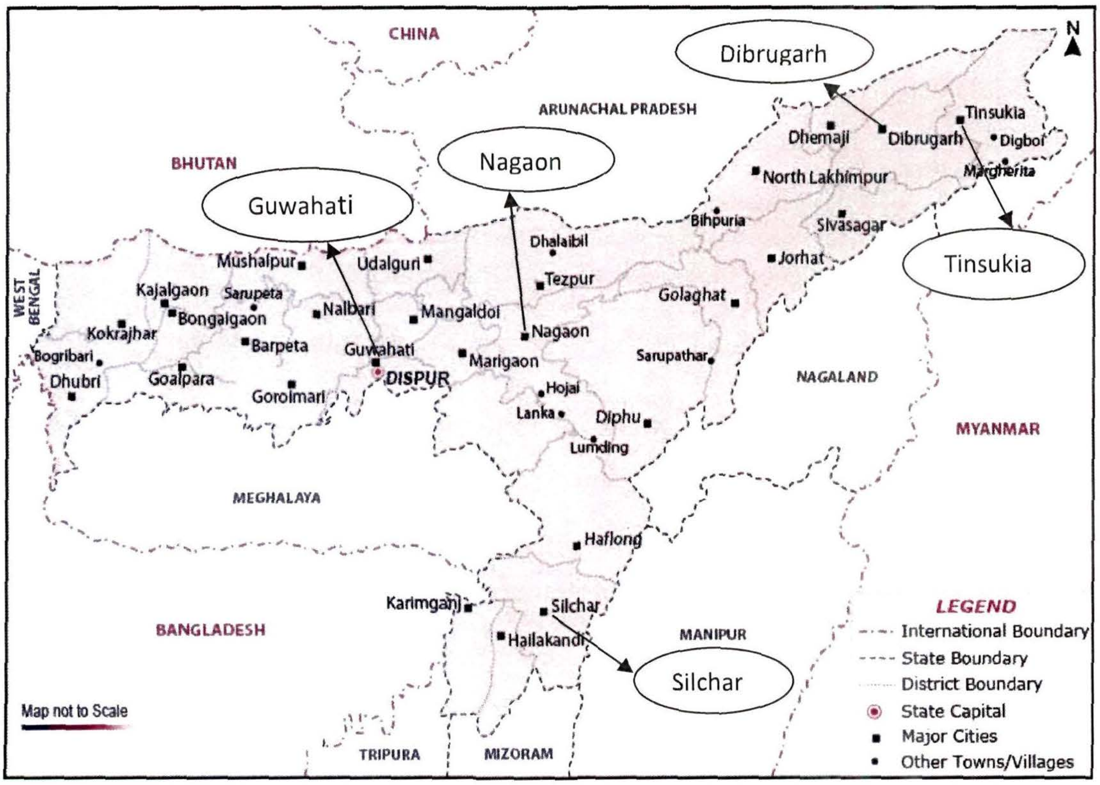

Figure 2.2. Locational map of Assam showing study area

2.3. LIMITATIONS

The study suffers from the following limitations -

2.3.1. As banks are the gateway to the most basic form of financial services, banking inclusion/ exclusion are most often used as analogous to financial inclusion/exclusion.[9] The study primarily takes into consideration banking inclusion as financial inclusion.

2.3.2. The study covers individuals only and does not cover households and firms.

2.3.3. The study covers secondary data pertaining to the Scheduled Commercial Banks.

2.3.4. The branch manager or the head of a bank branch has been considered as representative of the branch.

2.3.5. The study suffers from dearth of published information on urban Financial Inclusion.

2.3.6. The study is subject to common limitations of sample survey.

2.4. PERIODICITY

Periodicity of the secondary data for trend analysis is 21 years during the period 1990-2011. The primary data was collected during the financial year 2010-11. Financial year in India starts from April 1 and ends on March 31 of the subsequent year.

[9] Leeladhar, V. (2005). Taking banking services to the common man – financial inclusion.*BIS Review*, 83 defines "Financial Inclusion is delivery of banking services at an affordable cost.............."

2.5. DEFINITION AND UNDERSTANDING OF MAJOR TERMS

In this section, definitions of various major terms used in the study are placed. It may be noted that there are many different definitions of these terms in the existing literature. However, the following definitions have been used in the context of the study.

2.5.1. Financial Inclusion

The study adopts the definition of Financial Inclusion by Leeladhar as delivery of banking services at an affordable cost to the vast sections of disadvantaged and low income groups.[10] As banks are the gateway to the most basic forms of financial services, banking inclusion/ exclusion has been used as analogous to financial inclusion/ exclusion. A detailed discussion on various definitions of Financial Inclusion has been done in § 4.1.1.

2.5.2. Financial Exclusion

The Study adopts the definition by European Commission 2008.[11] It defines Financial Exclusion as the process whereby people encounter difficulties in accessing and /or using financial services and products in the mainstream market that are appropriate to their needs and enable them to lead a normal social life in the society in which they belong.

2.5.3. Social Exclusion

The definition by United Nations has been adopted in the study.[12] It defines Social Exclusion as an involuntary exclusion of individuals and groups from society's political, economic and social processes which prevents their full participation in the society in which they live.

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[10] Leeladhar, V. " Taking banking services to the common man – financial inclusion" describes that banking services are in the nature of public good.

[11] European Commission. *Financial Services Provision and prevention of financial exclusion.* 2008. Print.

[12] Atkinson, A.B and Marlier, E. *Analysing and Measuring Social Inclusion in a Global Context.* New York.Department of Economic and Social Affairs. United Nations P. 2010. Print.

2.5.4. Urban Centres

The census population groups in India are 'rural' and 'urban', whereas the population groups used in banking statistics are 'rural', 'semi-urban', 'urban' and 'metropolitan'. There is no unique relationship between the two. For comparison purpose and simplicity, 'Rural' and 'Semi Urban' has been taken as 'rural', and 'urban' and 'metropolitan' has been combined as 'urban' as used by Mohan.[13]

As per RBI, Urban centres are with population of one tenth of a million and above but below 1 million and Metropolitan Centres are with population of 1million and above as per 2001 census. The study considers the following centres of the State as Urban centres as per RBI statistics[14]. Figures in brackets indicate population as per 2001 census.

i) Guwahati (881,809)

ii) Nagaon (123,265)

iii) Silchar (184,805)

iv) Dibrugarh (137,661)

v) Tinsukia (108,123)

2.5.5. Underbanked

A location, either a district or a State, is considered Underbanked where average population per branch office is more than the national average.

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13 Mohan, Rakesh. "Economic Growth, Financial Deepening and Financial Inclusion". Web. 20 May 2012. < http://www.rbi.org.in/scripts/BS_SpeechesView.aspx?Id=310>

14 http://rbidocs.rbi.org.in/rdocs/Publications/PDFs/18T_QUA210910.pdf

2.5.6. Unbanked

A person is referred as unbanked if he/she belongs to any of the following group

-is not having any bank account at present

- is having a bank account but not operated for at least last two years

2.5.7. Know Your Customer (KYC)

KYC norms are guidelines that banks and Financial Institutions (FI) follow in identifying the customers, accepting them, monitoring their transactions and managing risk involved in the whole process. The objective of KYC guidelines is to prevent banks and FIs from being used, intentionally or unintentionally, for money laundering activities. In the process, banks and FIs collect some documentary evidences from customers which are popularly known as 'KYC Documents'. These are mostly identification, signature and address verification documents.

2.5.8. Banking Facilitators and Banking Correspondents

Banking Facilitators (BF) and Banking Correspondents (BC) are individuals or entities engaged by banks to undertake some activities of banks at places other than the bank premises with an objective of increasing the banking outreach without establishing a banking unit. Detailed discussion is placed in Chapter 4.

2.5.9. Demand Side

Demand side signifies the unbanked population.

2.5.10. Supply Side

Supply side signifies the supplier of banking services i.e., the banks.

Chapter 3

Research Methodology

3. Research Methodology

The study involves analysis of both primary and secondary data. For this purpose, appropriate statistical tools have been applied. The methodologies followed to fulfill each objective is discussed in brief below -

3.1. Methodology for Objective #(i)

- To study the status of Financial Inclusion, secondary data is collected and analysed based on a series of alternative measurements. Index of Financial Inclusion (developed by Chakravarty and Pal, 2010, refer §3.6) is calculated encompassing various dimensions of inclusion.
- Trend is studied for the possible explanations to observed patterns.

3.2. Methodology for Objective #(ii)

This requires identification of factors hindering financial inclusion. Both demand and supply side factors are studied from primary data collected through sample surveys in the study area with help of questionnaires designed for the purpose. A mixture of judgmental and convenience sampling is undertaken. Together with common descriptive analysis, both qualitative and quantitative analysis is undertaken on the primary data. Logistic Regression analysis, specifically Binary Logistic Regression with categorical variables (refer §3.7), is used to a great extent in the analysis of demand side data. Due to the ordered response nature of questions, for analysis of supply side data non-parametric statistical tools are used viz., Kruskal-Wallis test (refer §3.8).

3.2.1. Demand side

The survey covered 520 urban residents in five urban banking centres of the State of Assam.

Table 3.1: Distribution of respondents (demand side)

Urban centre	*Number of respondents*
Dibrugarh	39
Guwahati	336
Nagaon	46
Silchar	66
Tinsukia	33
Total	**520**

The distribution of respondents is in approximate proportion of population in these urban centres as per 2001 census.

The unit interviewed was chosen who fulfills the following criteria

i) An adult

ii) Residing or working in any of the urban banking centres of the State

iii) Not having any bank account at present or having a bank account but not operated for at least last two years.

The study first identified the key socio-economic characteristics or personal characteristics of the respondents viz., gender, age, education, religion, caste, residing area, dwelling type, location, consistency of residing at a location, occupation, income, personal belongings etc. Subsequently, these characteristics are attempted to map with the following –

i) Infrastructure Availability

ii) Awareness level

iii) Experience, Expectation and Perception regarding banking services

iv) Usage of non-banking financial services for saving, credit and transaction

v) Awareness, availability and reasons for access to insurance or otherwise

3.2.2. Supply side

A sample size of 100 respondents who are heading branches of 30 different banks at urban locations of the State is considered. Perception of the respondents on various issues of Financial Inclusion is collected through a questionnaire designed for the purpose. The respondents' perception on the constraints towards inclusion both from customers' and providers' point of view was collected. Further, the respondents' suggestion on improvement of inclusion was also collected and analysed.

Table 3.2 : Distribution of respondents (supply side)

Location	*Number of Bank Managers*		
	Public Sector Bank	*Private Sector Bank*	*Total*
Dibrugarh	5	3	8
Guwahati	48	12	60
Nagaon	8	1	9
Silchar	10	5	15
Tinsukia	4	4	8
Total	**75**	**25**	**100**

3.3. Methodology for Objective #(iii)

From the primary data collected from surveys as mentioned above, usage of non banking services among urban unbanked adults is studied. Along with common descriptive analysis, binary logistic regression analysis is carried out to identify the factors influencing the choice of a particular saving mode or source of credit.

3.4. Data sources

In this study, data and information have been collected from both secondary and primary sources. A number of secondary sources such as reports of various commissions, committees, multilateral organizations; books; articles in different journals, periodicals, newspapers, magazines, websites on Financial Inclusion have been consulted.

Primary data for the study is collected by two surveys as mentioned in §3.2.1 and §3.2.2.

3.5. Research Instruments

The primary data for the study has been collected with the help of two questionnaires designed for the purpose. Sample questionnaires are placed in Annexure -1 (used for survey among urban unbanked adults) and Annexure -2 (used for survey among Bank managers).

As majority of the unbanked people belongs to the marginal sections of the society and not convergent with English, the questionnaire was translated to the vernacular language (i.e., Assamese) for its effective use. Sample translated questionnaire is placed at Annexure -3.

3.6. Index of Financial Inclusion

There is no universally accepted measure of Financial Inclusion. However, many indicators are commonly used to measure various dimensions of inclusion/ exclusion such as number of bank accounts per 100 adult population, average population per branch office, per capita deposit/ credit, Credit Deposit Ratio, per capita credit to Net State Domestic Product (NSDP) etc. However, each such parameter provides partial information about inclusion. Thus, using individual indicators may lead to misleading understanding of the extent of financial inclusion.

Researchers have developed various methods of measuring Financial Inclusion. The methods which incorporate several dimensions of Financial Inclusion in one single number are getting widely recognized. Sarma in 2008 has developed an index of financial inclusion with some modifications in approach which is used by UNDP for computation of some well known indexes such as HDI, HPI, GDI and so on. Sarma's index has been subsequently used in many studies.

In 2010, Chakravarty and Pal have developed another index for measuring Financial Inclusion. This index overcomes the limitations of Sarma's index by way of incorporating an axiomatic structure and calculation of contribution of each dimension in the index. In this study, Chakravarty and Pal's index has been used for measuring financial inclusion.

Chakravarty and Pal assumed that the banking system has $k \geq 1$ dimensional activities. Each dimension represents a functioning. Let *xi* be the attainment level or the value of functioning *i*. The lower and upper bounds of *xi* are denoted by *mi* and *Mi* respectively. We assume that $m_i < M_i$. For empirical applications sample minimum and maximum can be chosen as values of m_i and M_i respectively. An indicator for functioning *i* is a real valued function *A* that associates a value $A(x_i, m_i, M_i)$ to each $x_i \in [m_i, M_i]$. It is assumed that *A* is continuous in its arguments. Continuity ensures that minor observational errors on x_i, m_i and M_i will generate minor changes in the value of *A*. *A* is specified as

$$A_r(x_i, m_i, M_i) = \left(\frac{x_i - m_i}{M_i - m_i}\right)^r \qquad (1)$$

Where $0<r<1$ is a constant. Chakravarty and Pal has interpreted r as an inclusion sensitivity parameter in the sense that given x_i, m_i and M_i as the value of *r* decreases $A_r(x_i, m_i, M_i)$ increases. Weights to variables are assigned corresponding to the eigenvector of the leading eigen value after performing Principal Component Analysis among the indicators.

This is an axiomatic approach which satisfies four basic axioms for an arbitrary indicator A of an individual functioning. The axioms are placed below along with analysis of the index given by (1) in terms of these axioms.

i) Normalization :

$$A(x, m_i, M_i) = \begin{cases} 1 \; if \; and \; only \; if \; x_i = M_i \\ 0 \; if \; and \; only \; if \; x_i = m_i \end{cases}$$

Normalization ensures that the indicator levels for functioning *i* are one and zero in the extreme cases when the functioning assumes its maximum and minimum values, M_i and m_i respectively.

ii) Monotonicity:

Given m_i and M_i, for any $\delta > 0$ such that

$x_i + \delta \in [m_i, M_i]$, $A(x_i + \delta, m_i, M_i) - A(x_i, m_i, M_i) > 0$.

Monotonicity says that an increase in the attainment level of functioning i increases the value of the indicator. For instance, financial inclusion should increase if there is an increase in the number of credit accounts per 100,000 adults.

iii) Homogeneity:

For any $c > 0$, $A(x_i, m_i, M_i) = A(cx_i, cm_i, cM_i)$

The homogeneity condition makes sure that the indicator becomes independent of any unit of measurement. This, in turn, becomes helpful for aggregating the indicators across functionings. For instance, the number of bank accounts per 1000 adults cannot be added with number of bank branches per 100,000 adults. However, if these figures are converted into unit free real numbers, then these can be added up. Homogeneity takes care of this.

iv) Lower difference in gain at higher levels of attainment difference:

Let $xi \in [m_i, M_i]$ be any attainment level for functioning i. Then for any $\delta > 0$ such that $x_i + \delta \in [m_i, M_i]$ the magnitude of gain in the indicator of functioning i, $A(x_i + \delta, m_i, M_i) - A(x_i, m_i, M_i)$ is a decreasing function of x_i.

This axiom conforms to the law of diminishing marginal utility. According to this axiom, the value of the increase in the indicator resulting from an increase in the level of functioning is grater at lower levels than an equivalent increase in the functioning level at higher levels. For instance, an increase in the number of bank accounts per 100 adults from 10 to 20 indicates a greater gain in the functioning indicator than when the number increases from 60 to 70.

Thus the index fulfills the four basic axioms for all values of $0 < r < 1$. However, if $r = 1$, A_r satisfies the first three axioms but not the forth. This particular case of A_r was suggested as an indicator of functioning i by Sarma (2008).

The desired financial inclusion index is derived by averaging the individual indicators in (1) across functionings as below –

$$Ir(A_r(x_1, m_1, M_1), \dots \dots, A_r(x_k, m_k, M_k)) = 1/k \sum_{i=1}^{k} \left(\frac{x_i - m_i}{M_i - m_i}\right)^r$$

Like the individual index, the global index also satisfies all the above four axioms.

Index (I_r) has been calculated in this study for r=0.75, 0.5 and 1 and analysis of individual contributions as well as percentage contributions of each of the attributes to overall achievement has been undertaken.

3.7. Regression analysis

Regression analysis is used to predict a continuous dependent variable from a number of independent variables. If the dependent variable is dichotomous, then logistic regression should be used. Logistic regression (sometimes called the logistic model or logit model) analyzes the relationship between multiple independent variables and a dependent variable and estimates the probability of occurrence of an event by fitting data to a logistic curve. Logistic regression allows the researcher to test models to predict categorical outcomes with two or more categories.

There can only be a single dependent variable with logistic regression. The dependent variable is usually dichotomous, that is, the dependent variable can take the value 1 with a probability of success, or the value 0 with probability of failure. This type of variable is called a binary variable. The independent variables can be either categorical or continuous, or a mix of both in one model. Since logistic regression calculates the probability or success over the probability of failure, the impact of predictor variables is usually explained in terms of odds ratios. In this way, logistic regression estimates the odds of a certain event occurring compared to a reference category. Binomial logistic regression by default predicts the higher of the two categories of the dependent (usually 1), using the lower (usually 0) as the reference category.

The regression analysis is used in this study to examine the extent to which a factor relates to opting for a particular saving mode after holding constant the influence of all other factors. The factors that are deemed to have an independent relationship with the outcome measure are those with a p-value smaller than 0.05. These are called significant predictors. Whilst identifying which factors are significant, the analysis also identifies which categories of factors significantly increase or decrease the odds of saving in a particular mode compared to a reference category. Categories that differ significantly from the reference category are again those that carry a p-value of less than 0.05. By definition, the reference category has an odds ratio of 1.0. An odds ratio of greater than 1.0 indicates that the odds of occurrence of the dependent outcome increases relative to the reference category. Where odds ratio is less than 1.0, it indicates that the odds are decreased.

The analysis should also take due care of multicollinearity. Multicollinearity in logistic regression models is a result of strong correlations between independent variables. The existence of multicollinearity inflates the variances of the parameter estimates. That may result, particularly for small and moderate sample sizes, in lack of statistical significance of individual independent variables while the overall model may be strongly significant. Multicollinearity may also result in wrong signs and magnitudes of regression coefficient estimates, and consequently in incorrect conclusions about relationships between independent and dependent variable may be drawn. Collinearity is tested by two statistics viz. Tolerance and Variance Inflation Factor (VIF). Collinearity exists if Tolerance is less than 0.10 and VIF is 10 and above.

Coefficient of determination (R^2) indicates how well collectively the factors predict the outcome measure. An R^2 of between 0.15 and 0.50 is fairly typical in social research.

3.8. Kruskal-Wallis test

Non-parametric test is a statistical method wherein the data is not required to fit a normal distribution. Nonparametric statistics uses data that is often ordinal, meaning it does not rely on numbers, but rather a ranking or order of sorts. The Kruskal Wallis test is used when there is one independent variable with two or more levels and dependent variables are ordinal or interval in nature. It is widely recognized as the non-parametric version of ANOVA and a generalized version of Mann-Whitney test since it permits two or more groups.

Chapter 4

Conceptual Outline and Policy Initiatives

4. Conceptual Outline and Policy Initiatives

4.1 CONCEPT AND ITS EVOLVEMENT

4.1.1 Definitions

The definition of Financial Inclusion varies across countries and geographies, depending on the level of social, economic and financial development; the structure of financial sector; socio-economic characteristics of the financially excluded segments; and also the level of importance given by the authorities and Government on financial inclusion. Over the years, several definitions of Financial Inclusion/ Exclusion have evolved. These are presented in the Table 4.1 below –

Table 4.1: Definitions of Financial Inclusion/ Exclusion

Author/ Institution	*Definition*
Andrew Leyshon and Nigel Thrift (1994)	Financial Exclusion refers to those processes that prevent poor and disadvantaged social groups from gaining access to the financial system. It has important implications for uneven development because it amplifies geographical differences in levels of income and economic development.
ADB (2000)	Provision of a broad range of financial services such as deposits, loans, payment services, money transfers and insurance to poor and low-income households and their micro- enterprises.
Stephen P. 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.
Chant Link and Associates, Australia (2004)	Financial exclusion is lack of access by certain consumers to appropriate low cost, fair and safe financial products and services from mainstream providers. Financial exclusion becomes a concern in the community when it applies to lower income consumers and/or those in financial hardship.
Treasury Committee, House of Commons, UK (2004)	Financial Inclusion is the ability of individuals to access appropriate financial products and services.

Author/ Institution	*Definition*
Scottish Government (2005)	Access to individuals to appropriate financial products and services. This includes having the capacity, skills, knowledge and understanding to make the best use of those products and services. Financial exclusion is the converse of this.
United Nations (2006)	An inclusive financial sector is the one that provides 'access' to credit for all 'bankable' people and firms, to insurance for all insurable people and firms and to savings and payment services for everyone. Inclusive finance does not require that everyone who is eligible use each of these services, but they should be able to choose to use them if desired.
Philip Molyneux (2007)	Financial exclusion can be regarded as both the consequence of market failure (sub-optimal and reduced choice of services) and also due to other factors that limit access to financial services in efficient markets. The excluded group may not just have an appropriate choice of products available to meet their needs (sub-optimal choice) or it may not be worthwhile for the banks to offer such services due to 'apparent' lack of consumer interest (reduced choice).
World Bank (2008)	Broad access to financial services implies an absence of price and non-price barriers in the use of financial services. It is difficult to measure because access has many dimensions.
European Commission (2008)	Financial exclusion refers to a process whereby people encounter difficulties accessing and/or using financial services and products in the mainstream market that are appropriate to their needs and enable them to lead a normal social life in the society in which they belong.
Accion International (2009)	Financial Inclusion is a state in which all people of working age have access to a full suite of quality financial services, provided at affordable prices in a convenient manner, and with dignity for the clients
Georges Gloukoviezoff (2011)	Financial Exclusion is the process whereby people face such financial difficulties of access or use that they cannot lead a normal life in the society to which they belong.
Global Partnership for Financial Inclusion (2012)	Financial Inclusion is a state in which all working age adults, including those currently excluded by the financial system, have effective access to credit, savings, payments and insurance services provided by formal institutions.

Author/ Institution	*Definition*
Transact, nd[15]	Financial Inclusion is a state in which all people have access to appropriate, desired financial products and services in order to manage their money effectively. It is achieved by financial literacy and financial capability on the part of consumers and access on the part of financial product, services and advice suppliers.

Source : Adopted from *Report on Currency and Finance*. Vol V (2008), Reserve Bank of India and updated by researcher.

The review of literature observes that most of the operational definitions are context-specific, it originates from country specific problems of Financial Exclusion and socio-economic conditions. Operational definitions also accentuate the role of Financial Institutions or service providers involved in the process.

4.1.2. Concept and its evolution in Indian Context

Some definitions advocated by Indian policy makers are outlined below –

Table 4.2 : Definitions of Financial Inclusion/ Exclusion – Indian context

Author/ Institution	*Definition*
V. Leeladhar (2006)	Financial Inclusion is delivery of banking services at an affordable cost to the vast sections of disadvantaged and low income groups.
Mohan (2006)	Financial Exclusion signifies lack of access by certain segments of the society to appropriate, low-cost, fair and safe financial products and services from mainstream providers.
Usha Thorat (2006)	Financial Inclusion means provision of affordable financial services viz., access to payments and remittance facilities, savings, loans and insurance services by formal financial system to those who tend to be excluded.
Reddy (2007)	The process of Financial Inclusion consists of seeking each household and offering their inclusion in the banking system.
Committee on Financial Inclusion (2008)	Financial Inclusion is a process of ensuring access to financial services and timely and adequate credit where needed by vulnerable groups such as weaker sections and low income groups at an affordable cost.

[15] Transact is a free and independent UK-wide network for people committed to practising and promoting financial inclusion. <http://www.transact.org.uk>

Author/ Institution	*Definition*
Committee on Financial Sector Reforms (2009)	Financial Inclusion refers to universal access to a wide range of financial services at a reasonable cost. These include not only banking products but also other financial services such as insurance and equity products.

Committee on Financial Inclusion in its report submitted in January 2008 argued –

> Holding a bank account itself confers a sense of identity, status and empowerment and provides access to the national payment system. Therefore, having a bank account becomes a very important aspect of financial inclusion. Further, financial inclusion, apart from opening and providing easy access to a No Frills account, should also provide access to credit, perhaps in the form of General Credit Card or limited OD against the no frills account. It should encompass access to affordable insurance and remittance facilities. It should include credit counseling and financial education/ literacy. While financial inclusion in the narrow sense may be achieved to some extent by offering any one of these services, the objective of "comprehensive financial inclusion" would be to provide a holistic set of services encompassing all of the above.(35)

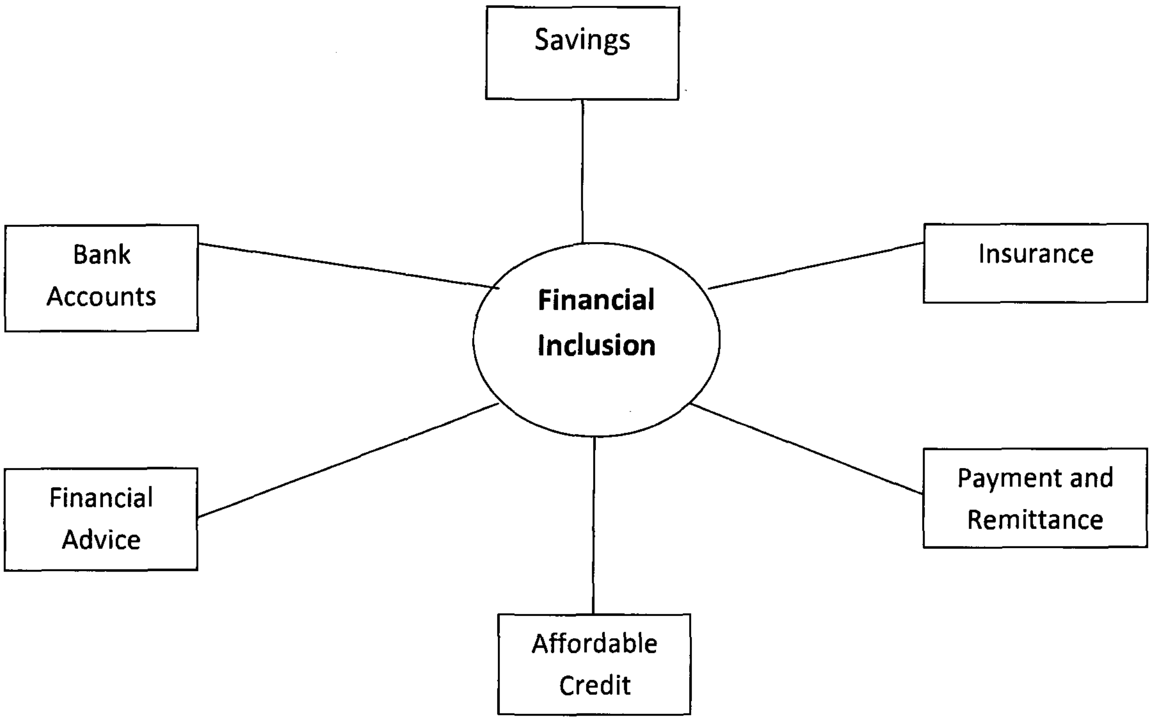

Figure 4.1 : Comprehensive Financial Inclusion

Source : *Report of the Committee on Financial Inclusion.* 2008 (34)

The Planning Commission, Government of India formed a committee on Financial Sector Reforms under the Chairmanship of Dr. Raghuram Rajan. The committee submitted its report viz. 'A Hundred Small Steps' in 2009. The committee while defining access in a financially inclusive system opines –

> Financial inclusion, broadly defined, refers to universal access to a wide range of financial services at a reasonable cost. These include not only banking products but also other financial services such as insurance and equity products. Households need access to finance for several purposes, the most important being for contingency planning and risk mitigation. Households build buffer savings, allocate savings for retirement and purchase insurance and hedging products for insurable contingencies. Once these needs are met, households typically need access to credit for livelihood creation as well as consumption and emergencies. Finally, wealth creation is another area where financial services are required. Households require a range of savings and investment products for the purpose of wealth creation depending on their level of financial literacy as well as their risk perception.(50)

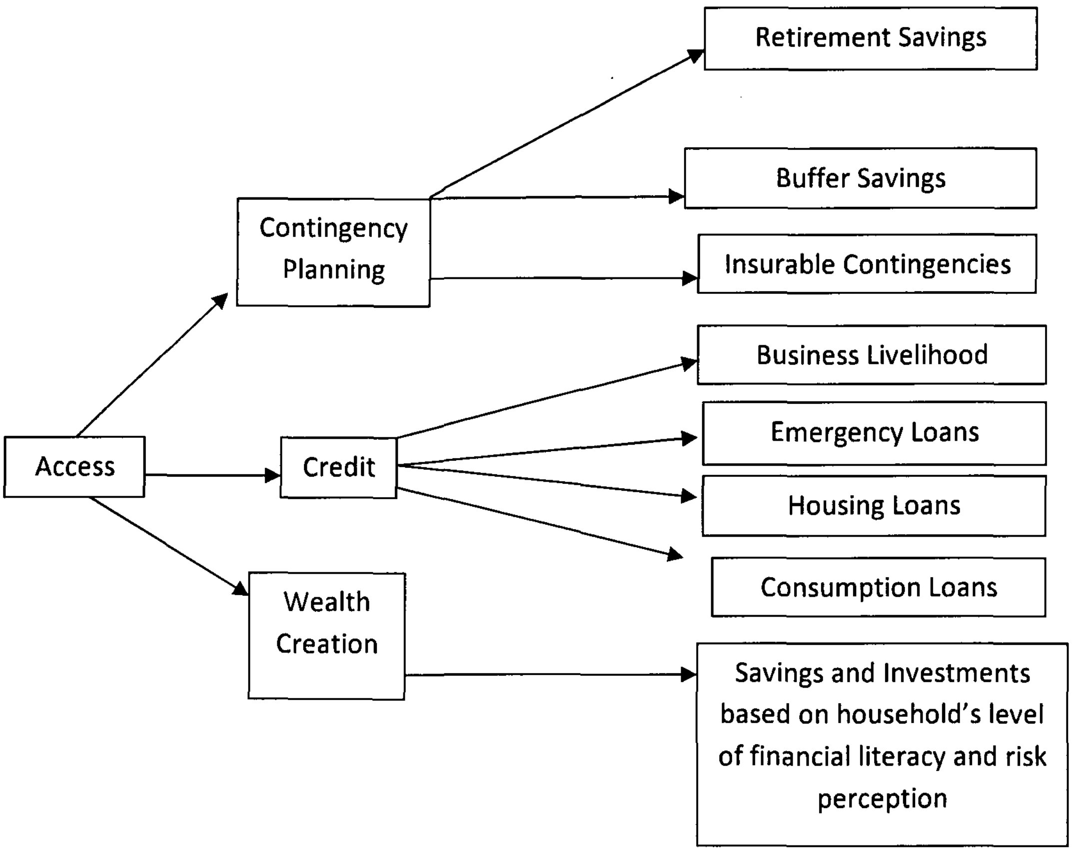

Figure 4.2 : Household Access to Financial Services

Source : *Report of the Committee on Financial Sector Reforms* (50)

4.1.3. Data and Measurement

Financial inclusion data is critical for effective policy making and tracking the progress of the proposed targets. Without standardised, comparable, and regularly updated data at the global and national level, progress tracking is difficult and targets set might lack direction. Thus data and measurement are indispensible that requires defining measurable financial inclusion dimensions and improving current and future data collection efforts and indicators toward the goal of establishing an international financial inclusion database.

Financial inclusion data are at an early development stage. It is critical to ensure that the necessary indicators are covered and key data are collected at regular intervals. Three sources of data can be used to measure financial inclusion as well as to know the factors limiting inclusion. These three sources are

i) Regulators of financial services (supply side),

ii) Financial institutions (supply side)

iii) Surveys of users – individuals, households and firms (demand side)

The regulators have a major role to play in facilitating data collection efforts. In a large number of countries, regulators don't collect data on number of bank deposits. Data on credit is even more limited (Kendall, Mylenko and Ponce). Further, data on regulated non-bank deposit accounts are also very limited. There are multiple avenues to support data collection efforts. A good example is from India where the Indian Government encouraged measurement and reporting to track progress of its agenda for increasing credit flow to women. Following the Government's direction, RBI in 2000 asked all public sector banks to disaggregate and report annually on percentage of credit within their total lending. Since then, it is been easy to track the progress on this issue.

Name	*Developer*	*Key Facts*
Financial Access	-World Bank Group -Published annually	- Statistics on financial access in 142 countries - Usage statistics: deposits, loans, branches - Policies and regulations: bank agents, postal networks, branch and credit regulations, consumer protection - SME financing
Financial Access Survey (FAS)	- IMF	- Cross-country geographic and demographic outreach of financial services - Outreach: bank branch network, ATMs Financial instruments: deposits, loans, debt securities, insurance
* Enterprise surveys	- World Bank	Comprehensive firm level data in emerging markets, collected in 3-4 year rotation
* Household and consumer surveys	- World Bank - World Bank and Bill and Melinda Gates foundations - FinMark (Finscope)	- Household level indicators of access to finance - World Bank's household surveys - Global household survey - Finscope: focus on consumers' usage and perception of financial services
Financial Infrastructure indicators and data	- World Bank	-Doing Business Indicators: Getting Credit (covering credit reporting and collateral securities in 183 countries) -Global payment systems survey (covering 142 countries) -Global remittance price database (launched in 2008, shows remittance data in 178 corridors)

*Demand side and others are supply side

Figure 4.3: Measuring Financial Access : Key existing reports

Source : Adopted from *Toward Universal Access: Addressing the Global Challenge of Financial Inclusion* and updated by researcher

Before Financial Inclusion can be improved, it must be measured. The extent of inclusiveness of the financial systems is less known globally. From the available literature it is evident that a comprehensive measure that can be used to indicate the extent of inclusion across countries is lacking. Various studies have identified various indicators of financial inclusion. Howarth, Catherine, Peter Kenway, Mohibur Rahman and Guy Palmer proposed 46 different indictors of social exclusion, three of which relate to financial exclusion.

To assist the policy makers in designing effective policies and tracking global progress in financial inclusion, the World Bank collected first set of indicators of financial access in countries around the world in 2005 and update these indicators for selected countries in 2008. Beck, Thorsten, Asli Demirguc-Kunt and Maria Soledad Martinez Peria have presented a comprehensive series of new indicators of banking sector penetration across 99 countries based on a survey of bank regulatory authorities. These indicators are

i) Geographic branch penetration: Number of bank branches per 1,000 km^2

ii) Demographic branch penetration: Number of bank branches per 1,00,000 people

iii) Geographic ATM penetration: Number of bank ATMs per 1,000 km^2

iv) Demographic ATM penetration: Number of bank ATMs per 1,00,000 people

v) Loan accounts per capita: Number of loan accounts per 1,000 people

vi) Loan-income ratio: Average size of loans to GDP per capita

vii) Deposit accounts per capita: Number of deposit accounts per 1,000 people

viii) Deposit-income ratio: Average size of deposits to GDP per capita

CGAP in its wide ranging reports viz. *Financial Access* presented the most recent and comprehensive set of global financial access indicators collected through a regulator survey in 139 countries in 2009 and 142 countries in 2010. These indicators include –

i) Number of deposit accounts and loans

ii) Number of deposit clients and borrowers

iii) Number of financial access points such as branches, agents and ATMs.

Improving access means improving the degree to which financial services are available to all at affordable price. It is easier to measure the use of financial services and use can be observed. But use is not always same as access. Access essentially refers to the supply of services whereas use is determined by demand as well as supply. A basic challenge in measuring financial inclusion is differentiating between access and use of financial services. Individuals may choose not to use services even if they are available. Such voluntary exclusion is difficult to measure, as it is not directly observable. So, researchers mainly rely on indicators of use as an approximation to access and use 'access' and 'use' interchangeably.

Another challenge is to distinguish between voluntary and involuntary exclusion. Further to distinguish involuntarily excluded between those that are rejected due to high risk or poor project quality and those that are rejected due to discrimination or high price which makes financial services unaffordable. Rejection due to high risk or poor project quality is not necessarily worrisome. However, rejection due to discrimination or high price is to be properly addressed. Poor people could be involuntarily excluded due to unavailability of suitable products and services. On the other hand, voluntarily excluded may be due to lack of awareness of products if financial institutions do not target their marketing towards certain groups. Further, individuals can access services indirectly by using accounts that belong to somebody else in the household or peer group. Voluntary exclusion can also result from lack of financial literacy.

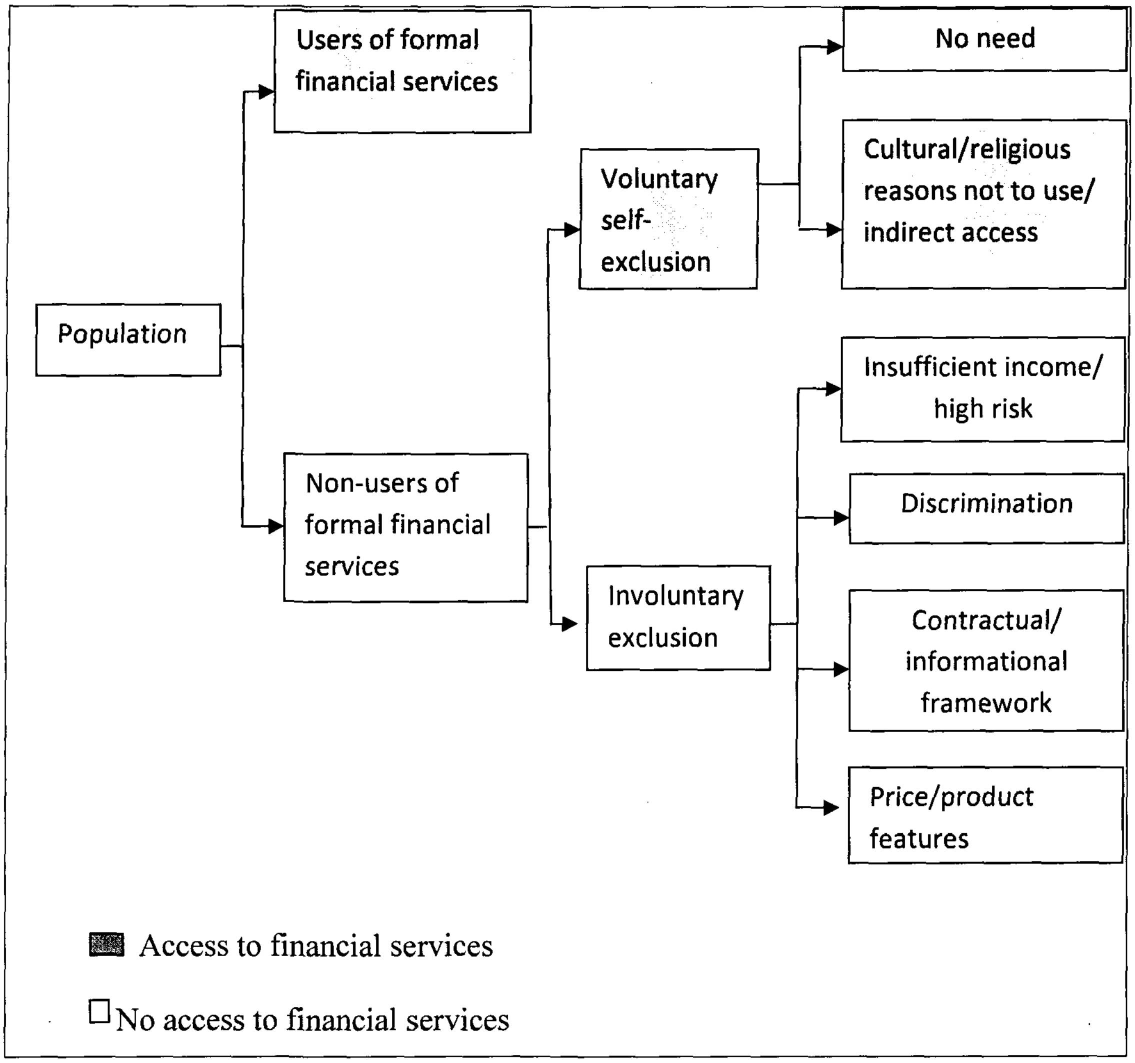

Figure 4.4 : Distinguishing between access to finance and use

Source : Adopted from World Bank. *Finance for all: Policies and Pitfalls in Expanding Access* (29).

Due to the inherent difficulty of collection of demand side data, most of the studies on financial inclusion/ exclusion rely on 'supply –side data' collected from regulators. Supply side data suffers from a major limitation that they cover only regulated financial system, excluding semi-formal and informal service providers which have a very large clientele base specially in the low-income countries. In addition, the number of accounts often overstates the number of account holders due to multiple account holdings. It is almost impossible at the present situation to avoid double counting of individuals with multiple accounts or credit facilities or accounting a large number of dormant accounts. However, using household surveys in combination with regulatory data can improve data consistency and quality. Harmony of methodology for key financial access indicators would allow for a more effective cross-country comparison and analysis. An important step towards this has been undertaken by the World Bank. Its Development Research Group is working on Global Financial Index, popularly called Global Findex. It fills a major gap in the landscape of financial inclusion data and it is the first public database of 'demand-side' indicators that constantly measures individuals' usage of financial products across countries and over time. Key characteristics of Global Findex include: cross-country compatibility, availability of demographic co-variates and regular measurement of the entire set of countries over time. The Global Findex indicators are drawn from survey data collected over the 2011calendar year, covering more than 1,50,000 adults in 148 countries and representing about 97 percent of the world population. It may be noted here that the data collection in India under this survey excludes Assam.

From the above discussion it has been observed that several indicators have been used to assess the extent of financial inclusion. Such indicators while using individually can provide only partial information and can lead to misleading understanding of the extent of financial inclusion in an economy. Thus, it was felt that a comprehensive measure of financial inclusion is necessary which can incorporate several dimensions of financial inclusion, preferably in one single number. With this objective in 2008, Sarma has developed an index of financial inclusion with some modifications in approach which are adopted by UNDP for computation of some well known indices. Sarma's index has received wide acceptance among researchers and policy makers. The index incorporates three basic dimensions of banking as detailed in the Table 4.3.

Table 4.3: Sarma's Index – Dimensions and sub-indicators

Dimensions	*Sub-indicators*
Banking penetration (BP)	-Number of bank accounts as a proportion of total population
Availability of banking services (BS)	-Number of bank branches per 1000 population
Usage of banking services (BU)	-Volume of deposit as proportion of country's GDP -Volume of credit as proportion of country's GDP

Source : Sarma, Mandira. "Index of financial inclusion." Working Paper No.215, Indian Council for Research on International Economic Relations.

Further, another index was developed by Chakravarty and Pal in 2010 bringing an axiomatic approach to measurement of the multi-diemnsional issues of financial inclusion. This index is an approach to estimate effectively the level of financial inclusion on the basis of relatively easily available data on banking outreach as demand-side data on households are hard to collect. It considers six indicators of banking outreach such as

i) Geographic penetration, which is measured as the number of bank branches per thousand square kilometer area

ii) Demographic penetration, which is measured as the number of bank branches per lakh people

iii) Deposit account per thousand people

iv) Credit account per thousand people

v) Deposit-income ratio, i.e., the ratio of average size of deposits to per capita net state domestic product

vi) Credit-income ratio, i.e., the ratio of average size of loans to per capita net state domestic product

To sum up, there is no single comprehensive measure that can be used to indicate the extent of financial inclusion across economies. Since measuring inclusion is perceived to be difficult, financial inclusion has generally been defined in terms of exclusion from financial system. As the demand-side data is difficult to collect, researchers are developing measures to effectively evaluate level of inclusion using supply side data. The measures which incorporate many dimensions of financial inclusion/ exclusion are gaining importance.

4.1.4. Tackling Exclusion as Business Proposition

It is difficult to know whether banks consider financial inclusion as an 'opportunity' or an 'obligation'. There has been growing concern that the banks should consider financial inclusion initiatives as a profitable business venture on a long-term perspective. The World Bank advocates that the financial inclusion efforts should make business sense to the providers for having a lasting effect. Further, 'not-for-profit' mandate for providing financial access may be attributed as a serious shortcomings in the current efforts (Kochhar iii).

However, it is felt that the present business models of banks have a cost structure that is economically unviable for catering to the marginalized sections of the society. On the other hand, the phenomenal growth of the MFI industry and informal providers of financial services in developing countries reflects a huge unmet demand and suitability of some elements of their business models for that demand. The Boston Consulting Group (BCG) in its research conducted in 2006 in India found that a large segment of customers just above at the bottom of the pyramid are excluded from formal financial services. It has termed this segment as "the next Billion" with annual incomes ranging from Rs.60,000/- to Rs.180,000/-. It is the segment which can be profitably served by innovative low cost business model as huge unmet demand for financial services exists in this segment. However, to serve the customers at the bottom of the pyramid necessitates State subsidies and support. BCG in its widely recognized research viz., *Indian Banking 2020: Making the decade's promise come true* had proposed for a new business model to serve the excluded people profitably. The imperatives of this new model are presented in Figure 4.5.

Economic realities	*Business model imperatives*
Low ticket size • Transaction costs to be lowered by over 90%	**Entirely new model** • Smaller, lower cost branches, low cost technology, local low cost human resources • Leverage shared infrastructure (e.g. shared hosted CBS, UID to reduce KYC cost)
High cost in last mile • High geographic dispersion of customers	**Variable cost model for last mile** • Channel costs linked to transactions/ business volume • Tie up with other businesses who have an existing variable distribution network • Leverage ICT based last mile solutions to reduce costs, risks
High risks, no credible collateral	**Rely on JLG/ SHG to begin with** • Build credit history quickly
Low float	**Transaction fee bases business models**
Unique customer traits • Low financial literacy/ discipline • Unpredictable/ cyclical cash flows • Need for all financial services at one place	**Unique business processes/ product design** • Door step collection • Products designed for rural segments • Integrate the credit and deposit models into one single window for customer • Offer insurance, remittances through the same window • Customer education as a integral activity in business model
Defunct local economic eco-system and gaps in business value chains	**Support local economic drivers to spur local livelihood generation** • Fund economically viable value chain segments

Figure 4.5 : Imperatives to a business model for Financial Inclusion

Source : Boston Consulting Group Inc. *Indian Banking 2020: Making the decade's promise come true.*

The economic viability of financial inclusion in India may be enhanced by the following ways –

4.1.4(a). Transaction fee based model – As it is unreasonable for banks to expect good float from the customers of the marginal sections, a transaction fee based model will ensure good returns. The transactions are to be suitably priced.

4.1.4(b). Shared infrastructure – Government should encourage and incentivise developing infrastructure which can be shared by all players for their financial inclusion drives eg., a shared facility to host low value account, a shared KYC data base etc. UIDAI's Aadhar is one very important step towards it and banks are accepting Aadhar cards as KYC document for account opening (refer §9.3.1)

4.1.4(c). Routing Government payments – Routing social benefits through bank accounts has been proved as one of the most significant factor encouraging financial inclusion as well as transparency of such Government schemes. It is being advocated that the Government should also consider paying a transaction fee to the banks who enlist the beneficiaries as customers. Payment of wages though bank accounts under Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGA) is a major step towards it. Till 2010-11, nearly 100 million bank/ post office accounts of the poorest people of the country have been opened and around 80% of MGNREGA payments are made through this route. Further in Assam, some other social benefits e.g., benefits under National Rural Health Mission, Government merit scholarships to the ST/SC/OBC students are paid through bank accounts of the beneficiaries.

4.1.4(d). Centralised and updated Land records – Collateral in form of land records is an invaluable asset for secured landing specially among the marginal sections which may at the best have lands, if not other collaterals to offer to secure loans. Computerisation of land records and its easy accessibility and mortgaging formalities will make credit delivery convenient for the banks and poor will be benefitted. Under National e-governance plan, computerization of land records and property registration is being undertaken. Further, under Central Registry for Securitisation and Security Interest of India (CERSAI), the mortgages are being registered. Both these initiatives are expected to bring transparency to the existing practices along with making credit availability and delivery easy for the poor.

4.1.4(e). Interoperability in BC network – Interoperability of BCs will enhance the viability of distribution infrastructure in remote areas. In this direction, RBI on March 2, 2012 has allowed interoperability of BCs subject to on-line transactions in a CBS platform.

4.1.4(f). Viability gap funding of BCs – The Government may consider funding the viability gap of BCs till this channel is properly established as a business proposition.

However, the activities under financial inclusion drive involve high costs and are seen as impositions upon the regular business by of the bank by both the management and the branch staff. If the bankers would have seen significant business potential in these activities, a more dynamic roll out of the financial inclusion drive with real momentum would have been apparent.

4.1.5. Use of technology

While Financial Inclusion initiative primarily aims to deliver services to all people in a fair, transparent and equitable manner at an affordable cost, making latest technologies available in these areas may a long way towards achieving these objectives. Countries which have leveraged the technological advancements in Financial Inclusion drives have made commendable progress towards combating exclusion. Very well known examples are from Kenya, Brazil, Philippines, Bolivia etc. where use of proper technologies have made it possible to reach to the remote clients with ease and in a cost effective way making financial transactions fast and efficient. Use of technology in addressing the issue of outreach and circumventing the problem of lack of physical infrastructure has been talked about a lot, it actually goes much beyond that. At a macro level, technology can help achieve a variety of business objectives and have a multi-dimensional positive impact on it. On one hand, by reducing the transaction costs and also by eliminating costlier, time and labour intensive workflows, it can help lower the costs of doing business. On the other hand, it can lead to enhanced business productivity by bringing in efficiencies, effectiveness and economies of scale in business processes. Further, it can also enable structures for better management control and insight, by helping monitor and mitigate business risks in a timely manner. All this can act as a perfect launch pad for building and growing a successful enterprise. Interestingly all the above are also the challenges faced by Financial Inclusion intervention, so it is thought that technology can go a long way in meeting such challenges.

Financial Inclusion without the intensive use of technology, especially ICT, in the Indian context is almost impossible given the geographical diversities of the country. Reaching its 1.20 billion population with traditional brick and mortar branches would be nearly impossible. An estimate by Sa-Dhan and City Foundation, even an ultra small branch might need an initial investment of Rs.5 lakh and annual recurring cost of Rs.10 lakh. This implies that the branch would require average business level of Rs.3 crore to attain break even. Further, small value transactions using brick and mortar branches may not be economical. The estimated cost of a cash transaction across the counter is Rs.50, an ATM transaction costs Rs.15, a transaction in mobile costs Rs.1 and through internet it costs fraction of a Rupee. With extensive use of technology, BCs have the potential to reduce cost substantially.

Although BC has been adopted as the model for outreach under Financial Inclusion, the model is yet to be proved commercial viability. It is due to the high cost involved in establishment and the recurring cost of handing small value transactions against the revenue collected from it. As technology has the potential to address the issue of outreach, therefore, one of the basic assumptions for viability of the BC model is intensive and extensive use of technology, especially Information and Communication Technology (ICT). By use of IT, it is possible to provide door step service where accounts can be operated even by illiterate by using bio-metrics or mobile telephones in a very safe manner. ICT in the BC model is positioned as key business enabler.

The existing ICT infrastructure, especially CBS, in the banks should be leveraged to create a delivery model suitable to achieve financial inclusion through the BCs. Indian banking industry has achieved significant success during the last decade by implementation of core banking solution that has helped them streamlining, standardizing and expanding their services. ICT solutions help the banks in providing seamless systems to capture customer data, ensure unique identification and facilitate financial transactions using remote connectivity, consumer data protection and uninterrupted service.

Transfer of social benefits directly to the bank accounts of beneficiaries has been proved a very successful tool for combating financial exclusion globally. In India too, Government is encouraging this model. The Government of India has been emphasizing the need for transferring all state benefits and various cash subsidies to beneficiaries by direct credit to their bank account. Implementation of Electronic Benefit Transfer (EBT) has multiple benefits such as lessening administrative expenditure of cash payment, increasing transparency and avoidance of any leakage. However, the prerequisite for successful implementation of EBT is availability of doorstep banking services throughout the country. ICT based BC model is a good option to reach this objective. Realising this, the RBI advised all banks to make intensive use of IT in BC model.

4.1.5.(I) Technology Models of BC

In India, BCs are found to use two models

a) Smart Card Based Kiosk Model

b) Mobile Hand set based Model

(a) The Smart Card Based Kiosk Model

Under this model a customer is given a card with a 32k/ 62k memory chip where details like primary account number, postal address, nominee details, contact information, bio-metric finger print and transaction history is stored. Both the Customer Service Point (CSP) and the customer are issued smart cards. The CSP's smart card is used for authentication of the Point of Sale (PoS) machine, establishing connection with the intermediate server at the Beginning of the Day (BoD) and at the End of the Day (EoD) for data transfer. The customer is authenticated using the biometric finger print stored in the smart card. The CSP gets connected using any of the secured communication channel such as Global System for Mobile Communication (GSM), Code Division Multiple Accesses (CDMA), Public Switched Telephone Network (PSTN) or Ethernet depending on the availability of type of network at the place of operation. Through this connectivity, the CSP reaches the back-end intermediate Financial Inclusion server of the bank or its service provider where all customer information and account information including the current balance is stored. This server either regularly updates the banks CBS Server at a pre-decided interval or on a real-time basis.

The IBA Sub-Committee on IT–enabled Financial Inclusion has recommended for issuance of All-purpose Single Card to all the underprivileged as a matter of routine after taking care of the KYC norms as applicable. If cards are issued free of cost, only one card from any bank should be provided and holding of more than one card from different banks should be avoided. At any case, issuance of more than one card should be on chargeable basis. The card should contain all possible features such as –

- Card to contain the full particulars of the account holder with limits sanctioned/ available, balance outstanding, photo, finger prints etc. with provision for data updation and the unique citizenship number, if allotted in future.
- Cover working capital, consumption loan and overdraft limits
- Card should be operable in both online and offline systems
- Operable in ATMs/ PoS/ POTs
- Contactless smart card chip must be conforming to the global standards

(b) Mobile Handset based Models –

4.1.5. (b) (i) GPRS based mobile model

In this model, the CSP uses a high end General Pocket Radio Service (GPRS) based, Near Field Communication (NFC) mobile phone with a camera in place of a personal computer. It also has wired or blue-tooth serial connection to a hand held printer, bar code reader, contact or contact less smart card reader etc. The mobile phone with CSP have sufficient memory to carry data on all customers including their photographs and finger prints. The transactions can be carried out both on line and off line. This model has many advantages such as low establishment cost, self-contained without the need of external power, can be used for door step service. It is ideal for remote locations and in urban locations may be used by existing retail outlets due its low investment and simplicity in operations.

4.1.5.(b) (ii) Mobile for banking transactions

This is the cheapest model available where the CSP and the customer can use any mobile handset for any financial transaction irrespective of mobile network operator or handset model or operating system on the handset. The client interface is just dialing of numbers. It works using Short Messaging Service (SMS) or Unstructured Supplementary Service Data (USSD) technology. This model has been successful in metropolitan cities as a means of remittance by migrant workers. The model with low cost and simplicity has potential to deliver the desired results. However, in a rural scenario with illiterate or little literate clients, it might find lower acceptance.

4.1.5.(II) Importance of Common Infrastructure

Success of technology driven financial inclusion drive in the country will greatly depend on Government's intervention by way of creating common infrastructure to be shared by all players. The Inter Ministerial Group constituted on November, 2009 by the Cabinet Secretariat, to work out the relevant norms and modalities, recommended the following infrastructure creation –

4.1.5. (II) (a) Real-time Micro Transactions (REMIT) Switch –

REMIT switch will be an interoperable central payments switch that will facilitate real time transactions routing between BCs, Banks, mobile service providers and other stake holders such as UIDAI etc. REMIT will help in executing large volume of small value transactions across banks in real time and a low cost. The REMIT switch will have to be capable to connecting to the UID authentication service so that it can verify the identity of the customer. Once the customer's identity is verified, REMIT then needs to contact the Account Mapper to obtain the bank account of the customer to proceed with the transaction.

4.1.5.(II) (b) Account Mapper

It is essentially a table which has three attributes: UID number, Bank account number and the mobile phone number of the account holder. It is a service that exists as part of the delivery framework that maps the reference to a mobile number or a UID number to a mobile linked no-frills account in a particular server. REMIT connects to the Account Mapper to obtain details pertaining to a specific customer after he has been authenticated. The Account Mapper will be operated by a trusted entity that will ensure the privacy of data. Till such time the Account Mapper is developed and becomes operational, alternative mechanisms of linking the customer's UID number, mobile number and mobile linked no-frills account details may be explored by the stakeholders involved.

4.1.5.(III)(c) Interoperable Infrastructure for Accounting Small Transactions (INFAST)

INFAST can be created as an additional infrastructure for creating and managing mobile linked no-frills accounts. It is like a limited version of CBS that can bring enormous cost optimization to all its stakeholders. The creation of INFAST would significantly reduce the load on the switching infrastructure as it will have to route the transactions only to INFAST instead of switching to the issuing and receiving banks. The chances of failure of a transaction due to non responsiveness on the part of one of the parties will also be minimal.

4.2 Policy Initiatives Globally

Financial Inclusion globally has been mainly initiated by policies of the Financial Regulators and the Governments. Though the nomenclatures of such initiatives were different in past, most of such initiatives were aimed at bringing banking to the mass. Policy initiatives can be broadly grouped as –

i) Direct regulation or legislation

ii) Indirect regulation

iii) Conducive related policies

Bayot, Bernard, Lise Disneur and Elaine Kempson defines Direct Regulation as:

> Designed to impose upon financial services providers an obligation or prohibition to provide a certain kind of financial service and to organize, regulated, monitor or control financial services provision in order to ensure financial inclusion.

Many countries such as France, Norway, and Belgium etc have adopted direct regulation to ensure right to an account, adequate transaction and payment banking services provision. However, due to its inherent nature, credit has not been recognized as a right in any country. To regulate the credit market, indirect regulations such as Interest Rate Ceilings, Credit Reporting, Credit Register Checking, Sectoral lending targets has been initiated in many countries.

Governments in many countries are taking up policies which create conducive atmosphere for financial inclusion in those economies. Such reforms are such as financial literacy, relaxation of identification proof, creation of social identification numbers, social security payments through bank accounts of beneficiaries etc. Such initiatives have direct influence in reduction of excluded population. The countries with the lowest penetration of excluded population are the countries where all Governments' social security payments have been paid directly in to bank accounts for some time. Sweden, Germany, Australia, UK, USA and Canada are few countries to name. Electronic payments to the beneficiaries accounts reduces the cost of administration of social security plans and makes distribution effective by eliminating many a lacuna in the distribution process. It has encouraged many a countries to adopt such distribution method of direct transfer of benefits. Its effect on financial inclusion would be seen in years to come.

Financial literacy plays a vital role in making the excluded population respond to the initiatives of the banks and other financial institutions towards Financial Inclusion. There has been increased emphasis in recent times by the policy makers in spreading financial literacy and creating awareness. Countries such as Netherlands, New Zealand, Spain, United Kingdom, Czech Republic and India have already adopted a national strategy for financial education.

The CGD Task Force on Access to Financial Service in its report on October 2009 has recommended ten policy principles for expanding financial access. These principles framed by an international task force of former policy makers, academics and practitioners have been widely accepted by policy makers across the globe. These principles are –

Principle 1: Promoting entry of and competition among financial firms

Principle 2: Building legal and information institutions and hard infrastructure

Principle 3: Stimulating informed demand

Principle 4: Ensuring the safety and soundness of Financial Service Providers (FSP)

Principle 5: Protecting low-income and small customers against abuses by FSPs

Principle 6: Ensuring usury laws, if used, are effective

Principle 7: Enhancing cross-regulatory agency co-operation

Principle 8: Balancing Government's role with market financial-service provision

Principle 9: Using subsidies and taxes effectively and efficiently

Principle 10: Ensuring data collection, monitoring and evaluation

In recent times, initiatives by Governments for Financial Inclusion in many countries have heightened. This fact is evident from the study of 142 countries conducted by CGAP. As per the report of the study, 45% of economies are having a strategy document for promotion of Financial Inclusion. Out of these, 91% of countries have adopted a strategic approach from 2004 or later. However, there is difference in focus in the strategies among the high- income countries versus low and medium income countries. In high income countries where most of the population is already financially included, regulators tend to focus on consumer protection and financial literacy. In low and middle income countries, focus includes a broader area including promotion of financial access along with consumer protection and financial literacy.

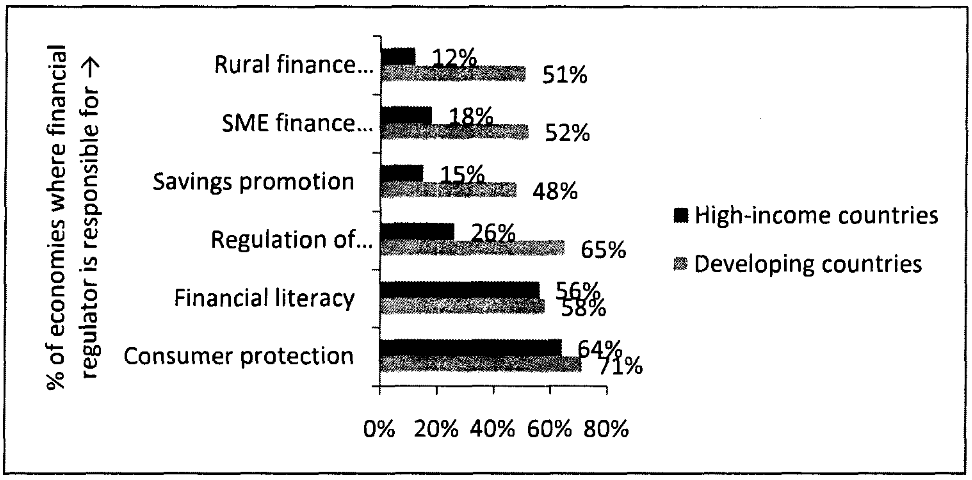

Figure 4.6: Focus in strategies

Source : Adopted from Consultative Group to Assist Poor. *Financial Access 2010: The state of Financial Inclusion through crisis* (18)

It is seen from the Figure 4.6 that along with consumer protection and financial literacy, developing countries give more importance than the high-income countries on promotional activities linked to Financial Inclusion. In other words, these countries undertake other related policies to make Financial Inclusion conducive. These policies are such as regulation of microfinance, promotion of savings, and promotion of credit flow to SME and rural sectors. In 65% of developing countries studied by CGAP, regulation of microfinance has been a mandate of financial regulators. However, it is also reported that commitment to reforms in Financial Inclusion in many countries are not matched by resources allocated for the purpose. Low-income countries allocate more resources. However, compared to the breath of their agenda, there exists a larger resource gap.

To ensure that financial systems are not used for illicit purposes such as financing terrorist activities and money laundering, many countries have mandated strict KYC norms. However, in many a case, it has been observed that though unintended, these rules pose as a hindrance to Financial Inclusion as poor are generally not having documented proofs of identity and address. Few countries are revisiting their KYC requirements with a Financial Inclusion focus. Few such examples are Afghanistan's KYC reforms to encourage branchless banking, Colombia's KYC relaxation for opening electronic saving accounts; Ghana's reduced KYC requirements for low-value transactions, India's adoption of minimum KYC for basic banking accounts etc.

Credit flow to SME has also received wide recognition as a reform agenda. Setting up or expansion of Credit Guarantee Schemes has been taken up in many economies. Some regulators such as in Sri-Lanka and India, direct banks to designate a minimum amount of their portfolios to SMEs.

Countries have undertaken reforms aiming creation of more inclusive financial systems. As per the latest available data, among the regions, South Asia and East Asia and the Pacific introduced the most reforms during 2008-09. It is followed by Sub-Saharan Africa, Europe and Central Asia and high-income countries had fewer reforms in financial access. Pakistan and India lead the way for South Asia with six and seven different areas of reform respectively. Philippines, Malaysia and Nigeria reported the highest number of reforms.

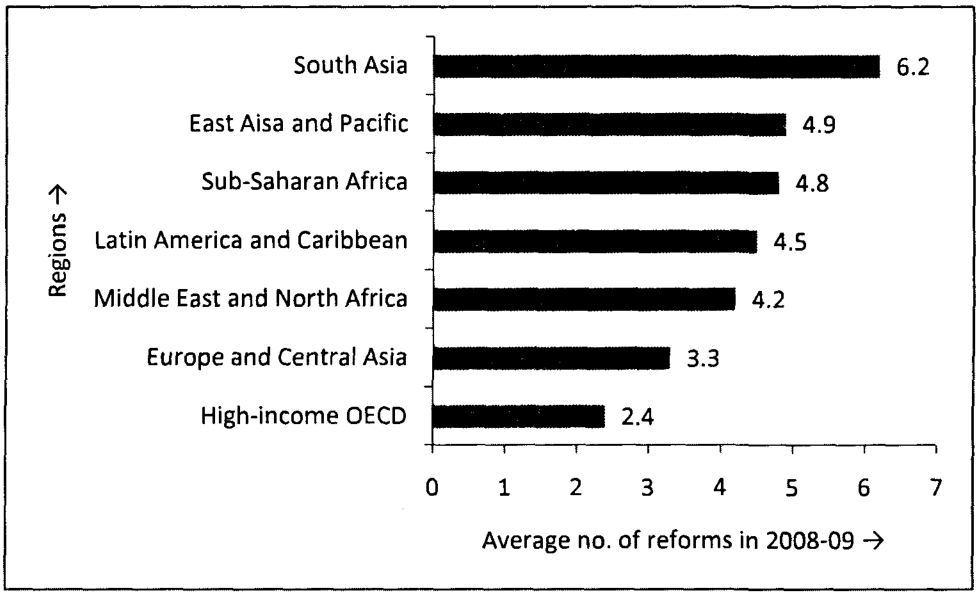

Figure 4.7: Reforms in various economies

Source : Adopted from Consultative Group to Assist Poor. *Financial Access 2010: The state of Financial Inclusion through crisis* (21)

4.3. POLICY INITIATIVES IN INDIAN CONTEXT

Banks in India are regulated by the Reserve Bank of India. The Indian banking system is mostly dominated by Scheduled Commercial Banks (SCBs). Scheduled bank is a bank which is listed under the second schedule of the RBI Act, 1934 which necessitates banks to fulfill certain conditions laid down by the regulator for ensuring depositors' interests. As on March 2011, there are 165 SCBs and 4 Non-SCBs operating in India. The SCBs include Public Sector Banks (PSBs), Private Sector Banks (PVSBs), Regional Rural Banks (RRBs) and Foreign banks operating in India. The Figure 4.8 pictorially shows the set up of Indian banking industry.

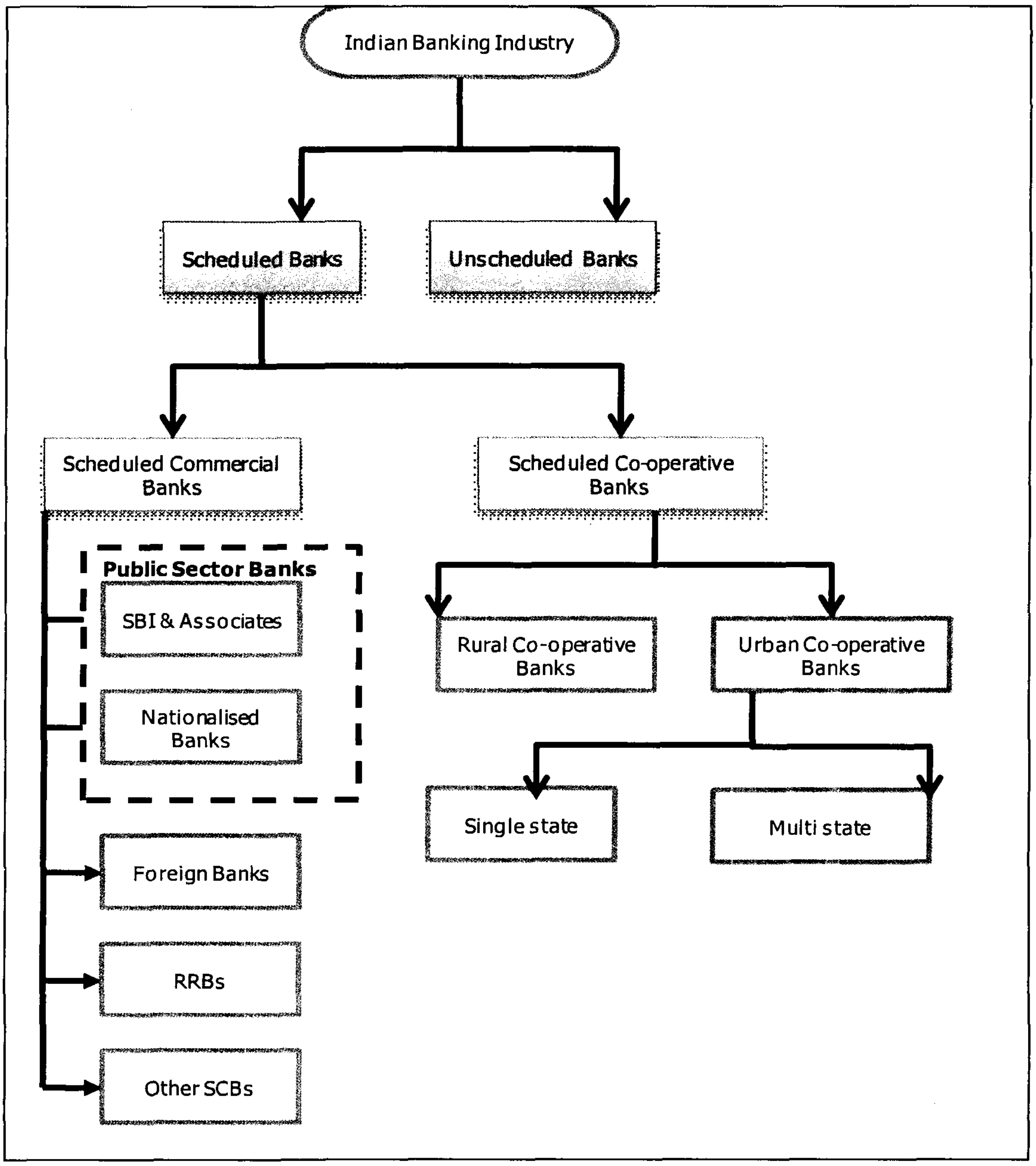

Figure 4.8 : Set up of Indian Banking Industry

Although nomenclatures were different, but India since its independence in 1947 has a long story of bringing banking to the mass. The Government and the

Reserve Bank of India has been undertaking policies to ensure that banking takes care of the needs of various sections of the society satisfactorily. The Indian financial system essentially catered to the needs of planned development. The planned strategy recognized the critical role of banks in making credit and other financial services available to public at large, so that the benefits of planned economic development can be distributed in a democratic way. In recognition of this role, authorities have adopted or modified policy frameworks from time to time. Accordingly, several initiatives have taken place over time. Various initiatives undertaken can be broadly categorised into three phases –

Phase I: Starting in the late 1960s through the 1980s

Focus was on channeling of credit to the neglected sectors of the economy and weaker sections of the society.

4.3.1. Nationalisation of Banks

Nationalisation of private sector banks in India was pioneering step towards accessibility of banking services to the vast rural population of the country. In December 1967, the announcement of the policy of social control over banks was made. In 1969, nationalization of major banks took place. The immediate task set for the nationalized banks were to mobilize deposits and lending for all productive activities. Special emphasis was given to provide credit facilities to weaker sections.

4.3.2. Lead Bank Scheme and Service Area Approach

Pursuant to the recommendations of a study group headed by Prof. D.R.Gadgil and a Committee of Bankers on Branch Expansion Program of PSBs under the chairmanship of Shri FKF Nariman, the Lead Bank Scheme (LBS) was introduced by RBI in December 1969. The scheme emphasized making specific banks in each district the key instrument of local development by entrusting them with the responsibility of locating growth centres, assessing deposit potential, identifying credit gaps and evolving a co-ordinated approach to credit deployment in each district, in connection with other banks and credit agencies.

In 1989, Service Area Approach (SAA) was adopted wherein service area villages were identified and assigned to bank branches based on their proximity and contiguity and adopting a cluster approach. However, this approach was posing some rigidity from both supply and demand side. Due to allotment of villages to designated bank branches, the activities of service area branches were restricted to allocated villages and they were unable to provide any service beyond their service area despite being in a position to do so. Likewise, borrowers were restricted to approach only the service area branches. Following the recommendations of the Advisory Committee on flow of credit to Agriculture and Allied Activities under the chairmanship of Prof. V.S.Vyas, the restrictive provisions were removed from December 2004, except for the Government sponsored schemes. Financial Inclusion has been given a mandate to all lead banks in recent years.

4.3.3. Priority Sector Lending (PSL)

PSL has been mandated by RBI since late 1960s to step up the flow of bank credit to agriculture, small scale industry, self-employed, small business and the weaker sections within these sectors. The banks operating within India are compulsorily to offer certain portion of its credit towards priority sectors. Priority sectors basically include sectors where flow of credit is not sufficient but development of these sectors is crucial for the socio-economic growth of the country. Broad categories of priority sector include agriculture (direct and indirect finance), small scale industries (direct and indirect finance), small business/ service enterprises, micro-credit, education loans, housing loans. Domestic commercial banks need to offer minimum 40% and foreign banks need to offer a minimum 32% of its adjusted net bank credit or credit equivalent amount of off balance sheet exposure, whichever is higher. There are also sub-targets depending on the importance of each sub-group in the economy and the gap in availability of credit in the sub-group. Domestic banks having shortfall in lending to priority sector and/or agricultural target is required to contribute allocated amounts to Rural Infrastructure Development Fund established with NABARD. Likewise, foreign banks having shortfall in lending to priority sector target/ sub targets is required to contribute to SIDBI. Interest rates for such contributions are decided by RBI from time to time. However, such contributions are not remunerative enough for banks, so that banks give importance on lending to these sectors. In a recent development, Government has specified that foreign banks having 20 or more branches in the country will be brought at par with domestic banks for priority sector mandatory lending in a phased manner over a maximum period of five years starting from April 1, 2013.

4.3.4. Credit Guarantee

Credit Guarantee Corporation of India was established in 1971 for providing guarantees against risks of default in payment in lieu of other securities for loans given by banks to various categories of small borrowers However, it was discontinued subsequently.

In August, 2000, Credit Guarantee Fund Trust for Micro and Small Enterprises was established by Government of India and SIDBI. The Credit Guarantee scheme (CGS) seeks to reassure the lender that, in the event of a MSE unit, which availed collateral free credit facilities, fails to discharge its liabilities to the lender, the Guarantee Trust would make good the loss incurred by the lender up to 75 / 80/ 85 per cent of the credit facility.

4.3.5. Differential Rate of Interest (DRI) Scheme

This scheme was instituted in 1972 to provide credit at concessional rate to the low income groups by banks.

4.3.6. Branch Expansion

The branch expansion policy during 1970s and 1980s on expansion of commercial bank branches in rural areas resulted in significant expansion of bank branches. The branch expansion policy was designed to address the inter-regional disparity of banking development and rural-urban divide. The branch authorization policy was simplified in December 2009 by permitting the domestic scheduled commercial banks to freely open branches in tier III to tier VI centres with a population of less than 50,000 under general permission subject to reporting. In 2011-12, with the aim of providing enhanced banking services in tier II centres, the general permission was extended to opening branches in tier II centres (with population of 50,000 to 99,999 as per census 2001). This policy has been effective, as a result majority of new bank branches opened during 2011-12 i.e., almost 70% (4,831 bank branches) were located in tier II to tier VI centres.

In the North Eastern states, SCBs are allowed to open branches of any types (rural, semi-urban and urban) without the need of taking permission from RBI, subject to reporting.

Phase II : Early 1990s through March 2005

During this phase focus was on strengthening the financial institutions as part of financial sector reforms. Financial inclusion was encouraged mainly by introduction of SHG-Bank-Linkage program in early 1990s and through Kishan Credit Cards (KCC) for providing credit to farmers.

4.3.7. SHG- Bank linkage programme and Micro Finance

One of the early attempts at financial inclusion during the period of economic reforms in India has been the launching of the pilot project on SHG-Bank linkage in February 1992 by NABARD. It proved to be a revolutionary programme for alleviating poverty through capacity building by making credit available and savings easy. Micro finance was adopted as a tool to bring vast unorganized segment of marginal borrowers to the formal credit mechanism and SHG model was adopted to boost the micro finance movement. In 1998, SHGs engaged in promoting the saving habits among their members was made eligible to open savings bank account and that such SHGs need not necessarily have availed credit facilities from banks before opening savings bank account. Subsequent to the Monetary and Credit Policy announcement for the year 1999-2000, the interest rate charged by banks on loans given to MFIs or by MFIs to beneficiaries such as SHGs or individuals was liberalized. Microfinance has emerged as an important semi-formal mode of credit delivery to the people specially those who are excluded from the formal financial system. The key factor which has influenced the success of microfinance is its ability to capture the void left by mainstream providers. Microfinance has been categorized as the fastest growing 'non-institutional' channel for financial inclusion in India by the Committee on Financial Sector Reforms. There are two models of microfinance adopted in India. They are i) Self-Help Group (SHG)- Bank linkage model where commercial banks lend directly to SHGs formed explicitly for this purpose and ii) the Microfinance Institution (MFI) model where MFIs borrow funds from banks to on lend to microfinance clients. The first model is the predominant channel for microfinance in India and is a good example of a meaningful liaison between commercial banks and informal SHGs. These two channels have contributed to the inclusion agenda through provision of loans and access to savings to the disadvantaged sections of the society. Figure 4.9 shows steady increase in Microfinance client outreach over the years.

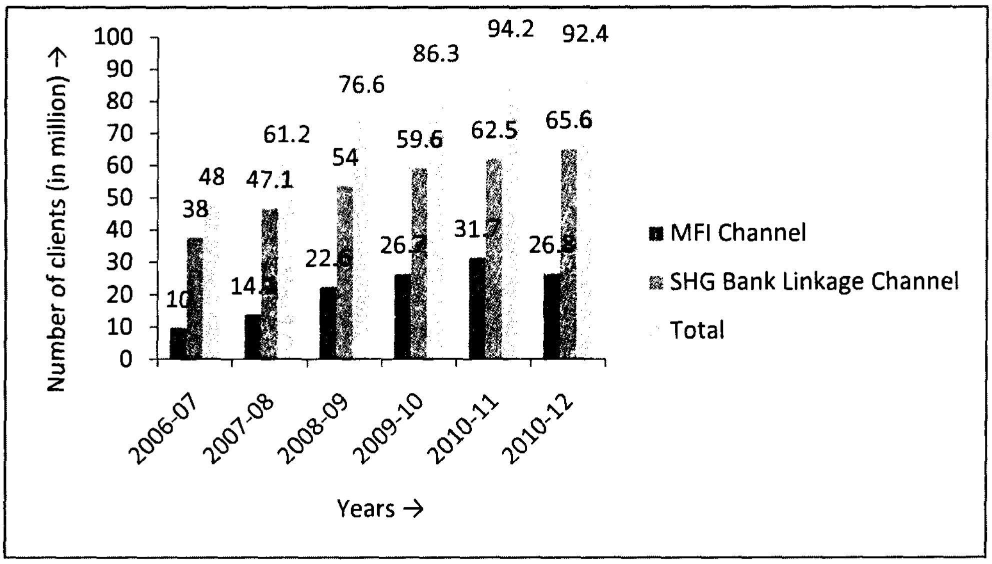

Figure 4.9: Trend in Micro Finance Client Outreach

Source : Adopted from Sa-Dhan. *The Bharat Microfinance Quick Report 2012* (2)

Similarly, as shown in Figure 4.10, the Micro Finance channel has collectively lent over Rs.556 billion out of which 62.37% has been contributed by the SHG Bank Linkage channel.

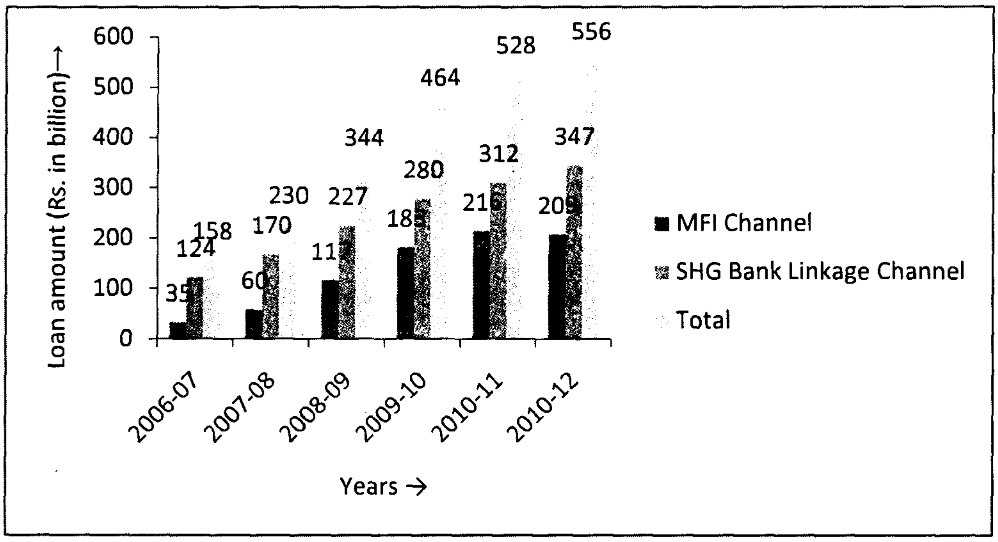

Figure 4.10: Microcredit portfolio outstanding over years

Source : Adopted from Sa-Dhan. *The Bharat Microfinance Quick Report 2012* (2)

The SHG- Bank linkage programme has also contributed towards providing safe saving avenue to the disadvantaged. A total of 110 million savers have saved Rs.78 billion with banks as on 2011-12 as per Sa-Dhan study.

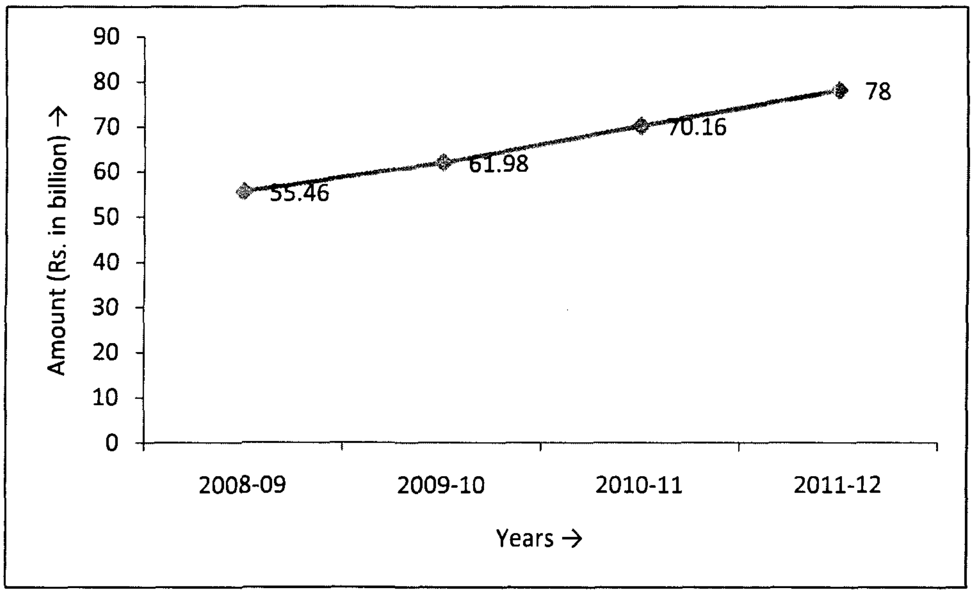

Figure 4.11 : Trend in savings by SHGs over years

Source : Sa-Dhan. *The Bharat Microfinance Quick Report 2012*

Although 'microfinance' is being replaced by 'financial inclusion' in the business vocabulary widely, in India, it cannot be so. It is due to the fact that some of the essential banking services such as savings and transactions are not allowed to be undertaken by the MFIs unless it is a BC of a bank. MFI-BC model is expected to go a long way in improving financial inclusion in India.

4.3.8. General Credit Card (GCC)

To make easy credit facilities available/ accessible to poor, RBI has asked banks to consider introduction of a general purpose credit card facility up to Rs.25,000/- at their rural and semi-urban branches. It is a hassle-free credit facility based in the assessment of household cash flow without security, purpose or end use of the credit. This is in the nature of revolving credit. Banks are incentivize by the regulator by allowing branches to show up to 50% of GCC loans as PSL.

Table 4.4: Progress made in GCC

Particulars	*As on March 2011*	*As on March 2012*
Number of GCC outstanding (in lakh)	17	21
Amount in GCC outstanding (Rs. in crore)	3500	4200

Source : RBI. *Report on Trend and Progress of Banking in India 2011-12*

Phase III : Beginning 2005 till now

In this phase Financial Inclusion is made a major policy objective.

4.3.9. Opening of 'no-frills' account

In the line of basic banking accounts globally, since November 2005, RBI has advised the banks operating in India to make available a basic banking 'no-frills' account. The main feature of this account is nil minimum balance maintenance requirement and minimum charges applicable for operation of this account so that it can be accessible to the common man. All banks in the country now offer 'no frills' account. RBI has reported that banks have opened 74.3 million such accounts as on March 31, 2011. Although considerable progress has been made towards it as depicted in Table 4.6, however, there are certain barriers that inhibit the active operation of these accounts such as time and cost involved in reaching the bank branch. Policies towards branchless banking are expected to make these accounts more accessible.

As per notification dated August 10, 2012, RBI has changed the nomenclature of 'no-frills' account to 'Basic Savings Bank Deposit Account' and issued guidelines on the Basic Services to be offered in this account with an objective of bringing uniformity across banking system. RBI advised banks to offer a 'Basic Savings Bank Deposit Account' which will offer following minimum common facilities to all their customers:

i. The 'Basic Savings Bank Deposit Account' should be considered a normal banking service available to all.

ii. This account shall not have the requirement of any minimum balance.

iii. The services available in the account will include deposit and withdrawal of cash at bank branch as well as ATMs; receipt/credit of money through electronic payment channels or by means of deposit/collection of cheques drawn by Central/State Government agencies and departments;

iv. While there will be no limit on the number of deposits that can be made in a month, account holders will be allowed a maximum of four withdrawals in a month, including ATM withdrawals; and

v. Facility of ATM card or ATM-cum-Debit Card;

The above facilities are to be provided without any charges. Further, no charge can be levied for non-operation/activation of in-operative 'Basic Savings Bank Deposit Account'. However, Banks are free to evolve other requirements including pricing structure for additional value-added services beyond the stipulated basic minimum services on reasonable and transparent basis and applied in a non-discriminatory manner. The existing basic banking 'no-frills' accounts should be converted to 'Basic Savings Bank Deposit Account'.

4.3.10. Relaxation in KYC Norms

As it was observed that lack of standard KYC documents posed as a major hindrance in opening bank account, in August 2005, RBI has revisited the KYC norms and relaxed it for opening 'no-frills account'. Now a minimum KYC such as introduction by an account holder who has been subjected to the full KYC drill suffice for opening such basic account. The banks are now permitted to take any evidence as to the identity and address proofs of the customer to their satisfaction. It has been further relaxed to include the letters issued by the Unique Identification Authority of India containing details of name, address and Aadhaar number.

4.3.11. Engaging Banking Correspondents

The Reserve Bank of India, in line with the global trend, ushered in the branchless banking as an important first step towards universal financial inclusion by allowing banks to use Business Facilitators (BF)/ Business Correspondents (BC) to expand their outreach in January 2006. BCs are permitted to carry out transactions on behalf of the bank as agents. The BFs can refer clients, pursue the clients' proposal and facilitate bank to carry out its transactions, but cannot transact on behalf of the bank.

Since the allowance of using BCs/ BFs in 2006, RBI has issued three notifications for deletion/ addition of entities allowed to work as BCs, operating guidelines of BCs supervision, scope of activities of BCs. Important developments are permitting individuals to operate as BC since April 2010, permitting 'for-profit' companies to be engaged as BC since September 2010 and then allowing inter-operability of BCs in retail outlets since March 2012. The BC channel is yet to pick up the momentum in India. As on 31/3/2012, a total of 62,468 BCs have been appointed in India. Banks have opened 13,434 BC outlets in urban areas during last three years.[16]

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[16] Chakrabarty, C. Kamlesh. "Financial Inclusion of Urban Poor in India" Keynote Address delivered at the Annual National Seminar titled 'Financial Inclusion of Urban Poor' conducted by the American India Foundation at New Delhi, on January 28, 2013. Web. 29 January 2013. < http://rbi.org.in/scripts/BS_SpeechesView.aspx?Id=774>

Table 4.5: BC/ BF in India – Eligible entities and services

	Eligible Entities	*Eligible Services*
BFs	NGOs, Farmers' Clubs, Co-operatives, Community based organizations, IT enabled rural outlets of corporate entities, Post Offices, Insurance agents, Well functioning panchayats, Village Knowledge Centres, Agri Clinics, Agri Business Centres, Krishi Vigyan Kendras and KVIC/KVIB units	i) Identification of borrowers and fitment of activities ii) Collection and preliminary processing of loan applications including verification of primary information/ data iii) Creating awareness about savings and other products and providing financial advice and promoting financial literacy iv) Processing and submission of application to banks v) Promotion and nurturing of SHGs and JLGs vi) Post sanction monitoring vii) Monitoring and handholding of SHGs/JLGs/ Credit Groups and others viii) Follow up for recovery
BCs	NGOs/ MFIs set up under Societies/ Trust Acts, Societies registered under Mutually Aided Co-operative Societies Acts or the Co-operative Societies Act of States, Section 25 companies, 'For-profit' companies, Post offices, Retired bank employees/ Government employees and Ex-servicemen	In addition to the activities allowed for the BFs, the following activities are allowed i) Disbursal of small value credit ii) Recovery of loans iii) Collection of small value deposits iv) Sale of micro insurance/ mutual fund products/ pension products/ other third party products v) Receipt and delivery of small value remittances/ other payment instruments

4.3.12. Mobile Banking

Mobile banking is perhaps the most promising front-end technology to speed up financial inclusion in India. Given the success of mobile phones reaching out the customer segments and geographies yet to be tapped by banking and it simplicity of operations, place it as the most preferred choice for the customers. As per Telecom

Regulatory Authority of India, total mobile subscribers in India is 913.49 millions as on July 31, 2012 resulting a teledensity of 75.21 making India a fastest growing telecom market.

Realising the huge opportunity to provide basic financial services to the unbanked citizens of the country by riding on the mobile infrastructure, an Inter Ministeral Group was constituted on November, 2009 by the Cabinet Secretariat to work out the relevant norms and modalities and to enable finalization of a framework to allow financial transactions through mobile services. The group proposed a framework involving introduction of "Mobile linked No-Frills Account". It is much like a regular "No-Frills" bank account that can be operated using a mobile phone. The customer can perform at least the following transactions

- Balance enquiry
- Cash deposit and withdraw
- Transfer of money.

RBI has issued guidelines for mobile banking transactions in October 2008. The guidelines permit banks to provide mobile banking transactions to its customers. It mandates that all transactions should originate from a bank account and end in another bank account. It also permits banks to extend this facility through their business correspondents. These guidelines were relaxed on December 2009 and May 2011.

4.3.13. Electronic Benefit Transfer (EBT)

As discussed earlier, social security payments through bank account has direct influence on the financial inclusion in India also. Banks have been advised to implement EBT by leveraging Information and Communication Technology through BCs. In this regard earlier it was "one district – one bank" model. However, keeping in view the difficulties faced by one lead bank in implementing EBT across all villages of the concerned district, RBI has recommended implementation of EBT through "one district-many banks-one leader bank". Under this model, all the banks having presence in a district would participate in EBT. However, for the administrative convenience, the Government would deal with only one leader bank.

The revised model is expected to expedite EBT as it overcomes many a problems of the earlier model.

One of the most successful EBT in the country is the payment of wages under Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGA). As on 2010-11 nearly 100 million bank/ post office accounts of the poor people have been opened and around 80% MGNREGA wages are made through this route. Special awareness and outreach activities are conducted to ensure that all wage seekers are able to handle bank procedures, especially in areas where they are unfamiliar with the banking system. Further, GoI and RBI has accepted MGNREGA job card as an officially valid document for KYC for opening bank account. Till Financial Year 2010-11, in Assam a total 2.84 million bank/post office accounts were opened and Rs.3.45 billion wages had been disbursed through these accounts.

4.3.14. Financial Inclusion Plan (FIP) of banks for three years

All public and private sector banks were advised by RBI to put in place Board approved three-year FIPs from April 2000 onwards. The FIP should broadly contain self-set targets with respect to – i) opening rural brick and mortar branches; ii) deployment of BCs; iii) coverage of villages with population of more than 2000 as also other un-banked villages with population below 2,000 through branches/BCs/ other modes; iv) opening no-frills accounts including through BC-ICT; v) issuing KCCs and GCCs and other specific products designed by them to cater to the financially excluded segments.

The progress by banks under FIP has been impressive. Especially the penetration of banking has increased in many-folds in rural areas. At the end-March 2012, villages covered under BCs constituted more than 80% of the total villages covered under FIP. The Table 4.6 summaries the achievements in various parameters by banks under FIP

Table 4.6: Progress under FIP

Sl. No.	*Particulars*	*As on March 2011*	*As on March 2012*
1	Total no. of Customer Service Points deployed	60,993	1,16,548
2	Total banking outlets in villages, of which 2.1 Branches 2.2 BCs 2.3 Other modes	1,16,208 34,811 80,802 595	1,81,753 37,471 1,41,136 3,146
3	Urban Locations covered through BCs	3,771	5,891
4	ICT Based A/Cs-through BCs (No. in millions)	32	57
5	ICT Based A/Cs Transactions (No. in millions)	84	141
6	ICT Based A/C Transactions (Rs. in millions)	5800	9300
7	Number of No-Frills Accounts (No. in millions)	10,500	13,900
8	Amount in No-Frills Accounts (Rs. in millions)	7600	10200
9	Number of No-Frills Accounts with Overdraft (No. in millions)	60	270
10	Amount in No-Frills Accounts with OD (Rs. in millions)	30	110
11	Number of KCCs outstanding (No. in millions)	2700	3000
12	Amount in KCCs outstanding (Rs. in millions)	160,000	206,800
13	Number of GCCs outstanding (No. in millions)	170	210
14	Amount in GCCs outstanding (Rs. in million)	3500	4200

Source : Adopted from *Report on Trend and Progress of Banking in India* 2011-12

4.3.15. Regulatory framework for the Micro Finance (MF) Sector

The micro finance sector has been contributing significantly towards financial inclusion in India, both in linking the poor with banks and in extending credit to the segment not generally catered by the formal financial system. With the exponential growth in this sector, it was important to formulate regulations to bring necessary transparency and safeguarding millions of beneficiaries. In October 2010, the state of Andhra Pradesh had issued an ordinance which later enacted into a law under which Micro Finance Institutions (MFI) functioning in the state needs to be compulsorily registered. Subsequently, RBI had set up a Committee under the chairmanship of Shri Y H Malegam to study the issues and concerns with regard to interest rates, lending and recovery practices in the MF sector. Based on the recommendations of the Committee, a special category of NBFC-MFIs has been created which will be regulated by RBI. The interest rate for Micro Credit has also been capped.

The proposed regulatory framework puts in place restrictions and safeguards with regard to minimum standards of governance, management and customer protection as well as the financial health of MFIs. The MFI (Development and Regulation) Bill, 2012 is pending in the Parliament. This bill proposes to exempt MFIs registered with and regulated by RBI from state money lending acts. This regulations ensuring growth of the sector as well as protecting the borrowers will go a long way in addressing financial inclusion in the country. Aim of the bill is to regulate the sector in the customers' interest and to avoid multitude of microfinance legislation in different states.

4.3.16. Special Dispensation Scheme to improve bank presence in the North Eastern Region

To give further fillip for expansion of bank network in the North Eastern Region, this scheme has been undertaken by RBI. Under this scheme, the RBI had undertaken to reimburse a one-time capital cost and recurring expenses for five years to banks for setting up branches at agreed centres in the North Eastern region and state Governments had agreed to provide the necessary premises, security and rental accommodation for the bank staff. This scheme is available for only those branches that have been opened at allotted centres by June 30, 2012.

4.3.17. Financial Inclusion Fund (FIF) and Financial Inclusion Technology Fund (FITF)

Based on the recommendations of the Committee on Financial Inclusion under the Chairmanship of Dr. C. Rangarajan, two funds were set up in NABARD during 2007-08 viz., FIF for meeting the cost of developmental and promotional activities and FITF for meeting the cost of technology upgradation. The corpus of each fund is Rs.5 billion to be contributed by the GoI, RBI and NABARD in the ratio of 40:40:20 in a phased manner over a period of five years, depending upon utilisation of funds. As of now Government of India has contributed Rs.100 million and NABARD Rs.50 million for each of the two funds.

Chapter 5

Status of Financial Inclusion in Assam

5. Status of Financial Inclusion in Assam

5.1 INTRODUCTION

As discussed in Chapter 4, in India, since late 1960s many policy initiatives have been undertaken for making banks serve the mass. Although considerable progress has been made in regards of branch expansion, however, many regions still continues to be under banked. In an important parameter for financial inclusion i.e., number of accounts held as a ratio to the adult population is only 74.73% as on March 31, 2010 which is considered to be very low compared to any developed country. For instance, the same ratio is 202.19% in USA. As on July, 2010, there are 296 underbanked districts in India. A comparison of basic inclusion parameters of India with same of some developed countries is presented in Table 5.1.

Table 5.1: Financial Access through Commercial Banks in selected countries

Country	*Deposits*			*Credits/ Loans*			*Average Adult Population served by a bank branch*		
	Account per 100 adults	*Value (as % of GDP)*	*Average Account value (as % of Per Capita Income)*	*Account per 100 adults*	*Value (as % of GDP)*	*Average Account value (as % of Per Capita Income)*	*Total*	*Urban*	*Rural*
USA	202.19	43.91	27.30	-	44.81	-	2,752	3,754	10,320
China	-	206.90	-	-	143.88	-	-	-	-
Japan	717.24	146.24	23.56	17.76	85.08	553.33	8,026	-	-
India	74.73	55.03	110.0	13.75	40.93	436.09	9,891	26,571	15,898
Germany	-	25.61	-	-	28.13	-	6,285	-	-
Russia	-	25.34	-	-	38.85	-	38,168	-	-
UK	292.32	61.32	25.44	-	80.64	-	4,822	-	-
Brazil	106.53	35.55	45.32	53.35	30.88	78.61	7,868	-	-
France	77.20	25.75	40.88	-	35.83	-	2,314	-	-
Italy	77.50	47.78	71.84	70.11	66.83	111.07	1,922	-	-

Source: Consultative Group to Assist Poor. *Financial Access 2010: The state of Financial Inclusion through crisis*

It is observed that in USA, Japan, UK and Brazil there are more number of deposit accounts than the number of adults where as in India there are 25.27% of adults without any deposit accounts. Credit delivery in India is marginal as only 13.75 out of per 100 adults are having credit accounts. However, Brazil and Italy have 3.8 times and 5 times of credit account per 1000 adults compared to India respectively. A large population and a small number of bank network has contributed to a large average number of adult population served by bank branches. In comparison to developed country like USA, bank branches in India serves almost four times more adult customers on an average; this is more acute in urban areas which account to be seven times of that of USA. Except Russia and Japan all other countries compared in Table 5.1 have a favourable statistics compared to India (data for China not available for this indicator) in this regard.

One of the objectives of the study is to study the status of Financial Inclusion in Assam with specific reference to the urban areas. The researcher attempts to study the status from available supply side secondary data. Trend is analysed for 21 years period from 1991 to 2011 for some critical parameters of inclusion. Performance on these parameters is compared with national average to understand the relative positions. Further, to know the overall achievement, Index of Financial Inclusion (IFI) has been calculated and analysed.

5.2 FINANCIAL INCLUSION IN ASSAM

Various indicators of Financial Inclusion considered for the study are

i) Number of bank branches per million population,

ii) Number of Deposit accounts per 1000 population,

iii) Number of Credit accounts per 1000 population,

iv) Per capita deposit,

v) Per capita credit and

vi) Credit to Deposit Ratio (CDR).

These indicators are calculated for Assam as well as for India for the period under study. They are presented in the following sections.

5.2.1. Bank branches per million population

Table 5.2: Number of bank branches per million population

	Assam		*India*	
Year	*Urban**	*Total***	*Urban*	*Total*
1991	54	55	63	71
1992	53	55	62	70
1993	53	54	62	69
1994	51	53	62	69
1995	59	52	67	68
1996	57	51	72	67
1997	56	49	67	66
1998	54	48	68	65
1999	52	48	69	65
2000	52	46	69	64
2001	46	46	66	64
2002	45	45	65	63
2003	52	44	65	63
2004	52	44	65	62
2005	54	44	66	62
2006	55	43	74	63
2007	60	44	77	64
2008	66	45	82	67
2009	62	46	86	69
2010	72	49	91	73
2011	79	50	90	75

Source : Calculated using RBI's data for banking and Office of the Registrar General and Census Commissioner's data for population

* Due to non-availability of data, 'Number of Reporting Offices' has been considered as 'Number of branches' for all other years

**Except for the years 1997-2002, due to non-availability of data, 'Number of Reporting Offices' has been considered as 'Number of branches' for all other years.

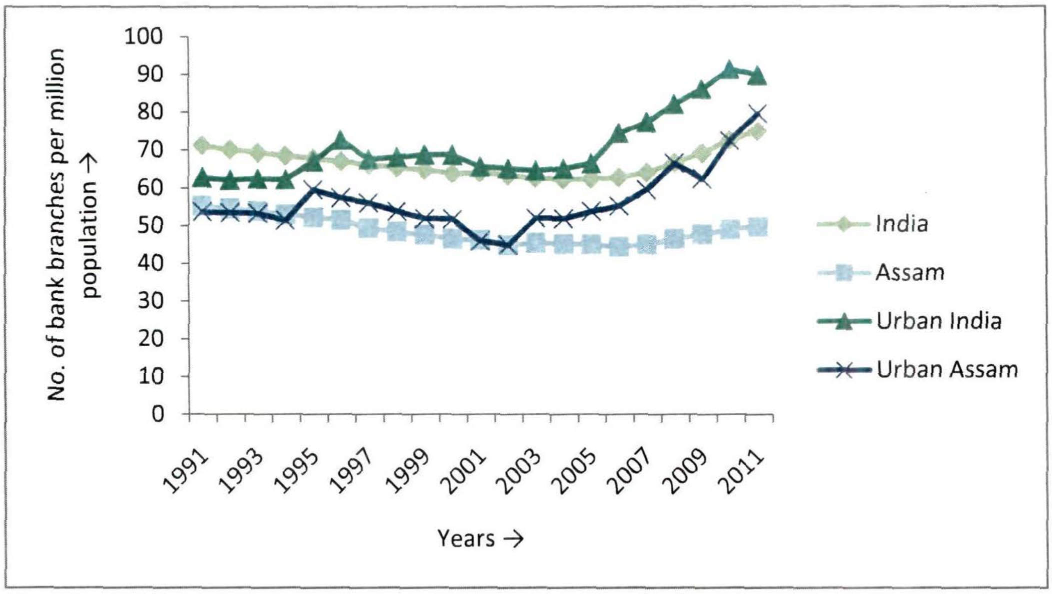

Figure 5.1 : Number of bank branches per million population

It is observed that since 1995 onwards, this indicator for Urban Assam has been above than that of Assam, only exception is the year 2001 when it was marginally below. Almost same trend is observed in the national scenario. The indicator for Urban India has been above than that of India since 1996. Further the value of this indicator for the State (total as well as urban areas) has been lesser than the corresponding value achieved at the national level in all the years during the period under study.

5.2.2. Deposit accounts per 1000 population

Table 5.3 : Number of Deposit Accounts per 1000 population

	Assam		*India*	
Year	*Urban*	*Total*	*Urban*	*Total*
1991	463	249	681	420
1992	469	268	681	428
1993	492	278	688	430
1994	502	286	713	440
1995	641	308	718	423
1996	600	301	694	416
1997	623	315	680	412
1998	590	315	663	407
1999	558	306	656	405
2000	499	292	649	403
2001	472	292	629	416

Year	*Assam*		*India*	
	Urban	*Total*	*Urban*	*Total*
2002	438	278	647	421
2003	420	275	639	420
2004	420	268	644	424
2005	415	272	635	426
2006	532	293	697	436
2007	568	308	720	460
2008	575	332	790	508
2009	610	385	853	571
2010	594	432	916	624
2011	656	473	922	669

Source : Calculated using RBI's data for banking and Office of the Registrar General and Census Commissioner's data for population

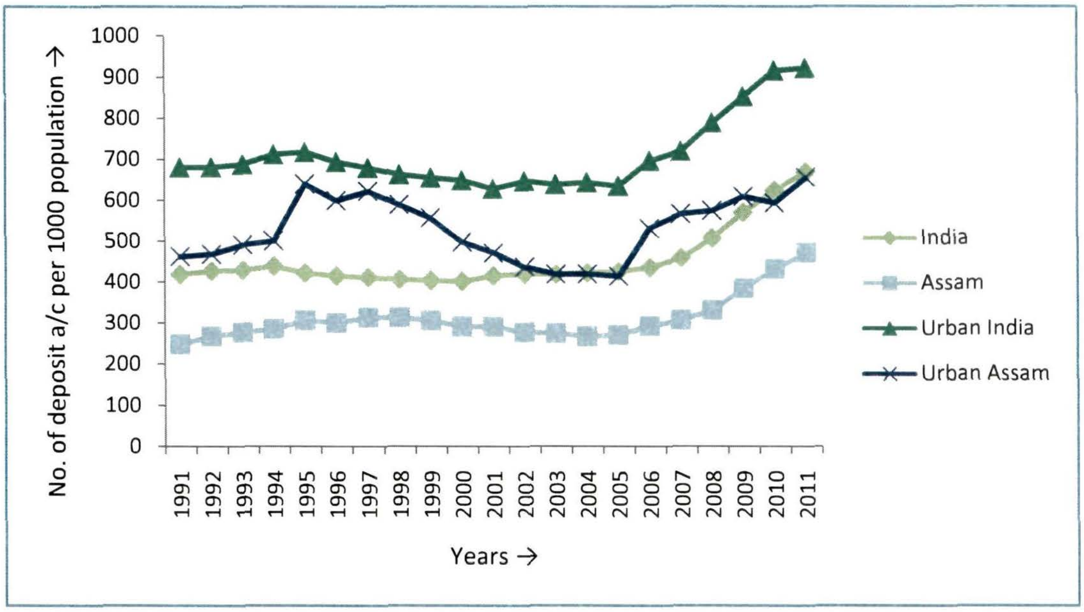

Figure 5.2: Number of Deposit Accounts per 1000 population

Although there are many fluctuations in the value of this indicator over the years for Urban Assam, it has been observed that the value has been always above than that of Assam. The value for Urban India also has always been greater than that for India during the period of study. Further, for this indicator of inclusion, the State as well as it urban areas could not achieve the national level of attainment.

5.2.3. Credit accounts per 1000 population

Table 5.4 : Number of Credit Accounts per 1000 population

	Assam		*India*	
Year	*Urban*	*Total*	*Urban*	*Total*
1991	50	37	55	73
1992	107	46	65	76
1993	104	46	54	70
1994	66	42	48	66
1995	69	42	49	63
1996	57	41	50	60
1997	60	41	50	58
1998	69	38	46	55
1999	34	29	51	52
2000	38	27	54	53
2001	45	24	55	51
2002	32	24	55	54
2003	33	25	62	56
2004	37	27	81	62
2005	43	30	95	70
2006	54	36	111	77
2007	60	40	128	84
2008	63	43	150	93
2009	66	44	152	95
2010	72	49	158	101
2011	74	53	140	100

Source : Calculated using RBI's data for Banking and Office of the Registrar General and Census Commissioner's data for population

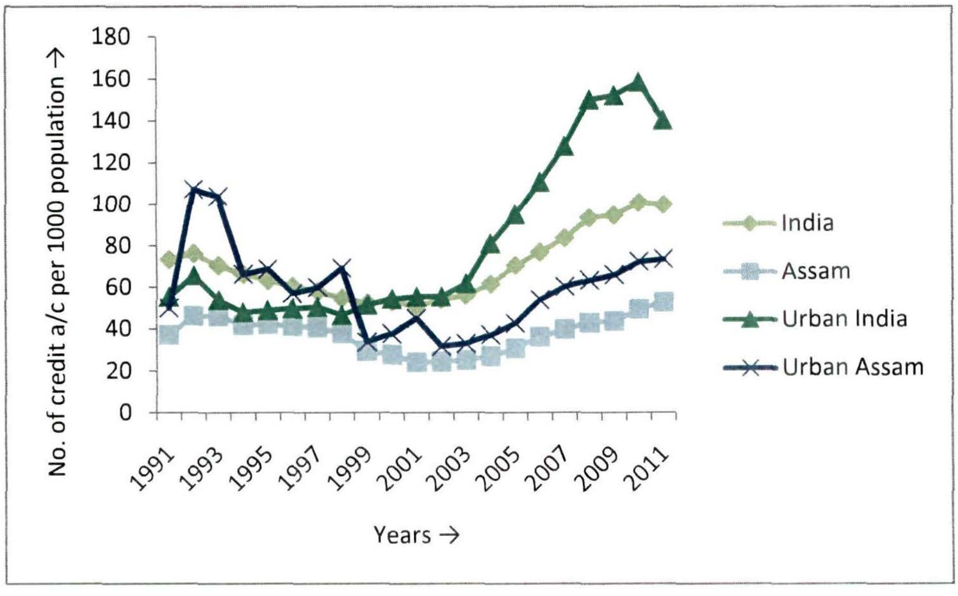

Figure 5.3: Number of Credit Accounts per 1000 population

The value of this indicator in Urban Assam has been more than that of Assam throughout the period of study. A peculiar trend has been observed in the national level as till 1999, level of attainment of this indicator in Urban India was lower than that of India.

5.2.4. Per capita deposit

Table 5.5 : Per capita deposit @

Amount in Rs.

Year	*Assam*		*India*	
	Urban	*Total*	*Urban*	*Total*
1991	3626.89	982.03	5883.00	2368.00
1992	3883.50	1085.34	6890.89	2738.00
1993	3948.59	1157.63	7883.05	3111.00
1994	4375.80	1331.31	9029.40	3596.00
1995	5912.90	1596.00	10689.03	4242.00
1996	6044.21	1748.00	11516.17	4613.00
1997	6853.19	2034.86	13160.19	5261.00
1998	7893.18	2359.00	15445.27	6170.00
1999	8593.48	2719.00	17625.46	7237.00
2000	9987.23	3236.00	20239.85	8498.00
2001	11950.20	3723.00	21804.05	9758.00
2002	13268.10	4337.00	25558.86	10994.00
2003	14813.03	4763.00	28593.79	12554.00
2004	16289.05	5355.00	34123.65	14550.00
2005	19218.47	6468.00	39398.17	16091.00
2006	23904.92	7343.00	48627.89	19276.00
2007	30841.57	8913.00	60454.62	23468.00
2008	38065.08	10796.00	74912.50	23827.00
2009	47270.83	13259.00	88234.19	33471.00
2010	56813.91	16411.00	100597.72	38062.00
2011	68904.17	19334.00	110829.77	43034.00

Source : RBI

@ For urban areas calculated using RBI's data for Banking and Office of the Registrar General and Census Commissioner's data for population

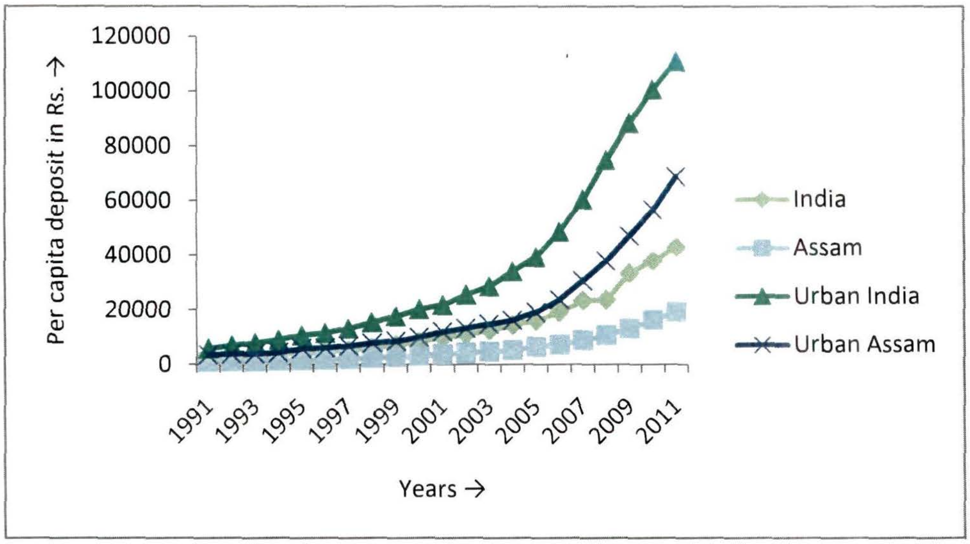

Figure 5.4 : Per capita deposit

It has been observed from the above table and figure that the per capita deposits in urban areas of Assam as well as India have been more than that of Assam or India as a whole for all the years under study. Further, the difference between the attainment levels in urban and total area for Assam as well as India is increasing over the years in absolute terms.

5.2.5. Per capita credit

Table 5.6 : Per capita credit*

Amount in Rs.

	Assam		*India*	
Year	*Urban*	*Total*	*Urban*	*Total*
1991	1814.29	405.00	3524.63	1343.00
1992	2047.45	546.30	3844.41	1516.00
1993	2028.30	570.52	4651.54	1752.00
1994	1757.65	549.76	5058.19	1854.00
1995	2239.74	607.00	6573.69	2320.00
1996	2221.70	687.00	7867.80	2719.00
1997	2211.66	739.08	8585.45	2931.00
1998	2478.98	775.00	9796.83	3356.00
1999	2683.74	856.00	11195.62	3738.00
2000	3617.54	1019.00	13340.29	4531.00
2001	5024.95	1205.00	14759.36	5221.00
2002	5003.86	1362.00	17591.29	5919.00
2003	4466.90	1362.00	19777.30	7143.00
2004	5497.31	1648.00	22634.33	8166.00
2005	6808.63	2225.00	29018.22	10440.00

Year	*Assam*		*India*	
	Urban	*Total*	*Urban*	*Total*
2006	10261.71	3083.00	38466.66	13774.00
2007	11934.61	3860.00	48809.85	17355.00
2008	14301.47	4451.00	59688.09	20928.00
2009	16493.93	5083.00	69194.98	24230.00
2010	19714.52	6065.00	79183.26	27489.00
2011	23532.61	6887.00	90114.23	32574.00

Source : RBI

*For urban areas, calculated using RBI's data for Banking and Office of the Registrar General and Census Commissioner's data for population

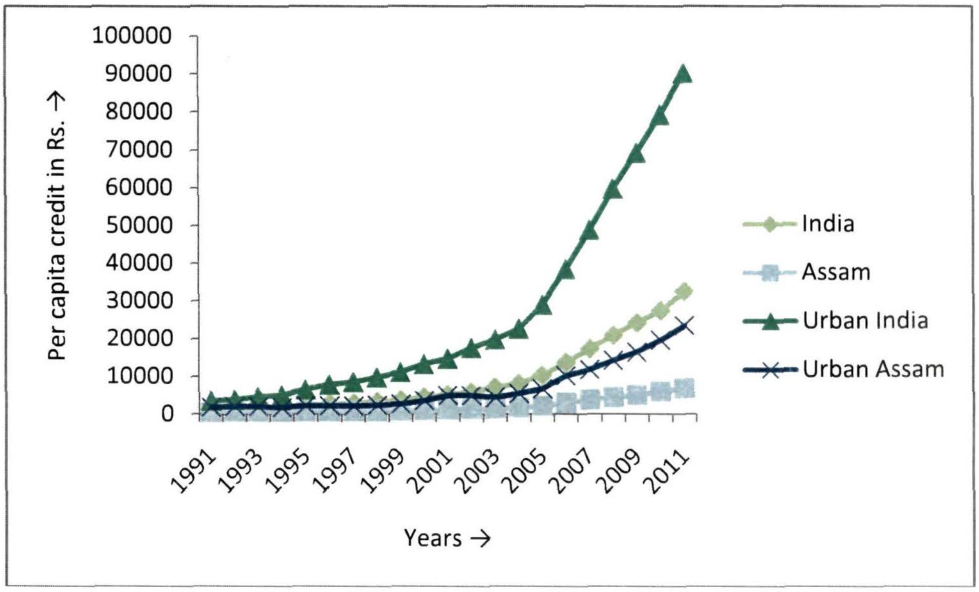

Figure 5.5: Per capita credit

Like the 'per capita deposit', 'per capita credit' in urban areas of the State as well as the country is higher than the overall 'per capita deposit'. The difference between the state and the national average is widening up in absolute terms over the years.

5.2.6. Credit to Deposit Ratio (CDR)

Table 5.7: Credit Deposit Ratio

Year	*Assam*		*India*	
	Urban	*Total*	*Urban*	*Total*
1991	50.02	69.90	59.91	60.60
1992	52.72	79.00	55.79	55.40
1993	51.37	75.90	59.01	56.30
1994	40.17	55.60	56.02	51.60
1995	37.88	47.40	61.50	54.70
1996	36.76	35.20	68.32	59.20
1997	32.27	36.30	65.24	55.70
1998	31.41	37.80	63.43	54.20
1999	31.23	38.70	63.52	51.70
2000	36.22	35.50	65.91	53.30
2001	42.05	38.10	67.69	53.50
2002	37.71	70.30	68.83	53.80
2003	30.16	61.60	69.17	56.90
2004	33.75	35.70	66.33	56.10
2005	35.43	41.90	73.65	64.90
2006	42.93	49.10	79.10	71.50
2007	38.70	52.50	80.74	73.90
2008	37.57	49.80	79.68	73.90
2009	34.89	41.50	78.42	72.40
2010	34.70	40.50	78.71	72.20
2011	34.15	38.90	81.31	75.70

Source : RBI

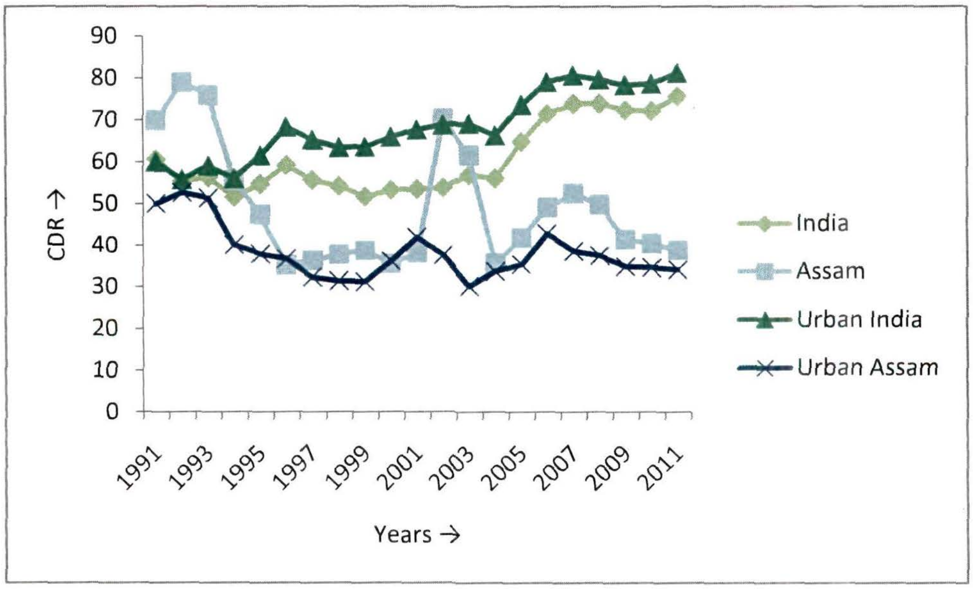

Figure 5.6: Credit Deposit Ratio

Although in all other indicators discussed above, urban areas of the State is performing better than the overall performance of the State, in case of CDR it is observed that the indicator is performing at a much lower level in urban areas of the State (baring for years 2001& 2002). It indicates that though deposit has increased at a rapid rate in the urban areas of the State, credit has not picked up to that level. It is noteworthy to mention that in the years 1991-94 and 2002-2003, CDR of the State was better than that of the country. However, 2004 onwards, the State CDR remains lower than that of the country and the gap between the two is widening in absolute terms over the years.

5.2.7. Average Annual Growth Rate (AAGR) of various indicators

The Average Annual Growth Rate (AAGR) of the indicators during the 21 years period under study are calculated and presented in Table 5.8.

Table 5.8: AAGR of selected indicators of Financial Inclusion during 1991-2011

Indicator	*AAGR*			
	Assam		*India*	
	Urban	*Total*	*Urban*	*Total*
Number of deposit accounts per 1000 population	1.98%	4.29%	1.69%	2.83%
Number of credit accounts per 1000 population	2.25%	2.04%	7.30%	1.73%
Per capita deposit	85.71%	88.99%	84.95%	81.78%
Per capita credit	57.00%	76.21%	116.99%	110.74%
Number of bank branches per million population	2.29%	(0.48%)	2.05%	0.25%
CDR	(1.51%)	(2.11%)	1.70%	1.19%

It is seen that against marginal annual growth of 'number' of accounts and branches there has been very rapid growth in 'amounts'. It indicates concentration of deposits or credits in the hands of few and shows that the banking system has not been inclusive over the years.

5.3. CALCULATION OF INDEX OF FINANCIAL INCLUSION

As discussed in Chapter 1 and 4, there is no universally accepted measure for Financial Inclusion. The various indicators independently provide partial information about inclusion and using it independently might lead to misleading conclusions. So, measures which take into consideration various dimensions of inclusion are gaining importance. Index is such a measure which can encompass various dimensions. To measure level of Financial Inclusion in Assam, index developed by Chakravarty and Pal has been calculated. The conceptual background of the index has been discussed in Chapter 3 (refer §3.6). This index may be used as an effective tool to measure the relative contribution of each indicator/attribute to the overall Financial Inclusion so that appropriate policy initiatives may be taken to improve upon the low contributing attributes.

Although there are various dimensions of Financial Inclusion, this index comprises of three very basic dimensions viz., availability of banking services, banking penetration and usage of the banking system. General as well as urban specific index for the country as well as for Assam for the period 1991-2011 have been calculated.

a) Availability of banking services –

Availability of banking services to the users is the basic of Financial Inclusion, unless services are available, we cannot expect an inclusive system. There are various parameters of measuring this dimension such as number of bank branches per million population, average population served by per branch office (APPBO), number of branches per 100 kilometer area, number of ATMs per 1000 population, number of bank staff per 1000 population etc. However, due to non availability of data, only one parameter has been considered to measure this dimension i.e., number of bank branches per million population.

b) Banking penetration –

An inclusive system should penetrate widely amongst its users. The number of people with bank account is a measure of banking penetration. However, as there is no published data on number of people with bank accounts, so number of accounts per 1000 population has been used as a measure. As both saving and credit are important parameters to know banking penetration, number of deposit and credit accounts are used separately in the index.

c) Usage of banking system :

Mere measure of availability and penetration cannot give a complete picture of financial inclusion. There is a possibility that a majority of people availing banking services are actually underbanked or marginally banked. It is also imperative that the banking services are adequately utilized. To incorporate the usage dimension in the index, two basic services of banking system has been considered viz. per capita deposit and per capita credit. Further, CDR is also considered separately as a measure of usage dimension to nullify the effect of higher per capita deposit in comparison of per capita credit.

Table 5.9, Table 5.10 and Table 5.11 in Annexure presents Index of Financial Inclusion in India calculated with r=1, 0.75 and 0.50 respectively. Likewise, Table 5.12, Table 5.13 and Table 5.14 presents Index for urban India calculated with r=1, 0.75 and 0.50 respectively. Table 5.15, Table 5.16 and Table 5.17 presents the Index calculated for Assam with r=1, 0.75 and 0.50 respectively. Table 5.18, Table 5.19 and Table 5.20 presents the index calculated for urban Assam with r=1, 0.75 and 0.50 respectively. Further, attribute wise breakdown of index and percentage contribution of each attribute to the overall index has been shown in these tables. Weights to variables are assigned corresponding to the eigenvector of the leading eigen value after performing Principal Component Analysis among the indicators as placed in Table 5.21.

Further levels of Financial Inclusion have been categorised into three categories depending on the value of the index. These categories are –

$0 \leq$ Index < 0.33 – low financial inclusion (L)

$0.33 \leq$ Index < 0.66 – medium financial inclusion (M)

$0.66 \leq$ Index ≤ 1 – high financial inclusion (H)

A summary of these categories and the value of index are given in Table 5.22.

Table 5.22 : Index of Financial Inclusion for India and Assam ($I_{0.75}$)

	India				*Assam*			
	Total		*Urban*		*Total*		*Urban*	
Year	*Index*	*Status of Financial Inclusion*	*Index*	*Status of Financial Inclusion*	*Index*	*Status of Financial Inclusion*	*Index*	*Status of Financial Inclusion*
1991	0.529	M	0.426	M	0.064	L	0.104	L
1992	0.527	M	0.431	M	0.099	L	0.117	L
1993	0.524	M	0.432	M	0.102	L	0.124	L
1994	0.513	M	0.430	M	0.088	L	0.112	L
1995	0.514	M	0.465	M	0.094	L	0.179	L
1996	0.519	M	0.495	M	0.077	L	0.166	L
1997	0.509	M	0.478	M	0.086	L	0.166	L
1998	0.505	M	0.476	M	0.087	L	0.153	L
1999	0.501	M	0.490	M	0.078	L	0.135	L
2000	0.513	M	0.505	M	0.068	L	0.132	L
2001	0.525	M	0.502	M	0.070	L	0.101	L
2002	0.539	M	0.519	M	0.096	L	0.089	L
2003	0.560	M	0.532	M	0.093	L	0.124	L
2004	0.581	M	0.564	M	0.070	L	0.139	L
2005	0.631	M	0.613	M	0.096	L	0.166	L
2006	0.686	H	0.704	H	0.131	L	0.242	L
2007	0.745	H	0.769	H	0.159	L	0.294	L
2008	0.815	H	0.850	H	0.185	L	0.348	M
2009	0.872	H	0.905	H	0.214	L	0.368	M
2010	0.934	H	0.967	H	0.255	L	0.428	M
2011	0.999	H	0.981	H	0.287	L	0.492	M

It has been observed from the Table 5.22 that Financial Inclusion in urban Assam has been at the low level from 1991-2007 and has improved to medium level since 2008. The level of Financial Inclusion for the State has been low for the entire period under study. Wide gap has been observed between the levels of attainment of Financial Inclusion of the State and the Country both in urban as well as general. Beginning 2006, India has attained high level of inclusion in urban areas and as a whole. For the rest of the period, level of inclusion has been medium. The trend has been discussed in detail below.

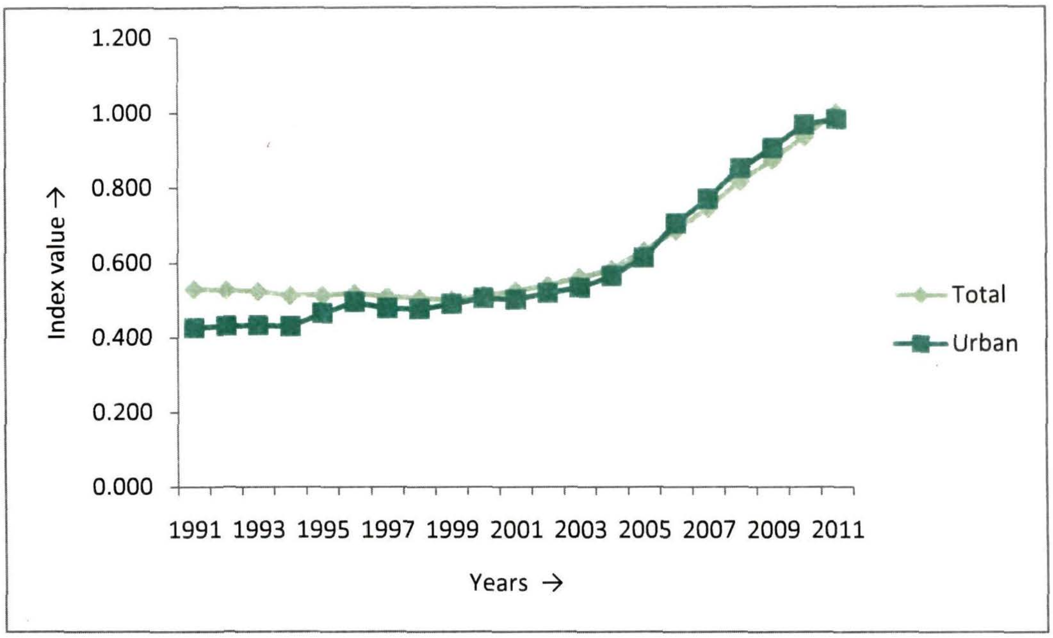

Figure 5.7: Index of Financial Inclusion for India

In Figure 5.7, Index for India as a whole and specific to Urban India are shown for r=0.75. For India as a whole, Index is minimum in the year 1999 and maximum in 2011, whereas in urban India, the index is minimum in the year 1991 due to low 'per capita deposit' and 'per capita credit'. Against the myth, Financial Inclusion in urban areas was lower than that of all areas as a whole during 1991-2005, due to low contribution of 'per capita deposit' and 'per capita credit' to the overall inclusion. The urban areas were better off during 2006-2010, however again fell marginally in 2011.

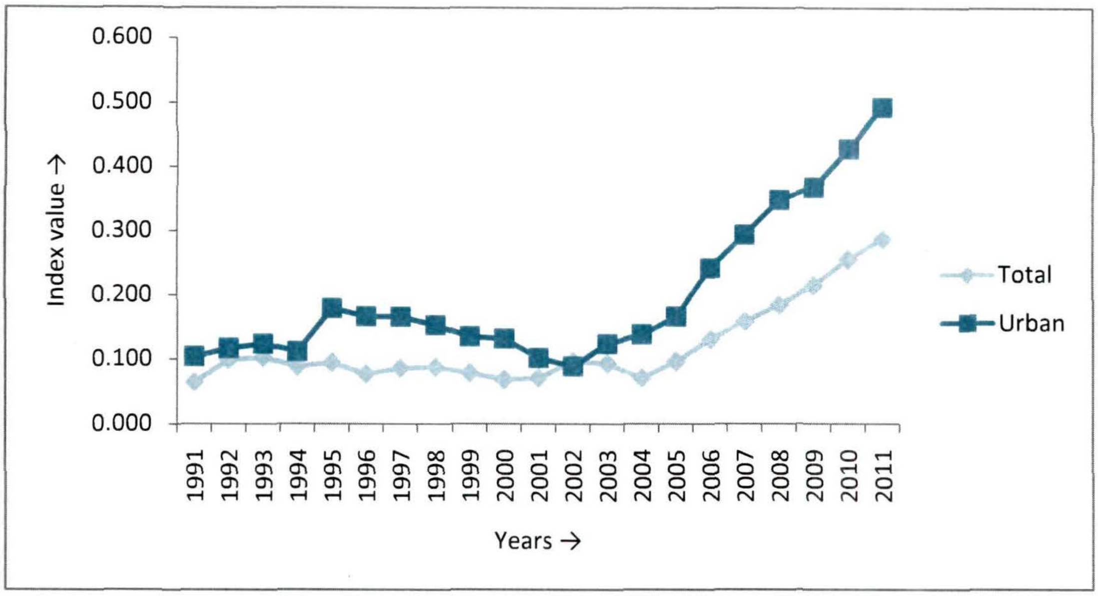

Figure 5.8: Index of Financial Inclusion for Assam

In Figure 5.8, Index for Assam as a whole and specific to Urban Assam are shown for r=0.75. The index for Urban Assam is minimum in 2002 and maximum in 2011 for Assam. The lowest level of attainment in 2002 may be attributed to low contribution of the indicators 'number of credit accounts per 1000 population' and 'number of branches per million population'. It shows many fluctuations for urban areas till 2002, registering the even lower level of attainment than Assam in 2002. However, since 2003 onwards, it is showing an upward trend. For the State as a whole, the lowest level of inclusion was experienced in 1991 due to low contributions of indicators viz., 'number of deposit accounts per 1000 population', 'per capita deposit' and 'per capita credit'. Level of inclusion shows consistent upward trend since 2005 onwards and is highest in 2011.

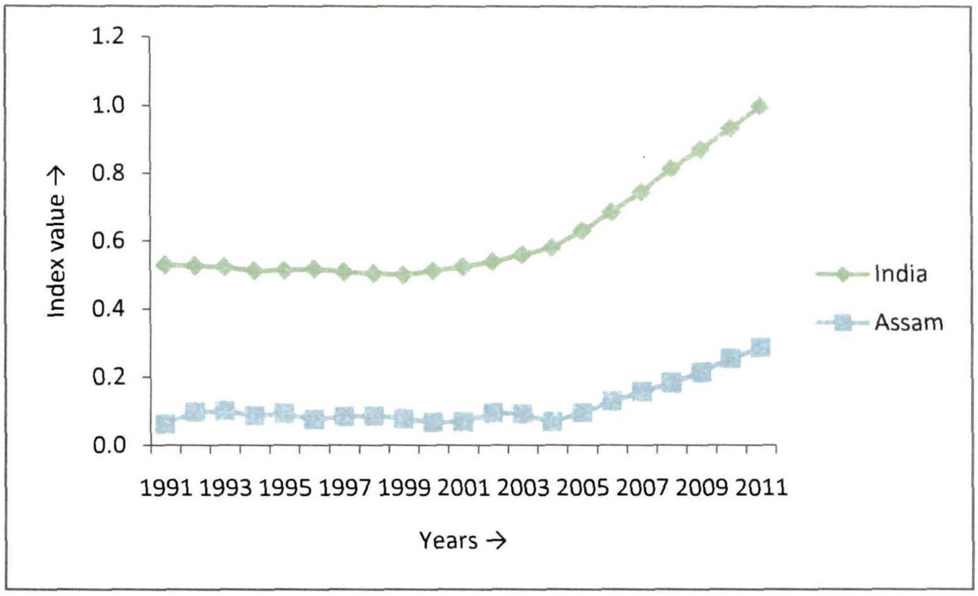

Figure 5.9: Index of Financial Inclusion for India vis-à-vis Assam

Level of Financial Inclusion in Assam has been lower than that of India consistently during the period of study. Further, the difference between the statuses of inclusion between the state and the nation is widening over period. It may be contributed to the fact that state lags behind in all indicators of financial inclusion. The gap is widening fast in respect of per capita deposit and per capita credit figures of the state in comparison to the country.

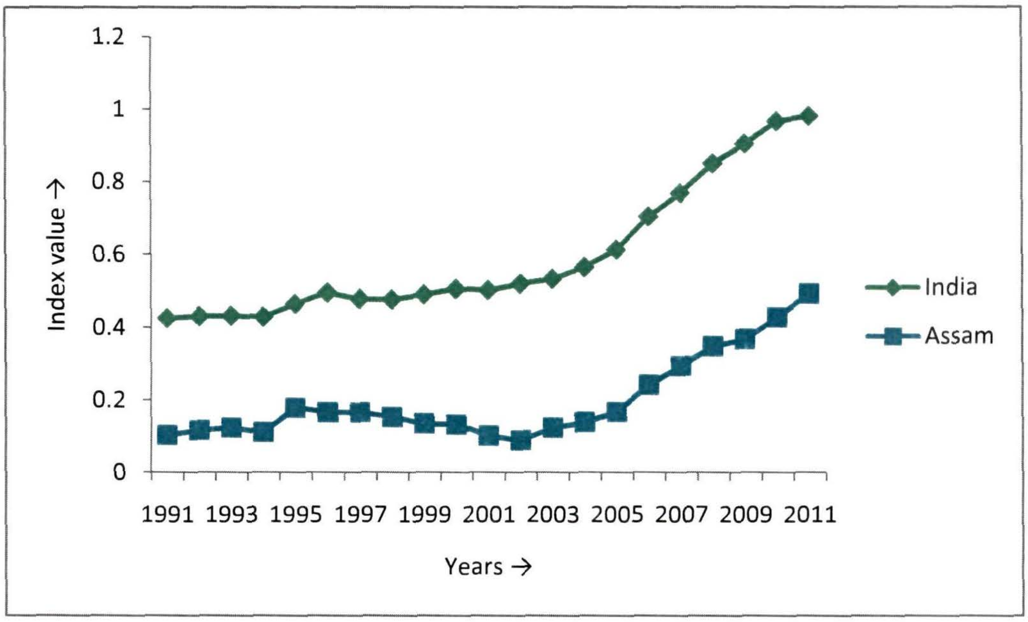

Figure 5.10: Index of Financial Inclusion for Urban India vis-à-vis Urban Assam

Financial Inclusion in Urban Assam has been worse than national level throughout the period of study.

5.4. FINDINGS :

Summary of findings from the analysis done in this chapter is as below –

5.4.1. The State lags behind the national performance in all parameters of Financial Inclusion considered for study viz., number of deposit accounts per 1000 population, number of credit accounts per 1000 population, per capita deposit, per capita credit, number of bank branches per million population and CDR (baring CDR for few years).

5.4.2. Urban Assam lags behind Urban India in all parameters of Financial Inclusion under study except 'per capita credit' for few odd years.

5.4.3. Per capita deposit/ credit has grown at a phenomenal rate annually against marginal growth in number of deposit/ credit accounts and bank branches. It is true for Assam and India as a whole and also for urban areas. Number of bank branches per million population and CDR has shown a negative average annual growth rate in Assam during the period of study.

5.5. CONCLUSION :

The study uses the available supply side data to analyse the trend and measure the extent of financial inclusion in the country as well as in the state of Assam. For measuring financial inclusion, the Index of Financial Inclusion developed by Chakravarty and Pal was calculated. The index for India as well as Assam for the period 1991-2011 has been calculated and trend is analysed. This index is calculated for both general and urban specific.

It is observed that there is mixed contribution of individual attributes towards the overall inclusion during the period of study without any particular trend or pattern for India as well as Urban India. Contribution of all the indicators in the best inclusive year is almost equal. Therefore, it necessitates importance to be given to each attribute to develop the index further in future. For improving inclusion in Assam, thrust is required to be given in improving the branch network, CDR and per capita availability of credit accounts. For improving inclusion in urban areas of the State, CDR and per capita availability of credit accounts need to be improved.

Chapter 6

Demand Side Survey

6. Demand Side Survey

6.1. INTRODUCTION

From the study of available supply side secondary data (refer Chapter 5), it is found that level of Financial Inclusion in the state has been low and it could not match the national level throughout the period of study. It provoked the researcher to study the causes of exclusion from the demand side also so that logical conclusions can be drawn. As evident from the literature survey, there have been very few studies dealing with demand side concerns of the issue of Financial Inclusion. It might be due to the fact that collection of demand side information is difficult. Initiatives have been undertaken very recently by multilateral organizations to collect demand side information. But such survey conducted in the country has also not included the State's population.

In view of this, a demand side survey among urban unbanked adults of the State has been undertaken by the researcher to understand and identify the factors limiting Financial Inclusion. Analysis of the primary data collected through the survey is presented in this chapter. The sampling methodology and analytical tools have been discussed in detail in Chapter 3 (refer §3.2.1).

6.2. KEY SOCIO-ECONOMIC CHARACTERISTICS OF RESPONDENTS

The survey includes 56% male and 44% female respondents. Even though survey excludes persons below 18 years of age, the respondents are relatively young. 67% of respondents belong to age 40 years and below. Only 7.5% of the respondents are above 60 years of age. Majority respondents (81%) are Hindu by religion followed by Muslims who consists 18% of the respondents.

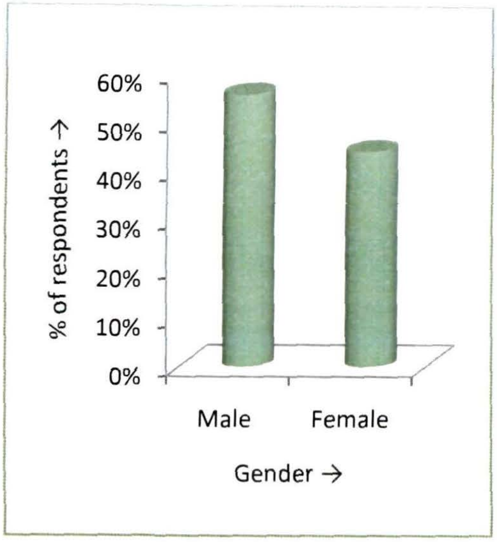

Figure 6.1: Gender profile

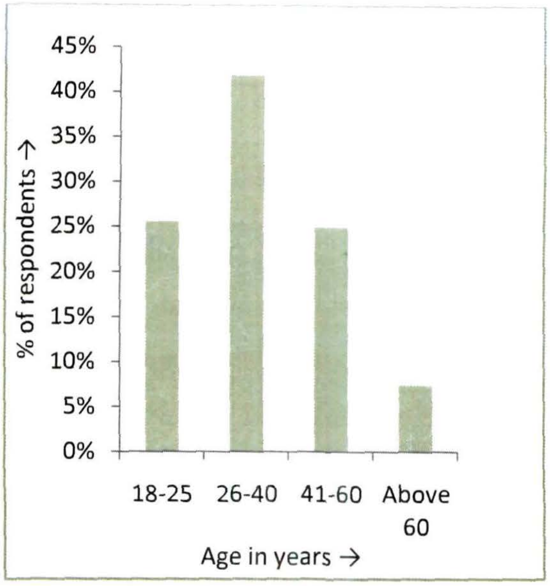

Figure 6.2:Age profile

The education profile of the respondents is relatively good. Only 15% are illiterate, 66% respondents are either undergraduate, graduate, post graduate or vocational/ technically qualified.

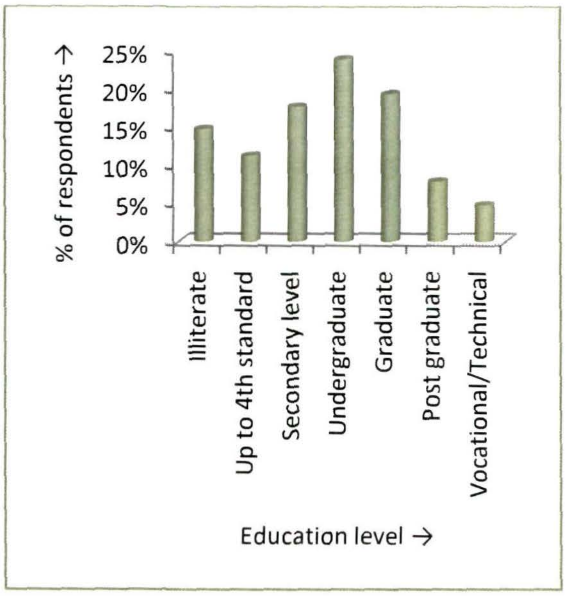

Figure 6.3: Educational profile

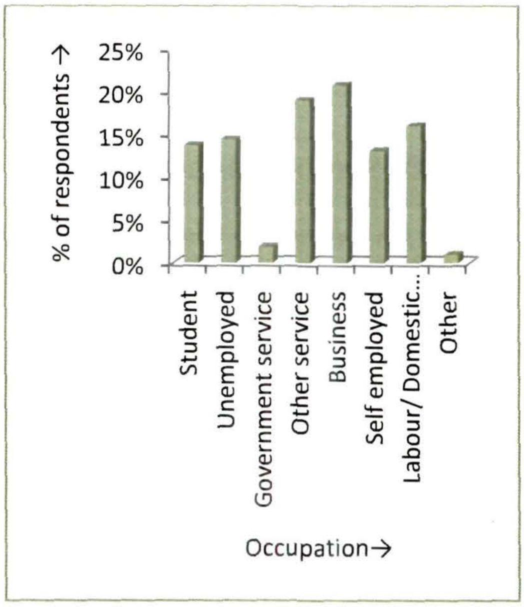

Figure 6.4: Occupational profile

The occupation profiles of respondents are varied. However, majority (21%) of respondents are running some form of business followed by service holders

(21%), labourer or domestic help (16%), unemployed (14%) and students (14%), self employed professionals (13%) etc.

Income of respondents is in lower levels. Only 15% of respondents earn Rs.10,000/- and above in a month. Further, 15% of respondents earn less than Rs.1,000/- per month. Majority of the respondents (27.1%) earn in the bracket of Rs.3,000/- to Rs.6,000/- in a month.

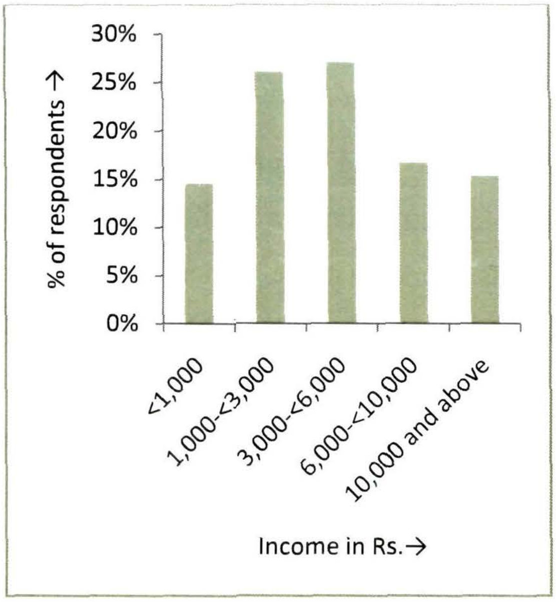

Figure 6.5 : Income profile of respondents

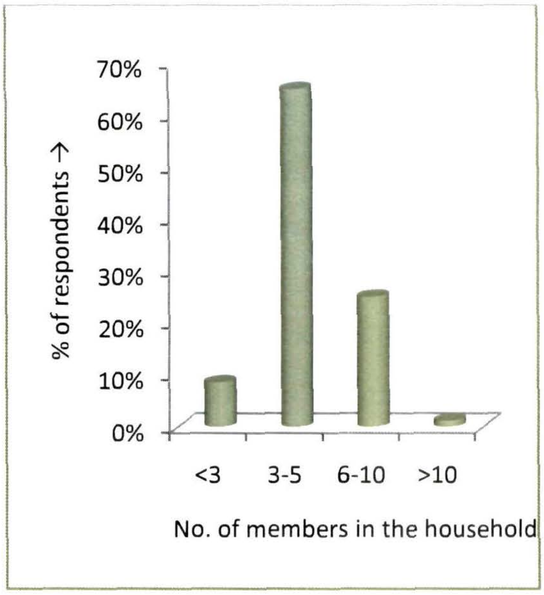

Figure 6.6: Household size of respondents

80% of respondents possess cellular phones and another 15% of them have easy access to it though not possessing it themselves. More than half of the respondents possess TV and Radio. Further, 37% and 31% of respondents have easy access to TV and Radio though not possesses these items.

'Ownership of dwelling' is varied among respondents from official accommodation to illegal accommodation. Majority of the respondents (52%) live on rented dwelling, followed by owned dwelling by 35% of respondents. Only 4% are enjoying official accommodation and 1.2% agreed to have been staying at illegal localities/ accommodation. 'Type of dwelling units' also varied. 47% respondents stay in a complete house or apartment, followed by 30% of respondents staying in a shack or one room accommodation. Analysis of the 'duration of stay' in a dwelling shows that 72% of respondents have been staying at the present dwelling for more than a year. Also 78% respondents have rarely changed their dwelling. However, 21% respondents have the tendency to change the dwelling type in a year's time.

Depicting an urban phenomenon, 'household size' of the respondents has been found to be small. Majority (65%) of respondents belong to households with 3-5 members.

45% of respondents have other earning members in the family, followed by 34% respondents who are dependents and 21% who are the only earners in their families.

As documentary proof of identity, address and signature are generally required to open regular bank accounts in the country; data on availability of such documentary proof was also collected. It was found that the respondents mostly possess Ration card or Family Identity Card (40%) followed by PAN Card (24%), Life Insurance Policy Document (23%), Electricity Bill (23%), Driving License (14%), Government Identity Card (4%), Voter's Identity Card (2.3%). Fewer respondents (<1% in each category) possess documents like Passport, Trade license, VAT Registration certificate etc.

6.3. INFRASTRUCTURE AVAILABILITY AND ACCESS TO BANKING UNITS

6.3.1. Availability of common infrastructure

Analysis of data on Common Infrastructure availability is presented below

Table 6.1: Availability of common infrastructure

Particulars	*Availability for respondents in % terms*	
	Available	*Not available*
Motorable Road	95.2%	4.8%
Electricity	99.4%	0.6%
Drinking Water	90.8%	9.2%
Public Transport	97.5%	2.3%
PCO/ Mobile Recharge Point	94.6%	5.4%

Most of the respondents are well connected by roads and public transport facilities at their locations. Basic amenities like electricity and drinking water are also found to be available for most of the respondents. Telecom facilities are also adequately available.

6.3.2. Distance to nearest banking unit

Respondents have been asked about the distance between the nearest banking unit (branch or ATM) from their residence and workplace, time required to reach them and their preferred mode of transport to the banking unit. Responses are summarized in the following tables

Table 6.2: Distance to the nearest banking unit

Distance	*To the nearest Bank Branch (in % of respondents)*		*To the nearest ATM (in % of respondents)*	
	From Residence	*From Workplace*	*From Residence*	*From Workplace*
<1 km	40.8%	48.1%	47.4%	50.1%
1 km - <3 km	46.7%	21.8%	41.2%	20.9%
3 km - <6 km	10.2%	3.9%	10%	3.2%
6 km - <10 km	1.3%	0.4%	0.4%	0.2%
10 km and above	0.8%	0%	1%	0.2%
No response	0.2%	11.3%	0%	11.0%
Not Applicable	0%	14.4%	0%	14.4%

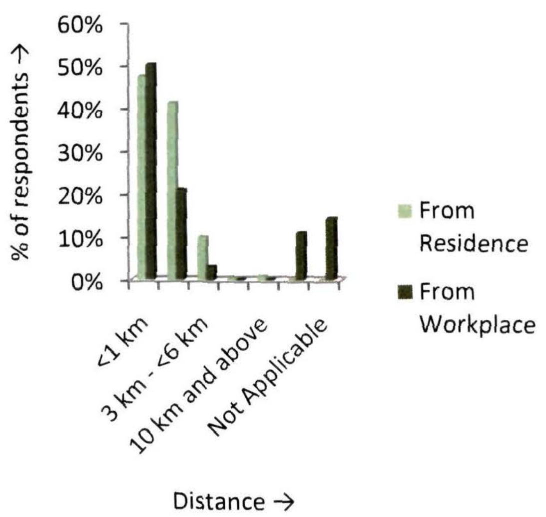

Figure 6.7 : Distance to the nearest bank branch

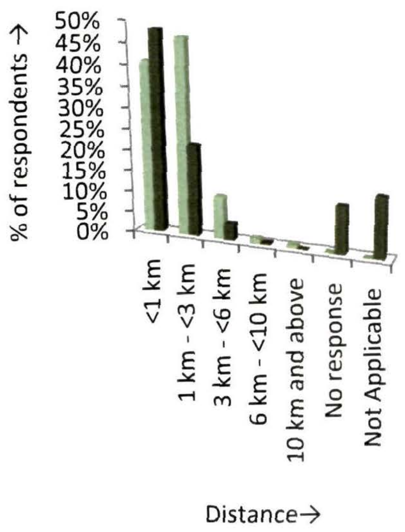

Figure 6.8: Distance to the nearest ATM

Physical distance to Bank Branch and ATM from respondents' residence and workplace is comfortable as majority being less than 3 km. ATM penetration is better than the branches.

For majority of respondents in all locations, the nearest bank branch is located in less than 3 km distance from their residence. In Silchar, 100% of respondents belong to this category, followed by Nagaon and Guwahati where more than 90% of the respondents belong to this category. Dibrugarh makes the least count of 53.8% of respondents for whom distance between the residence and the nearest bank branch is less than 3 km.

6.3.3. Mode of transport to reach the nearest banking unit and time required

Data on most preferred mode of transport to the nearest banking unit from respondents' residence and work place have been collected. It is summarised in Table no 6.3 below

Table 6.3: Preferred mode of transport to reach the nearest banking unit

Preferred mode of transport	*Nearest Bank Branch*		*Nearest ATM*	
	% of respondents		*% of respondents*	
	From Residence	*From Workplace*	*From Residence*	*From Workplace*
Public Transport (viz., Bus, Auto rickshaw, Tempo)	31.8%	18.2%	30.2%	17.4%
Bicycle/ Cycle rickshaw	31.8%	18.8%	28.0%	18.2%
On foot	32.4%	34.5%	37.9%	35.4%
Personal vehicle (car, bike)	4.0%	3.3%	3.9%	3.3%
Not Applicable	0%	14.4%	0%	14.4%
No response	0%	10.7%	0%	11.2%

Among various modes, majority of respondents prefer going on foot to the nearest banking unit.

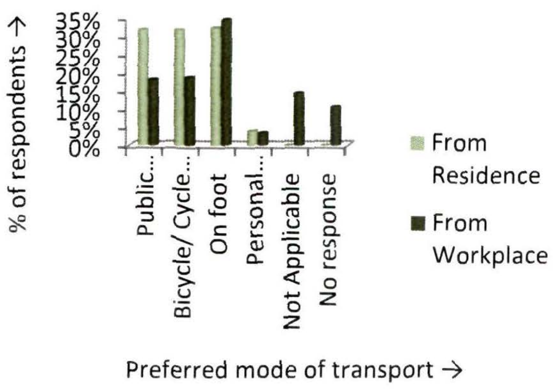

Figure 6.9 : Preferred mode of transport to reach the nearest Bank Branch

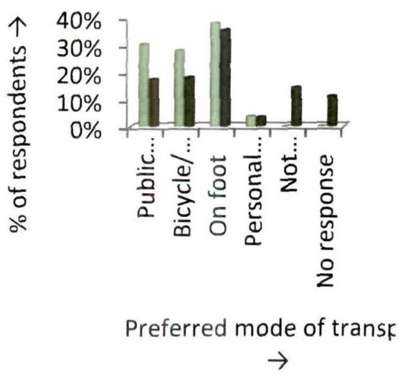

Figure 6.10 : Preferred mode of transport to reach the nearest ATM

Information on time required to reach the nearest banking unit by the preferred mode of transport have been collected from the respondents. It is presented in Table 6.4. It is found that the Branches and ATMs are located very conveniently at urban centres as majority of respondents can reach them within 15 minutes either from their residences or workplaces.

Table 6.4: Time required to reach the nearest banking unit

Time required	*Nearest Bank Branch*		*Nearest ATM*	
	% of respondents		*% of respondents*	
	From Residence	*From Workplace*	*From Residence*	*From Workplace*
< 5 mnt	9.1%	25.3%	9.7%	15.5%
5-15 mnt	72.2%	16.1%	75.7%	54.6%
16-30 mnt	12.5%	38.1%	11.3%	3.5%
>30 mnt	6.2%	4.3%	3.3%	1%
Not Applicable	0%	14.4%	0%	14.4%
No response	0%	1.8%	0%	11%

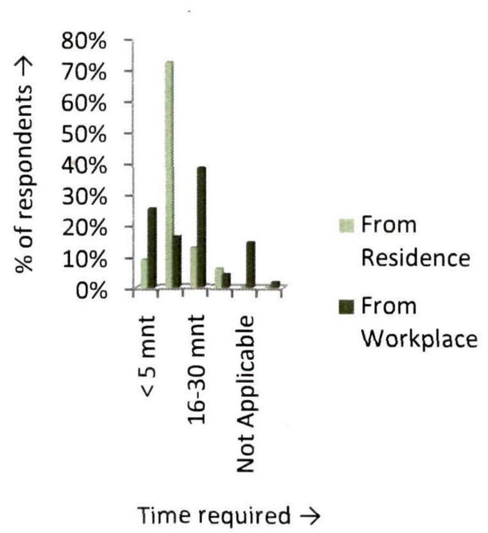

Figure 6.11:Time required to reach the nearest branch

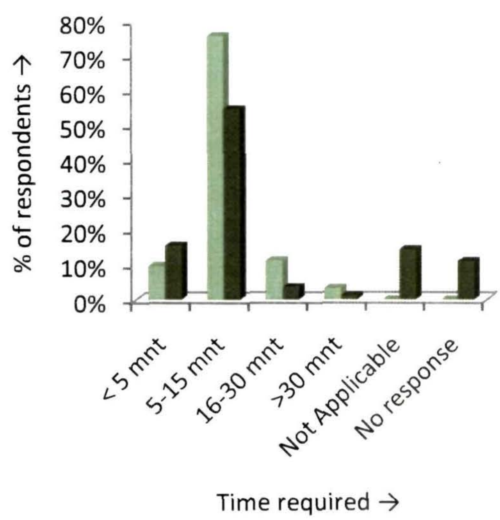

Figure 6.12 : Time required to reach the nearest ATM

6.4. Awareness Level

Data on awareness levels among the respondents about various services of the banks has been collected and analysed. Awareness about various deposit services of the bank (viz., Savings Bank Account, Current Account, Fixed Deposit, Recurring Deposit), transaction facilities (viz., Cheque book, Pass book), Loan facilities (Credit cards, Home loan, Auto loan, Personal loan, Education loan, Loan for business purpose) and alternate channels of transactions (viz., ATM card, Debit card, Internet banking, Tele banking, Mobile banking) have been collected.

Table 6.5: Awareness levels about various services of banks

Service	*As % of respondents*		
	Not aware	*Somewhat Aware*	*Adequately Aware*
Savings Bank a/c	14%	42%	44%
Current A/c	55%	31%	14%
Fixed Deposit	29%	43%	28%
Recurring Deposit	57%	32%	12%
ATM	18%	36%	46%
Debit Card	67.3%	23.2%	9.5%
Credit Card	66.9%	23.4%	9.7%
Home Loan	41.2%	39.9%	18.9%
Car Loan	44.2%	36.7%	19.0%
Personal Loan	48.5%	34.0%	17.6%
Education Loan	49.7%	33.7%	16.6%
Internet Banking	80.1%	14.7%	5.2%
Tele Banking	87.2%	10.1%	2.7%
Mobile Banking	89.4%	8.7%	1.9%

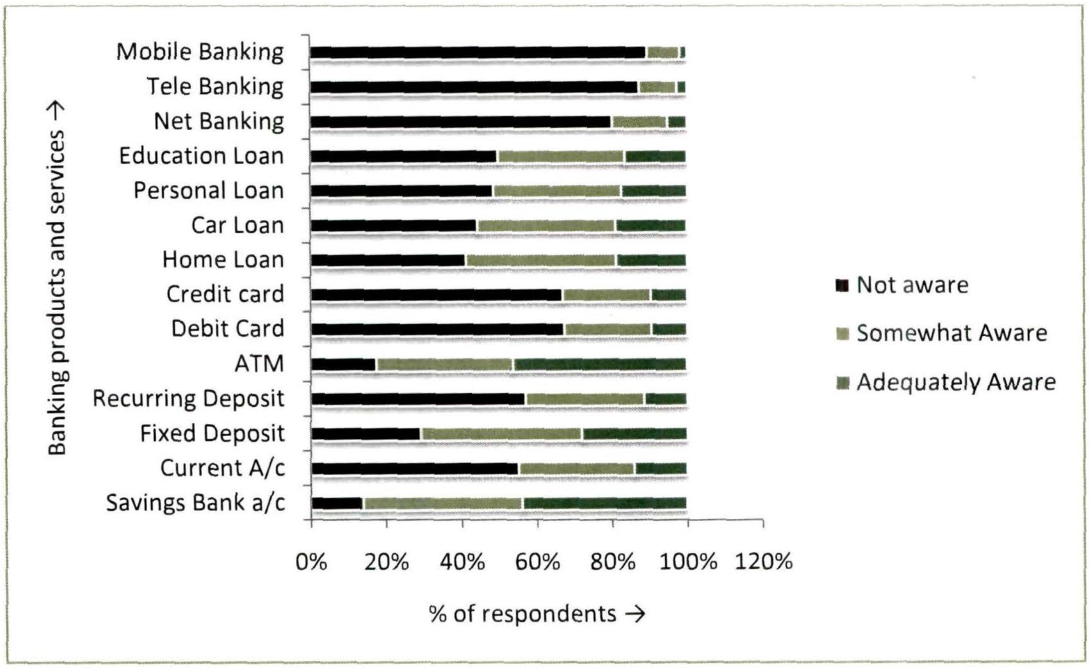

Figure 6.13: Awareness levels about various services of banks

The awareness levels about various products and services of banks have been found to be very low among the respondents. The awareness level about Savings Bank account and ATMs is found to be relatively better where 14% and 17.5% of the respondents respectively are ignorant. Further, 55.1% of respondents are ignorant about Current Account, a facility very suitable for petty traders and other business purposes.

Recurring deposit is one of the very effective tools for regular savings in small amounts. However, it is found that majority of the respondents (57%) are not even aware about banks offering recurring deposit services. Likewise, 29.2% of respondents are ignorant about Fixed Deposits which provides ample opportunity to depositors for periodic investment with committed returns.

Awareness about various loan products of banks is found to be very low among the respondents. It is found that more than 40% of respondents are ignorant about Home loan, Car loan, Personal loan, Education loan facilities offered by banks.

Further, more than 60% of respondents are ignorant about Debit Cards and Credit Cards.

Banking through cellular phones (popularly known as mobile phones) is emerging as a popular alternate way of banking. However, awareness about it is found to be very low among the respondents although 80% of respondents possess cellular phones. It was found that 89.4% of respondents are not aware about such service. Likewise, respondents are found unaware about other alternate channels of banking such as Internet banking and Tele Banking as 80.1% and 87.2% of respondents respectively are ignorant about it.

6.4.1.No frills accounts

In India, 'no frills account' has been designed as the main devise to bring the unbanked population to the banking fold. However, it is felt that there is lack of awareness among the unbanked people about no frill account. Therefore, the study also tried to collect information on awareness levels about no frill accounts among the respondents. It is found that there is wide level of unawareness among the respondents about 'no frills account' service of banks. As high as 90% of the respondents are ignorant about it.

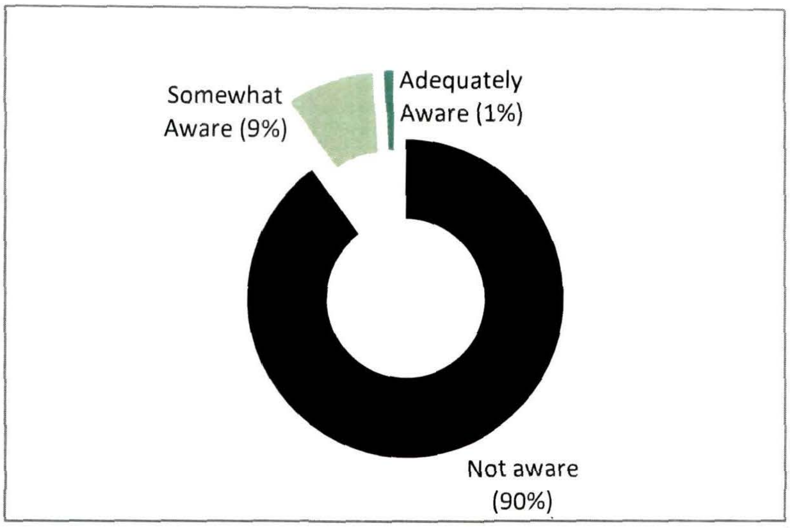

Figure 6.14: Awareness Level about No frill accounts

6.5. EXPERIENCE, EXPECTATION AND PERCEPTION REGARDING BANKING SERVICES

6.5.1. Need for a bank account

The respondents are asked whether they feel the need for a bank account. A vast majority i.e. 75.3% of respondents feel the necessity for bank account against 24.7% of them who do not feel the need for the same.

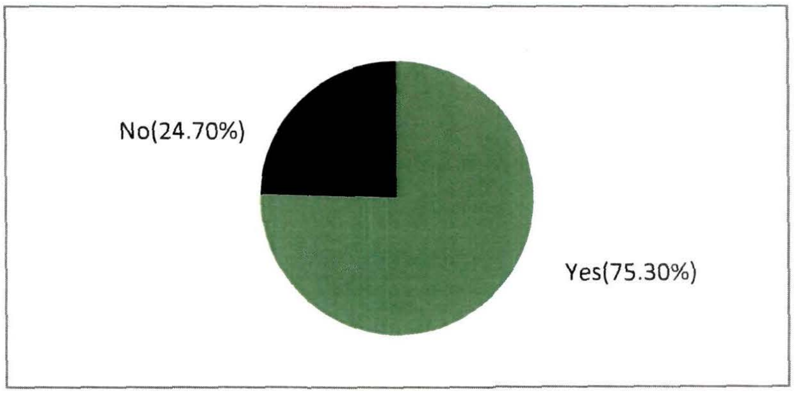

Figure 6.15: Need of bank account

The need of a bank account is felt by the respondents due to various reasons. The study also tried to know the reasons. Analysis of the data collected in this regard is briefly presented below.

Further, the reasons for feeling the necessity of a bank account were also analysed by collecting respondents' opinion about five statements on ordered scale from Strongly Disagree to Strongly Agree. Findings are summarized in Table 6.6 below –

Table 6.6: Various reasons for needing bank accounts

Bank account is necessary because

	Strongly Disagree	*Disagree*	*Don't know*	*Agree*	*Strongly Agree*
It provides safety of deposits	0.19%	0.19%	2.12%	30.00%	42.69%
It offers saving avenue	1.9%	0.2%	6.7%	41.9%	24.4%
It helps in getting loans	0.58%	3.85%	25.00%	35.19%	10.58%
It provides convenience of transactions	2.31%	5.19%	8.08%	49.04%	10.58%
It improves status among peers	16.92%	14.81%	28.85%	10.00%	4.62%

'Safety of deposit' is found to be a prominent reason for feeling the necessity of a bank account by the respondents. Only a mere 0.38% of respondents do not agree to it.

Many respondents feel that they are unable to save as there are few reliable saving options available for them. Saving in cash at home has not been effective due to its inherent problems, mainly easy accessibility and unsafe. These respondents expressed the need of a bank account so that they can use it for saving. Majority of respondents agrees to the fact that they feel the need of a bank account due to the saving avenue attached with it. Only a mere 2.1% of respondents did not agree to it and 6.7% of respondents are in 'cannot say' category.

Majority of the respondents (69.2%) feel the need of a bank account as it will make their monetary transactions convenient.

In most of the banks, banking relation of the loan applicant is weighted well while appraising the loan application. Many a respondents feel to have a bank account on the anticipation of getting a loan in future. Only 4.43% of respondents do not agree to the fact, 45.77% agrees to it and 25% of respondents belong to 'cannot say' category.

It is widely believed that in marginal sections of the society, having a bank account improves an individual's status among peers. Analysis shows that the myth of considering bank account as a symbol for self-respect or social status is wrong among the respondents of this survey. Only 14.62% of respondents agree to it against 31.73% of respondents disagreeing to the same.

As observed above, the need for bank account is felt due to various reasons starting from safety of deposits to improvement of social status. Various reasons were ranked by the respondents in a five-point scale from 'Strongly Disagree (-2)' to 'Strongly Agree (+2)'. The mean score is graphically represented in Figure 6.16 below –

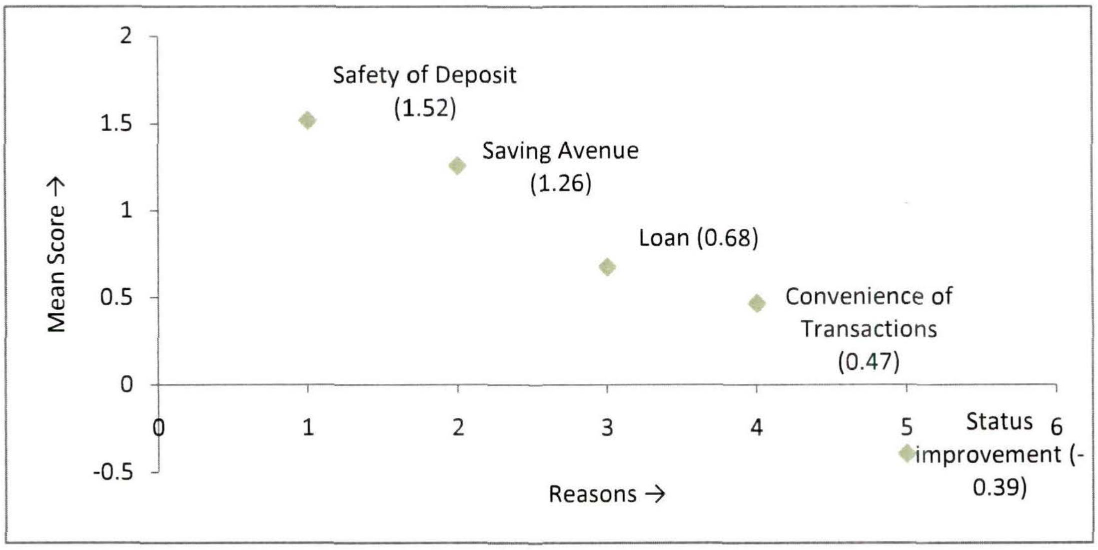

Figure 6.16: Reasons of needing a bank account

It is evident that safety of deposits and banks providing saving avenues has been the prominent reasons for the respondents to feel the need of a bank account. These reasons score much higher than loans or convenience. It shows that demand for saving product is very high among the unbanked population too who tend to use informal providers for such services.

6.5.2 No need of bank account

24.7% of respondents expressed that they do not feel the need of having a bank account. To get insight, the respondents had been requested to put the reasons for such opinion. On analysis of the data so collected, it was found that following are the major reasons –

Table 6.7: Reasons for not needing any bank account

Reasons	*% of respondents*
Account opening process is cumbersome	3.1
Banks offer less return on investments	2.3
Transact through accounts of other member in the family	5.5
Just do not feel the need	12.5
Lacks document to open account	2.3
Lacks money to save in bank	66.4
Not aware about the facilities/ services of banks	3.9
Old age	3.1
No trust in banks	0.8

Here majority of the respondents (66.4%) do not feel the necessity of a bank account as they feel they lack sufficient money to save in the bank. This is again due to the unawareness about the banking services suitable for them e.g., No-frills account which can be maintained with nil balance.

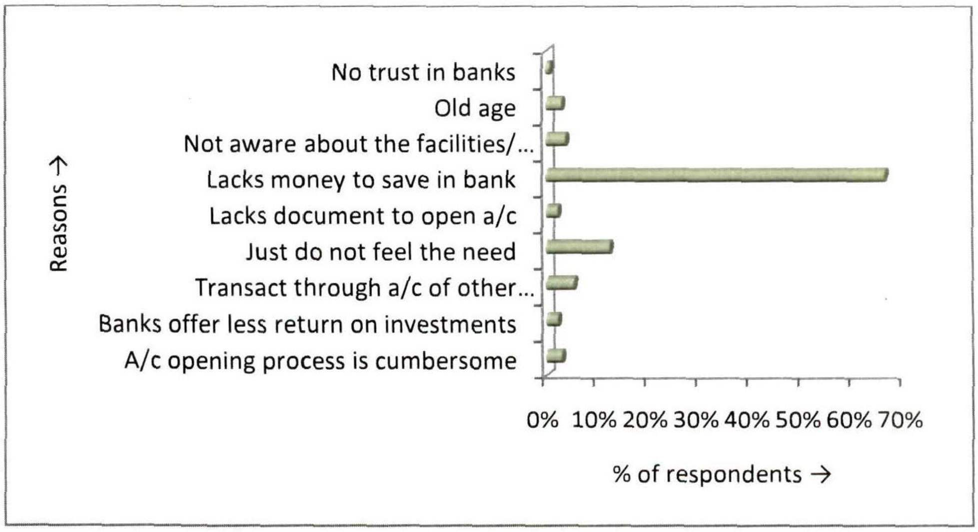

Figure 6.17: Reasons for not needing any bank account

6.5.3. Services expected to avail

Information regarding services the respondents would like to avail from banks has been collected. Findings of this is presented in the Figure 6.18 below -

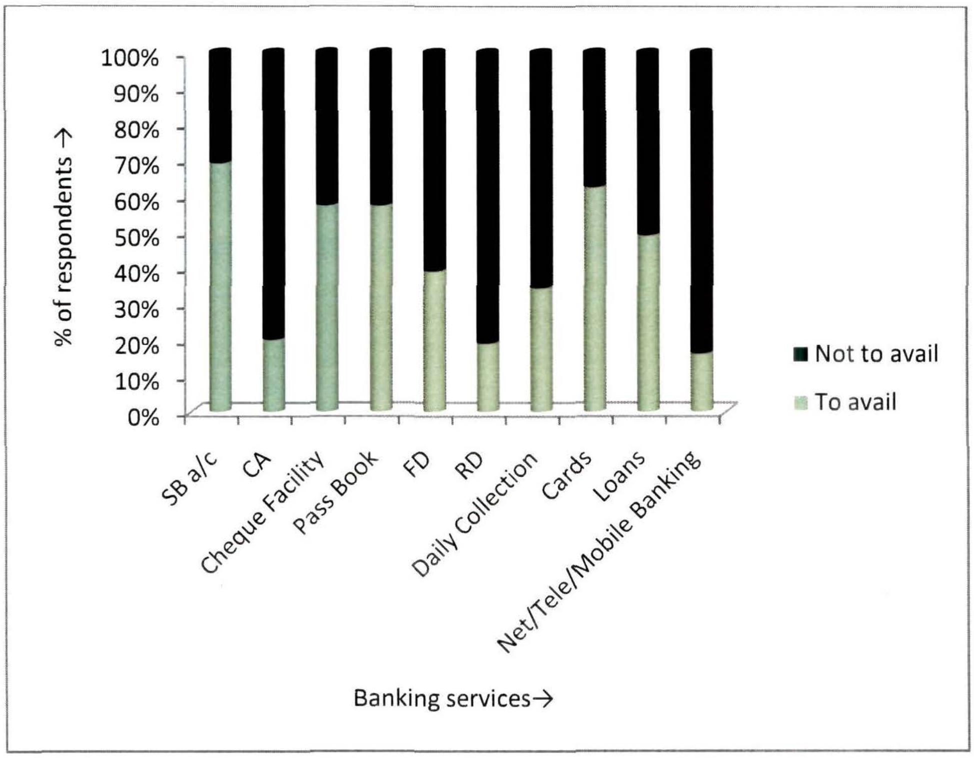

Figure 6.18 : Services expected to avail

Among the services listed above, Savings Bank Account, Cheque Book, Passbooks and Cards are mainly preferred by the respondents. Followed by Loans, Fixed Deposits, Daily Deposits (by daily collection from office/ residence), Current Accounts, and Recurring Deposits and lastly Internet, Telebanking, Mobile Banking services. The preference of various services are in line with the awareness levels of various services discussed above (§6.4), more the respondents are aware about the services, more they prefer it.

However, by going deeper into the preferences various segments of respondents, it was found that their preferences vary widely as shown in the Table 6.8 to Table 6.12.

Table 6.8: Occupation-wise percentage of respondents wanting to avail various services

Services of banks	*Occupation*							
	Student	*Unemployed*	*Govt. Service*	*Other Service*	*Business*	*Self Employed*	*Labourer/ Domestic Help*	*Others*
Saving Bank a/c	74.6%	66.7%	70.0%	81.8%	69.8%	79.4%	33.3%	80.0%
Current a/c	22.5%	9.3%	10.0%	32.3%	30.2%	17.6%	1.2%	20.0%
Cheque	60.6%	44.0%	100.0 %	77.8%	54.7%	61.8%	29.6%	100.0%
Passbook	57.7%	40.0%	80.0%	67.7%	64.2%	64.7%	35.8%	100.0%
Fixed Deposit	38.0%	36.0%	80.0%	50.5%	47.2%	30.9%	13.6%	100.0%
Recurring Deposit	19.7%	13.3%	30.0%	35.4%	20.8%	14.7%	3.7%	8.0%
Daily Collection	33.8%	24.0%	10.0%	42.4%	37.7%	50.0%	13.6%	100.0%
Cards	70.4%	50.7%	80.0%	87.9%	65.1%	60.3%	25.9%	80.0%
Loans	53.5%	34.7%	80.0%	61.6%	50.0%	57.4%	24.7%	80.0%
Internet/ Tele/ Mobile Banking	35.2%	8.0%	40.0%	23.2%	12.3%	10.3%	1.2%	60.0%
Others	11.3%	1.3%	0%	8.1%	3.8%	2.9%	0%	0%

Table 6.9: Education level wise percentage of respondents wanting to avail various services

Services of banks	*Education*						
	Illiterate	*Up to 4th standard*	*Secondary*	*Under Graduate*	*Graduate*	*Post Graduate*	*Vocational/ Technical*
Saving Bank a/c	32.5%	57.6%	74.4%	72.4%	83.2%	85.4%	68.0%
Current a/c	0%	15.3%	11.1%	18.7%	44.6%	29.3%	12.0%
Cheque	27.3%	40.7%	43.3%	63.4%	79.2%	78.0%	72.0%
Passbook	31.2%	50.8%	50.0%	56.9%	75.2%	80.5%	56.0%
Fixed Deposit	19.5%	27.1%	28.9%	39.8%	59.4%	53.7%	44.0%
Recurring Deposit	1.3%	10.2%	5.6%	23.6%	41.6%	24.4%	16.0%
Daily Collection	20.8%	30.5%	30.0%	39.0%	39.6%	41.5%	36.0%
Cards	20.8%	50.8%	55.6%	69.9%	84.2%	82.9%	68.0%
Loans	28.6%	40.7%	42.2%	54.5%	58.4%	63.4%	56.0%
Internet/ Tele/ Mobile Banking	0%	6.8%	6.7%	17.1%	29.7%	36.6%	24.0%
Others	0%	0%	0%	4.9%	13.9%	7.3%	0%

Table 6.10: Income level wise percentage of respondents wanting to avail various services

Services of banks	*Income per month in Rs.*				
	<1,000	*1,000-<3,000*	*3,000-<6,000*	*6,000-<10,000*	*10,000 and above*
Saving Bank a/c	36.5%	60.2%	83.3%	69.4%	82.3%
Current a/c	5.4%	9.8%	29.0%	35.4%	17.7%
Cheque	35.1%	45.1%	71.0%	64.7%	63.3%
Passbook	36.5%	48.9%	71.0%	62.4%	57.0%
Fixed Deposit	21.6%	25.6%	52.2%	44.7%	45.6%
Recurring Deposit	12.2%	11.3%	29.7%	22.4%	16.5%
Daily Collection	21.6%	25.6%	47.8%	43.5%	27.8%
Cards	31.1%	48.1%	76.8%	44.1%	74.7%
Loans	29.7%	36.8%	60.9%	60.0%	53.2%
Internet/ Tele/ Mobile Banking	4.1%	6.0%	21.7%	21.2%	29.1%
Others	0%	8%	12.3%	5.9%	0%

Table 6.11: Age-wise percentage of respondents wanting to avail various services

Services of banks	*Age in years*			
	18-25	*26-40*	*41-60*	*Above 60*
Saving Bank a/c	72.2%	76.3%	55.0%	51.3%
Current a/c	19.5%	25.6%	12.4%	12.8%
Cheque	63.2%	62.8%	45.0%	38.5%
Passbook	63.9%	60.5%	45.7%	46.2%
Fixed Deposit	40.6%	44.7%	28.7%	30.8%
Recurring Deposit	21.8%	21.9%	13.2%	10.3%
Daily Collection	35.3%	39.1%	23.3%	35.9%
Cards	72.9%	70.7%	43.4%	33.3%
Loans	51.9%	54.9%	38.0%	35.9%
Internet/ Tele/ Mobile Banking	25.6%	17.2%	7.0%	5.1%
Others	7.5%	5.1%	1.6%	0%

Table 6.12: Gender-wise percentage of respondents wanting to avail various services

Services of banks	*Gender*	
	Male	*Female*
Saving Bank a/c	70.3%	65.2%
Current a/c	23.1%	15.7%
Cheque	59.4%	53.0%
Passbook	57.3%	55.7%
Fixed Deposit	41.3%	35.2%
Recurring Deposit	21.7%	15.2%
Daily Collection	34.6%	33.0%
Cards	64.7%	57.8%
Loans	49.7%	47.0%
Internet/ Tele/ Mobile Banking	17.1%	14.3%
Others	3.8%	5.2%

From the above tables (refer Table 6.8, 6.9, 6.10, 6.11 and 6.12), it is found that preference for various services vary widely among various socio-economic segments of respondents. E.g., 'Saving accounts' are mostly preferred by the service holders and self employed with relatively higher education background and income in the age group of 18-40 years. Again 'Card products' are preferred mostly by students and service holders with relatively higher education background and income in the age group of 18-40 years. Respondents engaged in business and services (other than Government service) who are graduates in the age group of 26-40 years earning Rs.3,000-Rs.10,000/- per month are more willing to avail 'Current Accounts' than rest of the respondents. But the 'no-frills accounts' does not contain the facilities of a current account. There is a scope of future research for profiling the customer segmentation and designing suitable products to attract the marginal sections to come to the banking fold. Chakrabarty has also expressed similar view of designing innovative financial products to attract the unbanked urban poor to the banking fold and adopting a cluster approach.[17]

6.5.4. Reasons of not having bank account

To have a deeper insight on the respondents' perception on the reason of not having bank account, the respondents have been requested to rank their opinion about few statements it in a five point scale starting from 'Strongly disagree'(-2) to 'Strongly agree'(+2). Each of these statements contains a probable reason of being unbanked. Analysis of the responses so collected is presented below –

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[17] "Financial Inclusion of Urban Poor in India" - Keynote Address delivered at the Annual National Seminar titled 'Financial Inclusion of Urban Poor' conducted by the American India Foundation at New Delhi, on January 28, 2013. Web. 29 January 2013. < http://rbi.org.in/scripts/BS_SpeechesView.aspx?Id=774>

Table 6.13: Perception about not having bank accounts

Not having bank account because

	Strongly Disagree	*Disagree*	*Don't know*	*Agree*	*Strongly Agree*
There is no necessity	33.8%	35.5%	8.8%	10.4%	11.5%
Unaware about facilities	6.7%	50.7%	9.8%	25.1%	7.7%
Banking transactions are complicated and time consuming	1.9%	17.1%	36.3%	36.1%	8.6%
Bank is not conveniently located	15.9%	64.2%	12.8%	5.6%	1.5%
Cumbersome account opening process	15.9%	64.2%	12.8%	5.6%	1.5%
Lack of documents	11.4%	24.6%	28.7%	22.5%	12.8%
Unable to meet minimum balance requirement	6.3%	25.7%	9.6%	39.4%	19%
Unsuitable services	3.2%	12.3%	63%	15%	6.6%

The mean score calculated for various responses is graphically presented in the Figure 6.19.

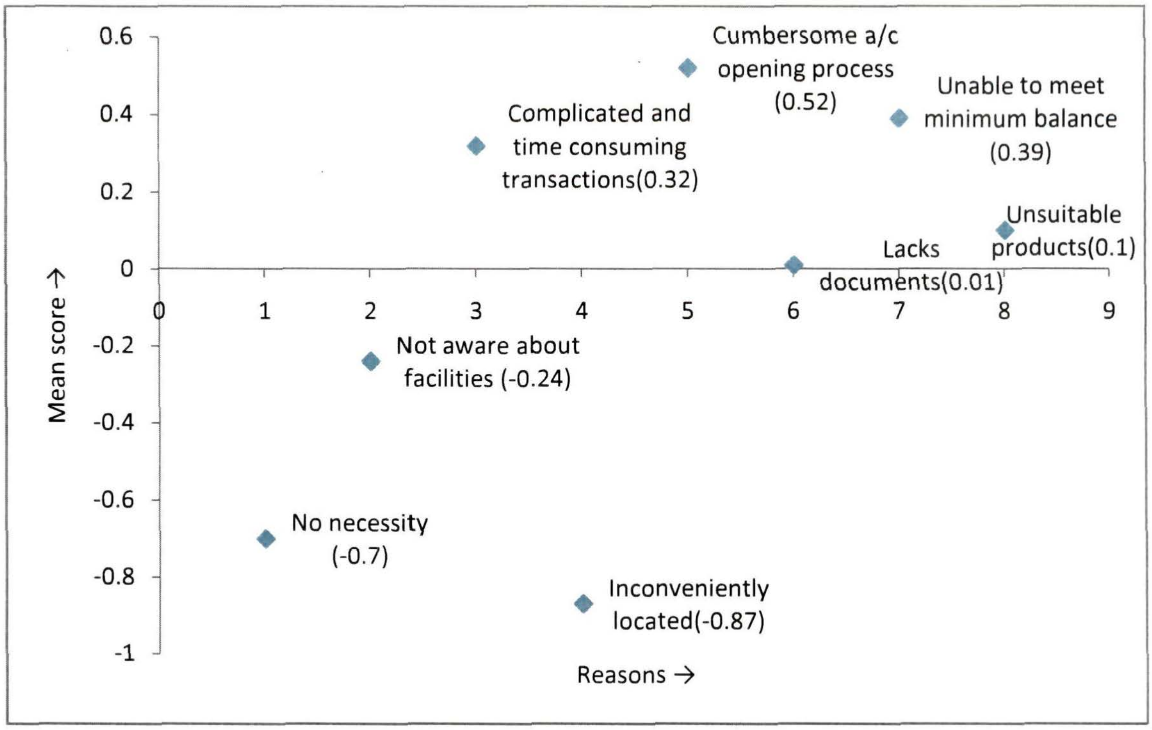

Figure 6.19: Plotting mean score of responses about being unbanked

It is observed that the respondents have agreed to the following factors as influential for not having any bank account –

I. **Cumbersome account opening process** - Majority of respondents (54.5%) agree that among other reasons they are unbanked because they perceive that they need to go through a cumbersome process for account opening.

II. **Unable to meet the minimum account balance requirement** - Banks specify periodic minimum balance to be maintained in various types of account. It differs from bank to bank. Majority of respondents (58.4%) agrees that they are unbanked as they cannot keep this minimum balance. This clearly shows the unawareness among the respondents about no frills accounts where eligible customers are offered accounts with minimum or nil balance by every bank. There may also be the possibility that banks do not offer the suitable account to the customer though available.

III. **Complicated and time consuming transactions** - Perception about banking services/ transactions also play an important role in whether to have a bank account or not. This statement is included to capture the responses of respondents who are unbanked as they perceive that banking transactions are complicated and time consuming. It is found that out of the unbanked respondents surveyed, 44.7% of respondents agree that they are unbanked because they think it involves longer time and it is complicated too.

IV. **Unsuitable products** - Majority of respondents (63%) is in 'Don't Know' category here. However, 21.6% of respondents feel that they are unbanked as banks' services are not suitable for them, 15.5% disagrees to the statement.

V. **Lacks documents** - There are some mandatory documents required to open accounts in the country as per guidelines of the RBI. 35.30% of respondents agree that they are unbanked as they do not possess the required documents to open an account. It also might be due to the unawareness about the minimum KYC applicable for 'no-frills account'.

VI. **Inconvenient location** - Inconvenient location of banks may affect the respondent's choice of banking. By including this issue in the questionnaire, it is tried to find out to which extent, the inconvenient location of banks might have affected the decision of respondents of remaining unbanked. It is found that out of the unbanked respondents surveyed, only 7.1% of respondents agrees that they are unbanked because of inconvenient location of banks. It implies that banking infrastructure is not a reason for the financial exclusion in the urban centres of the state.

6.5.5. Approach by Banks

Data on whether at any point of time any bank has approached the respondents for opening bank account, is also collected. It is found that a mere 7.2% of respondents were approached by banks to open accounts. It shows that this segment of population has been traditionally excluded by formal financial system.

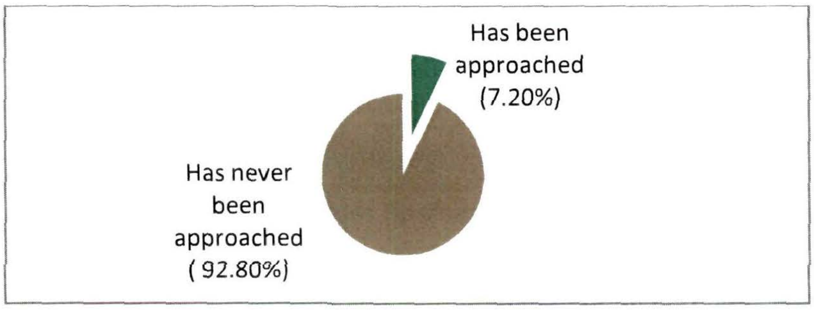

Figure 6.20: Approach by banks to respondents

6.5.6. Approach by Respondents

As discussed above, banks have rarely approached the respondents ever for opening accounts. In view of it, the study tried to find out whether at any point of time the respondents themselves have approached the banks for account opening and were refused. Analysis of data so collected shows that only a mere 3.9% of respondents have approached banks for account opening and were refused. Remaining 96.1% have never approached a bank for account opening.

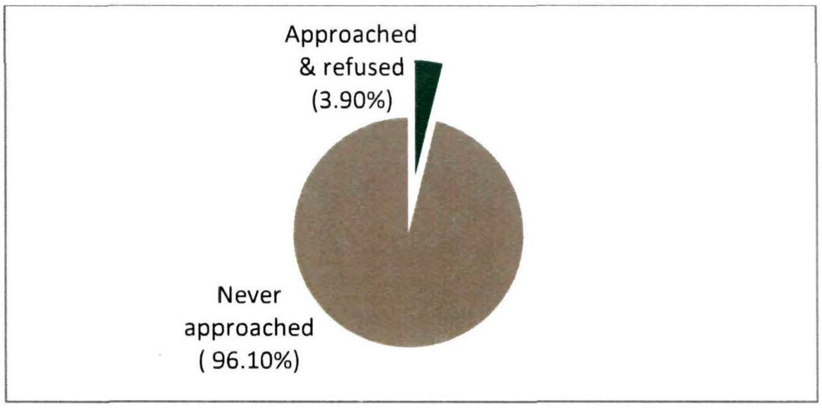

Figure 6.21: Respondents' approach to banks

6.5.7. Refusal Reasons:

As discussed in §6.5.6, only 3.9% of respondents have approached the banks but for opening accounts but they were refused. The study also tried to analyse the refusal reasons as perceived by the respondents. The main refusal reason faced by the respondents (85%) is lack of KYC documents. Another reasons have been inability to meet the minimum balance requirement (5%) and 5% of respondents feel that they have not been taken into confidence by the banks. Remaining 5% of respondents are unaware of the refusal reasons of their account opening application.

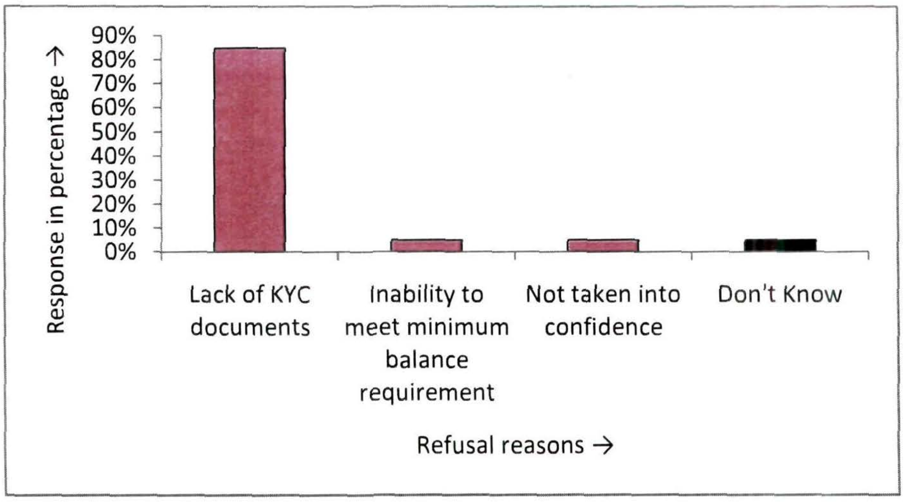

Figure 6.22: Reasons of refusal by banks

6.5.8. Past Experience with banks

It is believed that past experience of transacting with banks may influence greatly the decision of transacting again with it. It is found that 8.7% of respondents had bank accounts in past.

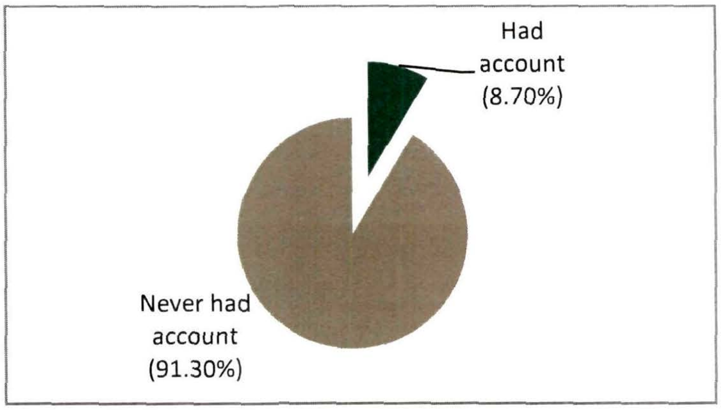

Figure 6.23: Past experience with banks

It is also tried to find out the reasons for stopping transactions by respondents who had bank accounts earlier. Analysis of data so collected shows that 24% of the respondents stopped transacting as they feel that they do not need the account now. It may be mainly due to the reason that the account was opened for some specific reason such as deposit of scholarship, subsidy/ incentives, encashment of instrument, availing loan etc. as agreed by 22% of respondents. A mere 4% of respondents' accounts were closed by the banks themselves. 11% and 7% of respondents respectively stopped transacting as they found the banking transactions to be time consuming and also transaction charges were high. A sizable portion of respondents i.e. 36% told that they failed to maintain the minimum balance in their accounts which led to closure of their accounts. In case of 18% of respondents shifting of the bank branch or themselves from the original location has lead to ending the transactions in the accounts. Further, 11% of respondents have agreed that they stopped transacting with banks subsequent to banks rejecting their loan applications.

Table 6.14: Reasons of stopping account operations

Reasons	*Response*	
	Yes	No
Not necessary now	24%	76%
Was opened for specific purpose	22%	78%
Account was closed by bank	4%	96%
Transactions are time consuming	11%	89%
Failed to maintain minimum balance	36%	64%
Charges were high	7%	93%
Shifting	18%	82%
Rejection of loan	11%	89%

6.5.9. Perception regarding bankers' attitude

Perception regarding attitude of the bank staff among the respondents is attempted to capture with the help of two questions. Here, the respondents are requested to rank their opinion about two statements in a five point scale starting from 'Strongly disagree' to 'Strongly agree'. Analysis of the responses so collected is presented below –

6.5.9.(i) "Banks maintain the same service standard for all customers, be it rich or poor"

Strongly Disagree	*Disagree*	*Don't know*	*Agree*	*Strongly Agree*
10.6%	*27.2%*	*44.2%*	*13.9%*	*4.1%*

Further, the opinion of respondents who already had dealt with banks (who had bank accounts in past) is separately analysed. The alarming observation is that majority of respondents (57.8%) among them feels that banks do differentiate in offering services to customers from different economic groups.

6.5.9(ii) "Change in the attitude of bank staff is very important to include more and more people from the marginal section of society into the banking fold"

Strongly Disagree	*Disagree*	*Don't know*	*Agree*	*Strongly Agree*
3%	*5.7%*	*47.3%*	*27%*	*1%*

Further, the opinion of respondents who already had dealt with banks (who had bank accounts in past) is separately analysed. Here also an alarming majority of respondents (74.2%) feels that to spread banking services among the marginal sections of the society it is important for the bank staff to change their attitude towards customers of that segment.

6.6. AWARENESS, AVAILABILITY AND REASONS FOR ACCESS TO INSURANCE OR OTHERWISE

Insurance is the basic protection from economic loss due to unpredicted events. It helps in absorbing economic shocks which is of immense importance for people from underprivileged sections of the society. However, majority of respondents (73.7%) are not having insurance coverage. Coupled with other reasons, low level of awareness about benefits of insurance may be attributed for such low insurance coverage. The study attempted to bring insight on this low level of insurance coverage among respondents. Findings are discussed in the following sections.

6.6.1. Availability of insurance coverage

The availability of insurance coverage is found to be low among the respondents. 73.70% of respondents do not have any insurance coverage.

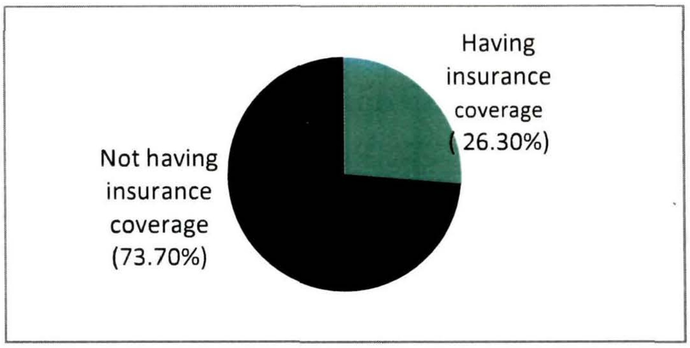

Figure 6.24: Availability of Insurance Coverage

6.6.2. Awareness about insurance products

Analysis of the awareness level about insurance among the respondents is presented below –

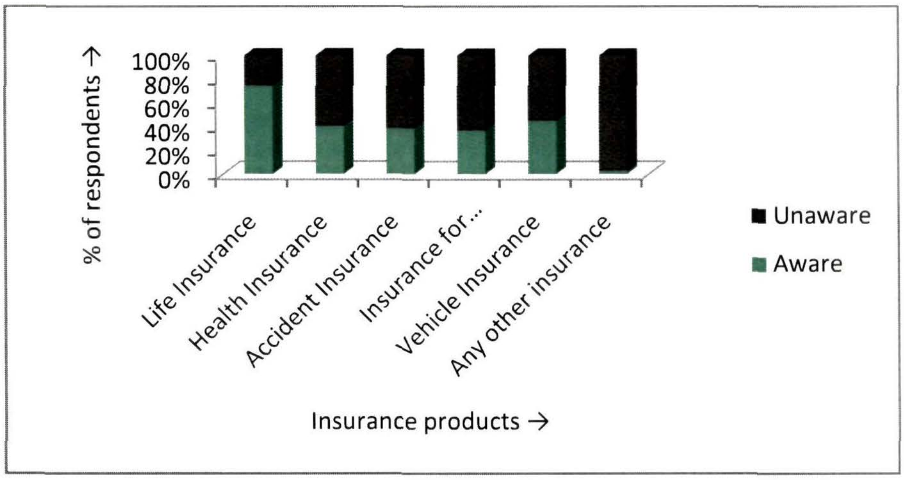

Figure 6.25: Awareness about insurance products

Awareness about Life Insurance and Vehicle Insurance is relatively more among the respondents compared to other insurance products.

Relation between 'Awareness levels' and 'Insurance coverage' is analysed. Awareness level is found significantly co-related with level of Life Insurance coverage and Vehicle Insurance coverage. However, in case of Life Insurance it was found to be negatively co-related, Pearson's Correlation Co-efficient being -0.326 at the 0.01 level (2-tailed). Likewise, in case of Vehicle Insurance, it was found to be negatively co-related, Pearson's Correlation Co-efficient being -0.136 at the 0.01 level (2-tailed). For other types of insurance correlation between the awareness level and insurance coverage is found to be not significant among the respondents.

6.6.3. Reasons of low insurance coverage

As an alarming portion of respondents (73.7%) are not having any insurance coverage, it is very important to analyse the reasons for the same. From the analysis of the responses in this regard, the main reasons for the low insurance coverage are found to be following –

i) Lack of awareness

ii) Insufficient fund

iii) No necessity is felt

iv) None approached

Most of the respondents (60%) told that they do not have any insurance as they are not having sufficient fund to buy the coverage. 23% of respondents attribute to their not having any insurance to the fact that no one has approached them for it. It is mainly due to the fact that insurance is perceived to be sold only through agents. 22% of respondents agree that they are uninsured as they are unaware about insurance. 18% of respondents have willing opt to be out of the insurance coverage as they feel no need for it.

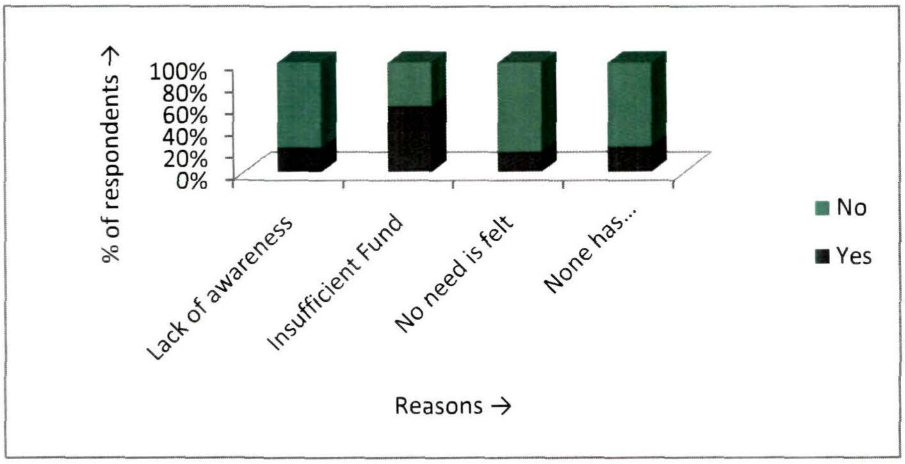

Figure 6.26: Reasons of low level of insurance coverage

6.6.4. Mode of taking the Insurance policy

It is also attempted to find the various modes that worked for the respondents for taking insurance policy. It will help us to know the relative influence of the various modes among the respondents. Analysis of the data collected in this regard shows that the following are the major modes adopted by our respondents

i) Bought through Agents

ii) The respondents themselves bought it from insurance company's office

iii) Was arranged by employers

iv) Was arranged by lenders

v) Was arranged by parents

The influence of agents in popularizing the insurance products is very prominent among the respondents. 82.58% of insured respondents have bought their policies through agents. Only 10% of respondents walked to the insurance company's office and bought the policies themselves. For 6.11% of respondents insurance was arranged by office. For almost negligible number of respondents, it was arranged by their lenders or parents.

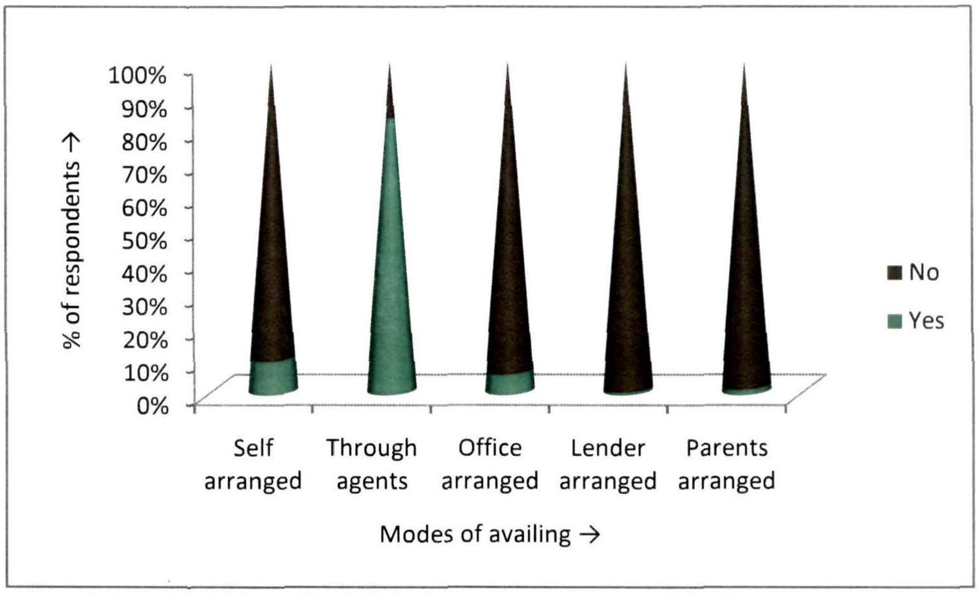

Figure 6.27: Modes of availing insurance

6.7. FINDINGS

Major findings derived from analysis of data collected through the survey among the urban unbanked adults are placed below -

6.7.1. Banking and other infrastructure is available and it is not a bottleneck for financial inclusion.

6.7.2. Awareness about banking services is very low except saving bank account and ATM cards. Specially awareness about basic banking services which are relevant for the underprivileged is found to be low (e.g., Recurring Deposit).

6.7.3. There is very low level of awareness about 'No frill account' – the main device for combating financial exclusion in the country among the people to whom it is intended.

6.7.4. The problem of exclusion is mostly in-voluntary in nature. The voluntarily excluded ones are excluded mostly due to unawareness. Most of them feel that they lack money to save in a bank or to maintain minimum balance. It is followed by the perception that the account opening process is very cumbersome.

6.7.5. Most of the unbanked feels the need of having a bank account as it is perceived to provide safety of deposits and saving avenue, to help in getting loans and makes financial transactions convenient. However, the respondents do not feel having bank account as a mean of improving social status.

6.7.6. The respondents expect to avail mainly savings bank account and transaction services as without these services they are facing day-to-day management problem. It is followed by Loans, Fixed Deposits, Daily deposits, Current Accounts and Recurring Deposits and lastly the value added services like Internet, Tele and Mobile Banking services. The preference of services is directly linked with the awareness levels and suitability of such services.

6.7.7. Banks are lagging behind in approaching the unbanked people to bring them to the banking fold.

6.7.8. Likewise very few unbanked approached a bank and their applications got rejected mostly due to lack of documents.

6.7.9. It is felt by many unbanked that banks' service standard differs depending on the economic class of the customers. Alarmingly, majority of erstwhile banked also have the same perception.

6.7.10. To bring more and more people from the unprivileged sections of the society to banking fold, change in the attitude of bank staff towards them is required as felt by most unbanked.

6.7.11. Erstwhile banked people stopped transactions mainly as they failed to maintain the minimum balance in accounts. Many open accounts for specific purpose and stops transacting once the purpose is over.

6.7.12. Insurance coverage is low mainly due to insufficient fund.

6.7.13. Awareness is there about Life Insurance followed by vehicle insurance. However, the awareness level is found to be negatively co-related with the insurance coverage.

6.7.14. The insurance coverage is availed mostly through the agents.

6.8. CONCLUSION :

The study has brought some very important insights on the issue of Financial Inclusion from the perspective of the population who are outside the ambit of banking. The sample consists of respondents of varied socio-economic background. These respondents are found to be mostly involuntarily excluded. Further, analysis shows that the exclusion is mostly caused due to unawareness of the respondents and their perceived impression about banking. Banks have also found to traditionally exclude such marginal segments of urban areas. It might be due to lack of policy focus on Financial Inclusion in urban areas unlike the rural areas. Further detail study on the supply side factors influencing Financial Inclusion/ exclusion is done in Chapter 8. In absence of formal banking services, the respondents have to rely on various non-banking financial services for saving, credit and transactions which are discussed in detail in the next chapter.

Chapter 7

Usage of Non-Banking Financial Services

7. Usage of Non-banking Financial Services

7.1. INTRODUCTION

In the previous chapter (Chapter 6), various constraints faced by the respondents in availing services of banks are discussed. In absence of bank facilities, the urban unbanked population extensively uses various non-banking sources. The non-banking financial service providers (mostly engaged in ponzi[18] schemes) have been hoodwinking the unaware population of the State. In recent time, there have been reports of various such NBFCs collecting huge deposits from public and disappearing. It has made the Government and the regulators to take firm steps against such NBFCs. As per newspaper reports based on press release of the State Government, 11 such cases has been handed over to the Central Bureau of Investigation for investigation. These cases are related to Saradha Group, Rose Valley, Unipay 2 U, Jivan Suraksha, Prayag, Basil International Limited, Alliance Vision Marketing Limited, Daffodil Group of Companies, Abyss Assam Group Company, etc. These cases are from among the total 246 cases registered by the Special Investigation Team of the Criminal Investigation Department of the Assam Police against 128 chit fund or NBFCs operating in the State. Further, Assam Protection of Interests of Depositors (in financial institutions) Amendment Bill 2013, has been passed by the assembly and is awaiting the Governor's nod. This Act will take care of dubious chit fund companies even before they start operations in the state.

In this background, it is felt necessary to study the usage of such non-banking financial among the respondents and it is attempted to identify the factors affecting the respondents to opt for a particular service. Three very important services viz. Saving, Credit and Transactions are included here. This study is based on the primary data collected from survey among urban unbanked adults of Assam.

[18] A Ponzi scheme is a fraudulent investment operation that pays returns to its investors from their own money or the money paid by subsequent investors, rather than from profit earned by the individual or organization running the operation. The Ponzi scheme usually entices new investors by offering higher returns than other investments, in the form of short-term returns that are either abnormally high or unusually consistent. Perpetuation of the high returns requires an ever-increasing flow of money from new investors to keep the scheme going.

Detailed data collection methodology has already been discussed in Chapter 3 (refer §3.2.1) and profile of respondents has been analysed in Chapter 6. A common questionnaire was used for collection of demand side information and usage information of various non-banking financial services. Primary data has been collected from the same set of respondents. So, while identifying the factors influencing the choice of a particular non-banking financial service, data analysed in Chapter 6 is also used. The usage of various non-banking financial services for Saving, Credit and Transaction is discussed in the following sections.

7.2. SAVING

Saving is the main tool adopted by poor people to manage finance. Savings help the households to smooth consumption; to meet the large or unexpected expenditure; to prepare them to face economic shocks and to provide for old age when most of the income sources dry up. With systematic savings, the households can face economic shocks with less severity. However, the poor unbanked people are characterized by income which is low, irregular and uncertain. To tap the savings potentials of this customer segment effectively, the saving products of formal financial institutions should take into account these income characteristics.

Many assessment studies by multilateral organizations establish that although there is higher demand for saving services, usage of formal financial institutions is low. Contrary to it, informal savings mechanisms are fulfilling key client preferences and being widely used.

As a sizable population is unbanked, it is important to know what are the alternate saving options they are using, what are the self reported reasons for choosing such alternatives and to identify the socio-economic factors influencing the choice of a particular saving alternative so that appropriate strategies can be adopted by the banks to tap these savings.

7.2.1. SAVING HABITS AND USE OF NON-BANKING FINANCIAL SERVICES FOR SAVING

As a sizable portion of population is without any savings bank account even in the urban areas of the state, it is attempted to study how they do save, what are the saving alternatives available for them. A sample survey has been undertaken among

520 numbers of unbanked urban adults of Assam with an objective to find answers to these questions. Study attempted to capture the reasons of using various saving modes by the unbanked urban adult respondents. The analysis below brings insight to the saving behavior of the respondents.

7.2.1(i). Saving habits

The respondents save in various non-banking modes as presented in the figure below -

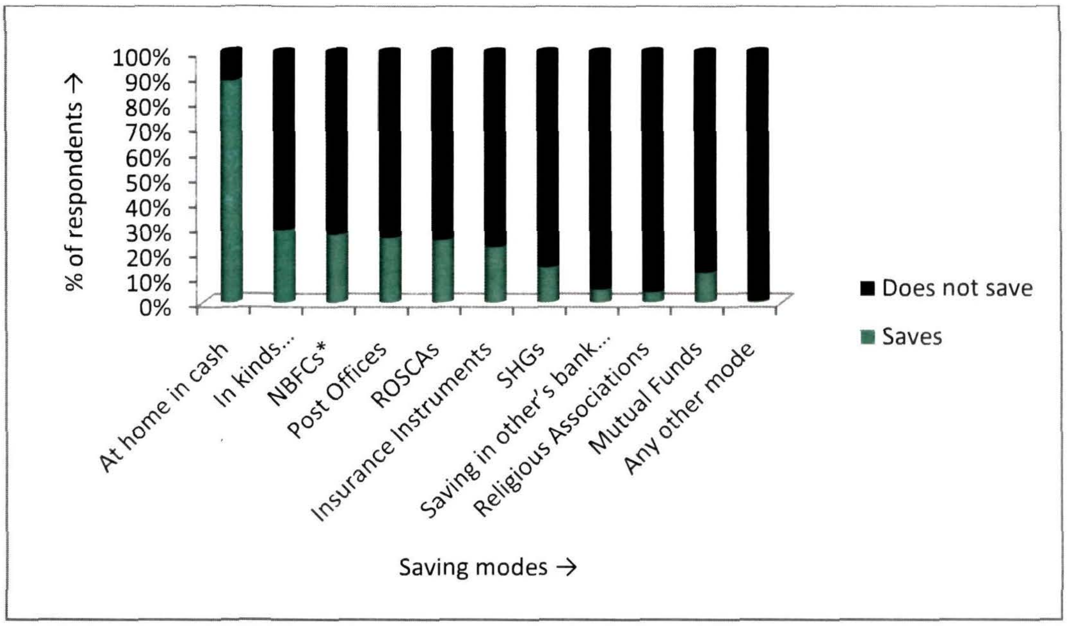

Figure 7.1: Saving habits of the respondents

* Although there were only two registered deposit taking NBFCs operating in Assam during the survey, many other companies were offering investment schemes. Investment in those companies have also been included in NBFCs as most respondents perceive these companies as deposit taking NBFCs.

It is observed that most of the respondents save in multiple modes. There are 100 numbers of respondents who does not save due to not having sufficient surplus to save.

Ranking of various modes of saving in terms of 'use' between the respondents is given in Table 7.1. The usage information is collected in three different scales viz. Mostly (value assigned is 2), In between (value assigned is 1) and Not at all (value assigned is 0) and raking is done based on the mean score.

Table 7.1 : Rank of saving modes in terms of use

Rank	*Saving mode*	*Mean Score*
1	At home in cash	2.12
2	ROSCAs	0.70
3	NBFCs	0.59
4	Post Offices	0.52
5	Insurance Instruments	0.46
6	In kinds	0.43
7	SHGs	0.32
8	Others' account	0.12
9	Religious associations	0.07
10	Mutual Funds	0.03
11	Any other mode than above	0.07

7.2.1(ii) Reasons for opting a particular saving mode

The respondents also selected the factors that generally affect their saving choices. It is presented below –

Table 7.2 : Opinion about reasons for opting a particular saving mode

Various reasons	*Percentage of respondents*				
	Strongly Disagree	*Disagree*	*Don't know*	*Agree*	*Strongly Agree*
These are the only saving options available to you	56.6%	9.1%	11.7%	7.2%	6.4%
Your peers have opted for the same	66.2%	9.1%	10.9%	7.3%	6.5%
Agents are known to you	66.4%	9.5%	11.1%	7%	6%
Safety of deposits	66.7%	9.1%	10.3%	7.3%	6.5%
Convenience of transactions	66.9%	9.3%	10.1%	7.2%	6.6%
Good returns	68.2%	9.7%	11.8%	7.8%	6.7%
Any other reason	8.8%	12.3%	43.9%	31.6%	3.5%

It is observed that reasons like safety of deposits, convenience of transactions, and expectation of good returns are very prominent reasons for opting for a particular saving pattern by the unbanked. Familiarity with the agents dealing with a particular instrument also influence the choice to some extent as 53.7% respondents agrees that it was due to agents familiarity that they have opted for a particular saving instrument. It was an interesting finding that apart from the listed reasons, some other reasons like trying to hide some transactions from the statutory authorities or other family members, self being agent of some organization promoting a particular saving instrument etc. also influence to a great extent on selection of the saving option. 36.1% respondents have agreed to this fact. The mean scores of responses are presented graphically in Figure 7.2 below –

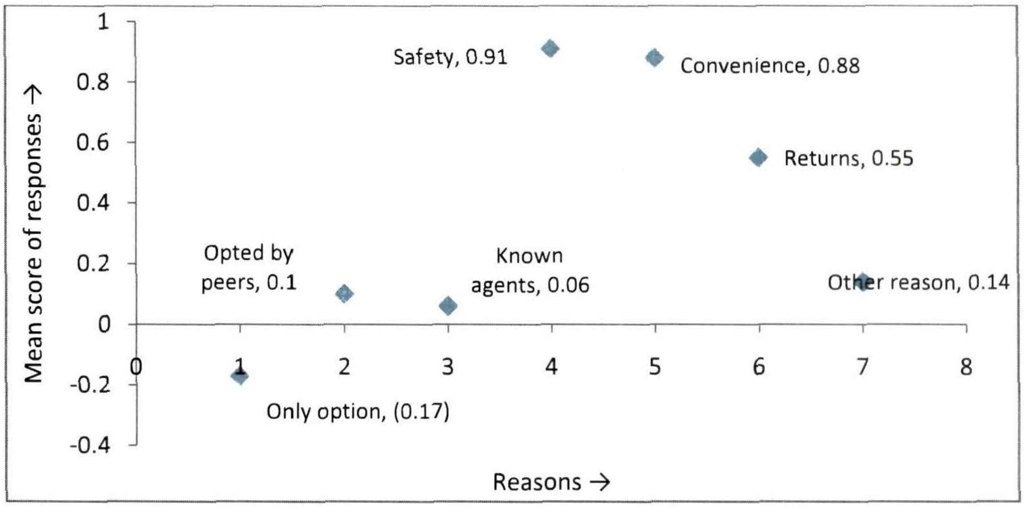

Figure 7.2 : Reasons for opting a particular saving mode

From the above figure based on the mean score of responses, we may rank the reasons for opting a particular saving mode as below –

Rank 1 – Safety

Rank 2 – Convenience

Rank 3 – Returns

Rank 4 – Other reasons

Rank 5 – Influence of peers

Rank 5 – Familiarity with agents

Rank 6 – These are the only option available (with a negative mean score signifying that the majority respondents do not agree to it)

7.2.1(iii) Perception about safety of deposit

A 14.7% of the respondents have agreed that they are aware of incidences of losing money by other depositors in the instruments where the respondents are saving. However, they opt to continue the same saving pattern. In this scenario, it is felt important to know the respondents opinion about safety of deposits in their adopted modes of savings. It was collected in a five point scale and the finding is summarized below –

Safety Scale

Not safe — *Somewhat safe* — *Have not considered the safety option* — *Safe* — *Very safe*

1% 16.9% 14.9%* 49.4% 17.8%

* Almost equivalent to the number of respondents who is opting for saving modes even after known incidences of loss (14.7%)

7.2.1(iv) Self-ranking of factors in terms of importance while deciding the mode of saving

The respondents have ranked factors according to their relative importance while deciding the mode of saving. It is collected for the purpose of cross checking their responses with their opinion on the statements mentioned above. The ranks have been specified from 1 to 4, 1 being the most important and 4 being the least important factor. Mean score of these ranks are graphically presented in Figure 7.3 below. A lesser mean score means high importance.

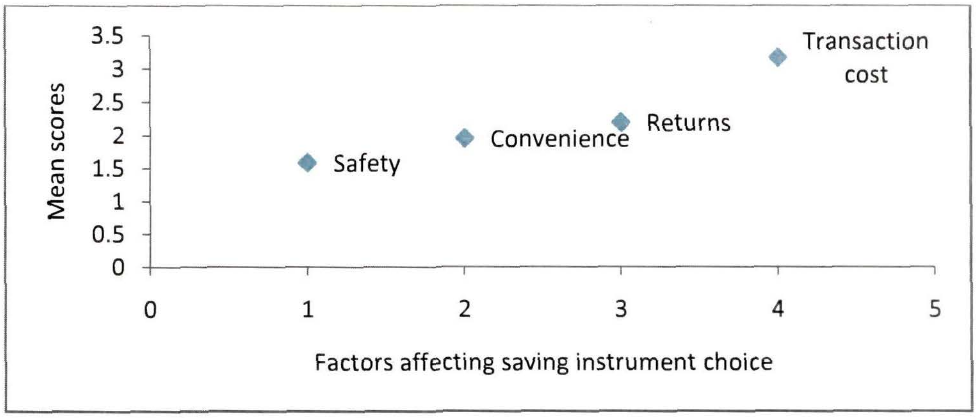

Figure 7.3: Factors affecting saving instrument choice

From Figure 7.3 it is observed that Safety is the most influential factor for the respondents on deciding a particular instrument for saving. It is followed by Convenience, Returns and Transaction Costs.

7.2.1(v) Summary of findings about self-reported importance of factors

From the findings depicted in Figure 7.2 and Figure 7.3, we may conclude that the rank of three important factors influencing saving mode are as below –

- ✓ Rank 1 – Safety
- ✓ Rank 2 – Convenience
- ✓ Rank 3 - Returns

Although some factors have been reported by the respondents as influential for the choice of any saving instrument, it is felt that a multiple number of socio-economic factors, individual characteristics, awareness levels and financial factors like availability of loan, expected returns, convenience of transaction etc also influence choice of various saving instruments. So, it is attempted to identify the factors influencing the saving instrument choice and to assess the extent to which these factors operate.

7.2.2. IDENTIFICATION OF THE FACTORS AFFECTING THE SAVING INSTRUMENT CHOICE AND ASSESSING THE EXTENT TO WHICH THESE FACTORS OPERATE

It is attempted to identify the factors influencing every saving instrument selection by using regression analysis, in particular, binary logistic regression analysis with categorical variables. Conceptual outline of Binary Logistic Regression has been discussed in Chapter 3 (refer §3.7). These factors can be broadly classified as socio-economic factors, individual characteristics, awareness levels and financial factors like availability of loan, expected returns, convenience of transactions etc.

A series of regression analysis have been conducted with variables which are found to be independent on a multicolinearity test, to identify the influential factors behind every saving instrument choice.

7.2.2 (i) Saving at home in Cash

88.8% of the respondents save at home in cash. Table 7.3 includes factors which have significant influence on the dependent variable i.e., 'Saving at home in cash'. The analysis shows that all the factors tested in the regression analysis are independently related to 'Saving at home in cash'.

The analysis shows that Safety of deposit, Earnings per month, Position in the household, Awareness level about Recurring Deposit and Perception about banks (Change of attitude of branch staff is necessary) are significant factors in predicting a respondent's choice of saving at home in cash.

Safety of deposits has shown a result against the myth. Respondents who feel that saving at home in cash is not safe have 10.33 times higher odds of saving at home compared to those who feel that it is safe. Feeling safe has decreased the odds of saving at home in cash.

Earnings show a mixed result. The odds of saving at home among respondents having monthly earnings between Rs.6,000/- to Rs.10,000/- is found to be increased by 2.99 times compared to respondents having monthly earnings less than Rs.1,000/-

Position in a household significantly influences the choice of saving at home in cash. Analysis shows that the 'Only Earner' of the family has 3.55 times higher odds of saving at home in cash than the respondents who are 'One of the Earners' in the families.

Perception about bank branch staff also found to be significantly influencing the prediction of a respondent's choice for saving at home in cash. The odds of saving at home increases by 18.10 times among respondents who feel that change in the attitude of branch staff is necessary to bring banking to the mass compared to respondents who strongly feels there is no need for change in the attitude.

Table 7.3: Logistic Regression predicting unbanked urban adults saving at home in cash

Factor	*Category*	*Significance (p-value)*	*Odds Ratio (Exp B)*
Awareness Level about Recurring Deposit	Adequately aware (Reference)	0.019	-
	Not aware	0.027	0.077
	Somewhat aware	0.293	0.316
Earnings per month in Rs.	>10000 (Reference)	0.399	-
	<1000	0.382	2.016
	1000 - <3000	0.342	1.997
	3000 - <6000	0.576	1.448
	6000 - <10000	0.053	6.021
Safety of deposit	Very Safe (Reference)	0.142	-
	Not Safe	0.999	6.143
	Somewhat Safe	0.909	1.111
	Safety not considered	0.035	0.210
	Safe	0.418	0.583
Position in the household	Dependent (Reference)	0.058	-
	Only earner	0.017	6.786
	One of the earners	0.221	1.912
Change of attitude of branch staff is required to bring more people to banking fold	Strongly Agree (Reference)	0.106	-
	Strongly Disagree	0.008	0.011
	Disagree	0.163	0.107
	Do not know	0.106	0.108
	Agree	0.227	0.199

Nagelkerke $R^2 = 0.319$

Variables found to be not significant in the model are Age, Gender, Place, Education level, Dwelling Type, Awareness Level (about Savings Bank account, Current Account, Fixed Deposit, No frill account), Perception about banks (Service Standard is uniform for all customers).

Table 7.4: Collinearity statistics for dependent variable 'Saving at home in cash'

Independent Variables	*Collinearity Statistics*	
	Tolerance	*VIF*
Dwelling type	0.913	1.096
Place	0.793	1.262
Awareness - SB A/c	0.532	1.881
Awareness – CA	0.365	2.736
Awareness – FD	0.445	2.245
Awareness – RD	0.491	2.036
Earnings per month	0.781	1.281
Safety of deposit	0.858	1.166
Household Size	0.938	1.066
Position in the household	0.725	1.380
No Frill a/c Awareness	0.813	1.231
Opinion on Service Standard	0.806	1.241
Attitude Change	0.841	1.189
Gender	0.846	1.181
Age	0.749	1.335
Education	0.555	1.802

7.2.2(ii) Saving in ROSCA

25.36% of the respondents save in ROSCA. Only 'Safety of deposit' has been found to have significant influence in predicting respondents' choice for 'Saving in ROSCA'. More the respondents' feel it as a safe mode of saving, the odds of 'Saving in ROSCA' increases. The odds increases by 708 times among respondents who considers it as a safe mode for saving compared to odds among respondents who considers 'Saving in ROSCA' in not safe.

The analysis shows that all the factors tested in the regression analysis are independently related to the dependent variable.

Table 7.5: Logistic Regression predicting unbanked urban adults saving in ROSCAs

Factor	Category	Significance (p-value)	Odds Ratio (Exp B)
Safety of deposit	Very safe (Reference)	0.223	-
	Not safe	0.999	0.001
	Somewhat safe	0.026	0.120
	Not considered the safety aspect	0.174	0.324
	Safe	0.527	0.708

Nagelkerke $R^2 = 0.539$

Variables found to be not significant in the model are Age, Gender, Place, Education level, Income level, Dwelling Type, Position of the respondent in the household, Household Size, Awareness level(about Savings Bank account, Current Account, Fixed Deposit, Recurring Deposit, No frill account), Perception about banks (Change of attitude of branch staff is necessary, Service Standard is uniform for all customers), Time required to reach the nearest bank branch (from residence and workplace).

Table 7.6: Collinearity Statistics for dependent variable 'Saving in ROSCA'

Independent Variables	*Collinearity Statistics*	
	Tolerance	*VIF*
Residence	0.910	1.099
Place	0.755	1.325
Awareness - SB A/c	0.490	2.041
Awareness – CA	0.366	2.730
Awareness – FD	0.446	2.241
Awareness – RD	0.488	2.049
Earnings per month	0.775	1.291
Safety of deposit	0.853	1.173
Household Size	0.932	1.072
Position in the household	0.717	1.395
No Frill a/c Awareness	0.797	1.255
Opinion on Service Standard	0.792	1.262
Attitude Change	0.826	1.211
Gender	0.843	1.187
Education	0.556	1.798
Age	0.737	1.357
Time required to reach the nearest bank branch from residence	0.746	1.340
Time required to reach the nearest bank branch from workplace	0.853	1.172

7.2.2(iii) Saving in NBFCs

27.6% of the respondents save in deposit schemes of NBFCs operating in the region. Although there were only two registered deposit taking NBFCs operating in Assam during the survey, many other companies (viz., Saradha Group, Rose Valley, Unipay 2 U, Jivan Suraksha, Prayag, Basil International Limited, Alliance Vision Marketing Limited, Daffodil Group of Companies, Abyss Assam Group Company, etc.) were offering deposit schemes. Saving in those companies have also been included in NBFCs as most respondents perceive these companies as deposit taking NBFCs and responded accordingly during the survey.

It may be noted here that the Table 7.7 consists only the factors which have significant influence on the dependent variable i.e., saving in NBFCs. The analysis shows that all the factors tested in the regression analysis are independently related to the dependent variable.

The analysis shows that Place, Age, Education, Awareness level (Current Account and Recurring Deposit), Safety of Deposit, Perception about banks (Change of attitude of branch staff is necessary), Time required to reach the nearest bank branch from workplace are significant factors in predicting a respondent's choice of 'Saving in NBFCs'.

Analysis shows that place of residence or earning livelihood also has significant influence on selection of this saving mode. The odds vary widely between the places surveyed. The odds of saving in NBFCs among the respondents in Nagaon is highest.

Age has significant influence predicting the selection of this saving mode among the respondents. With increase in age, odds of saving in NBFCs is found to be increasing. The odds increase 6.47 times in the age group 26-40 years compared to age group 18-25 years. Similarly, odds increases 1.97 times in the age group 41-60 years compared to age group 26-40 years.

Education level of the respondents is also found to have significant influence in predicting saving in NBFCs. However, it does not show any peculiar trend or pattern. The odds of saving in NBFCs is highest among the respondents who have studied up to class 4 only, followed by Post Graduates and Graduates. The odds are lowest among the undergraduates.

Awareness about Current Account and Recurring Deposits has significant influence in respondents' selection of this saving mode. However, it was observed that more is the awareness more is the odds of saving in NBFCs.

Respondents who agrees that there is a need for change of attitude of the bank staff to bring more people to the banking fold have 7.68 times higher odds of saving in NBFCs than the respondents who feel there is no need for change of attitude.

The odds of saving in NBFCs increases with the increase in the time required to reach the nearest bank branch from respondents' workplace. The odds of saving increases 26.84 times when time to reach the nearest bank branch from workplace increase from 5-15 minutes to 16-30 minutes.

Table 7.7: Logistic Regression predicting unbanked urban adults saving in NBFCs

Independent Variables	*Category*	*Significance (p-value)*	*Odds Ratio (Exp B)*
Place	Tinsukia (Reference)	0.000	-
	Guwahati	0.004	0.109
	Nagaon	0.018	33.548
	Silchar	0.482	1.900
	Dibrugarh	0.899	0.882
Awareness –CA	Adequately aware (Reference)	0.001	-
	Not aware	0.152	0.303
	Somewhat aware	0.258	2.086
Awareness –RD	Adequately aware (Reference)	0.011	-
	Not aware	0.230	0.441
	Somewhat aware	0.323	1.819
Safety of deposit	Very safe (Reference)	0.183	-
	Not safe	0.999	0.000
	Somewhat safe	0.267	2.509
	Not considered the safety aspect	0.528	1.716
	Safe	0.044	4.548
Change of attitude of branch staff is required to bring more people to banking fold	Strongly Agree (Reference)	0.025	-
	Strongly Disagree	0.888	0.914
	Disagree	0.691	2.149
	Do not know	0.030	4.701
	Agree	0.025	7.024
Education	Vocational/ Technical	0.095	-
	Illiterate	0.214	3.824
	Up to 4th standard	0.007	11.620
	Secondary level	0.133	3.733
	Undergraduate	0.517	1.736
	Graduate	0.150	3.491
	Post Graduate	0.120	4.845
Age	>60 years (Reference)	0.001	-
	18-25 years	0.617	0.623
	26-40 years	0.100	4.037
	41-60 years	0.014	7.970
Time required to reach the nearest bank branch from workplace	>30 mnts (Reference)	0.025	-
	NA	0.181	9.369
	<5 mnts	0.266	6.645
	5-15 mnts	0.206	9.125
	16-30 mnts	0.006	244.947

Nagelkerke $R^2 = 0.686$

Variables found to be not significant in the model are Gender, Income level, Dwelling Type, Position of the respondent in the household, Household Size, Awareness level(about Savings Bank account, Fixed Deposit, No frill account), Perception about banks (Service Standard is uniform for all customers), Time required to reach the nearest bank branch from residence.

Table 7.8: Collinearity Statistics for dependent variable 'Saving in NBFCs'

Independent Variables	*Collinearity Statistics*	
	Tolerance	*VIF*
Dwelling type	0.910	1.099
Place	0.772	1.295
Awareness - SB A/c	0.531	1.884
Awareness – CA	0.364	2.746
Awareness – FD	0.444	2.252
Awareness – RD	0.497	2.013
Earnings per month	0.763	1.310
Safety of deposit	0.853	1.173
Household Size	0.937	1.068
Position in the household	0.714	1.401
No Frill a/c Awareness	0.809	1.236
Opinion on Service Standard	0.807	1.238
Attitude Change	0.830	1.204
Gender	0.839	1.192
Age	0.547	1.829
Education	0.737	1.357

7.2.2(iv) Saving in Post Offices

26.2% of the respondents save in Post Offices. It may be noted here that the factors which have significant influence on the dependent variable i.e., 'Saving in Post Offices' has been listed in Table 7.9. The analysis shows that all the factors tested in the regression analysis are independently related to the dependent variable.

The analysis shows that Place, Awareness level (FD and No frill accounts), Dwelling type, Perception about banks (Change of attitude of branch staff is necessary), Age, Time required to reach the nearest bank branch from workplace are significant factors in predicting a respondents choice of saving in Post Offices.

Analysis shows that place of residence also has significant influence on selection of this saving mode. The odds vary widely between the places surveyed e.g., odds of saving in Post Offices among the respondents in Nagaon is 4.02 times, Silchar is 6.12 times and Dibrugarh is 57.19 times of the odds in Guwahati.

It was also found that the more the respondents are aware about the Fixed Deposits more is the tendency of saving in Post Offices. Odds of saving in Post Offices is 3.18 times among the respondents who are aware about Fixed Deposits compared to odds among respondents who are not aware about Fixed Deposits. Further, it was also observed that the odds of saving in Post Offices decreases with the increase in awareness about no-frill accounts. The odds decreases to half among 'somewhat aware' respondents compared to respondents who are 'not aware' about no frill accounts.

Ownership of dwelling of the respondents has been found to have significant influence on selection of this saving mode. Odds of saving in Post Offices among respondents residing at own residence is the highest. It is 1.39 and 96.33 times of odds among respondents residing in rented and official accommodation respectively.

Respondents who agrees that there is a need for change of attitude of the bank staff to bring more people to the banking fold have 1.46 times higher odds of saving in Post Offices than the respondents who strongly feel there is no need for change of attitude.

Age has significant influence in selection of this saving mode among the respondents. With increase in age, odds of saving in Post Offices is found to be increasing. The odds increase 2.52 times in the age group 26-40 years compared to age group 18-25 years. Similarly, odds increases 2.11 times in the age group 41-60 years compared to age group 26-40 years.

The odds of saving in Post Offices increases with the increase in the time required to reach the nearest bank branch from respondents' workplace. The odds of saving increases 3.42 times when time to reach the nearest bank branch increases from 5-15 minutes to 16-30 minutes.

Table 7.9: Logistic Regression predicting unbanked urban adults saving in Post Offices

Factor	*Category*	*Significance (p-value)*	*Odds Ratio (Exp B)*
Place	Tinsukia (Reference)	0.000	-
	Guwahati	0.005	0.159
	Nagaon	0.633	0.639
	Silchar	0.973	0.974
	Dibrugarh	0.020	9.094
Awareness –FD	Adequately aware (Reference)	0.033	-
	Not aware	0.009	0.158
	Somewhat aware	0.174	0.502
Awareness –No frill accounts	Adequately aware (Reference)	0.016	-
	Not aware	0.019	0.010
	Somewhat aware	0.006	0.005
Dwelling Type	Other (Reference)	0.045	-
	Owned	0.353	3.757
	Rented	0.488	2.691
	Illegal	0.999	0.000
	Common	0.895	1.261
	Official	0.085	0.039
Change of attitude of branch staff is required to bring more people to banking fold	Strongly Agree (Reference)	0.069	-
	Strongly Disagree	0.091	0.204
	Disagree	0.072	0.248
	Do not know	0.029	0.256
	Agree	0.019	0.298
Age	>60 years (Reference)	0.012	-
	18-25 years	0.660	0.698
	26-40 years	0.445	1.758
	41-60 years	0.072	3.708
Time required to reach the nearest bank branch from workplace	>30 mnts (Reference)	0.100	-
	NA	0.014	0.059
	<5 mnts	0.019	0.061
	5-15 mnts	0.031	0.067
	16-30 mnts	0.222	0.229

Nagelkerke R^2 Square = 0.561

Variables found to be not significant in the model are Gender, Education level, Income level, Position of the respondent in the household, Household Size, Safety of deposit, Awareness level(about Savings Bank account, Current Account, Recurring Deposit, No frill account), Perception about banks (Service Standard is uniform for all customers), Time required to reach the nearest bank branch from residence.

Table 7.10: Collinearity Statistics for dependent variable 'Saving in Post Offices'

Independent Variables	*Collinearity Statistics*	
	Tolerance	*VIF*
Dwelling type	0.910	1.099
Place	0.794	1.259
Awareness - SB A/c	0.524	1.907
Awareness – CA	0.364	2.747
Awareness – FD	0.445	2.250
Awareness – RD	0.496	2.015
Earnings per month	0.778	1.285
Safety of deposit	0.852	1.173
Household Size	0.935	1.069
Position in the household	0.716	1.397
No Frill a/c Awareness	0.815	1.227
Opinion on Service Standard	0.808	1.238
Attitude Change	0.845	1.184
Gender	0.836	1.197
Age	0.549	1.820
Education	0.745	1.342

7.2.2(v) Saving in Insurance Instruments

22.5% of respondents save in Insurance Instruments. The factors which have significant influence on the dependent variable i.e., 'Saving in Insurance Instruments' has been listed in Table 7.11. The analysis shows that all the factors tested in the regression analysis are independently related to the dependent variable.

The analysis shows that Place, Awareness level (FD), Income Level, Safety of deposit, Age, Position in the household and Perception about banks (Change of attitude of branch staff is necessary) are significant factors in predicting a respondent's choice of saving in Insurance Instruments.

Analysis shows that place of residence or work has significant influence on selection of this saving mode. The odds vary widely between the places surveyed and it is highest among respondents from Nagaon.

It was also found that the awareness about Fixed Deposits has significant influence predicting saving in Insurance Instruments. The tendency of saving in Insurance Instruments increases with the increase in level of awareness about Fixed Deposits. Odd of saving in Insurance Instruments is 2.09 times among the respondents who are somewhat aware about Fixed Deposits compared to odds among respondents who are not aware about Fixed Deposits.

The odds of saving in this saving mode increases with the increase in monthly earning. The odds of saving increases 1.37 times in income slab of Rs.1,000/- to <Rs.3,000/-, 1.40 times in income slab of Rs.3,000/- to <Rs.6,000/- and 1.55 times in income slab of Rs.6,000/- to <Rs.10,000/- compared to income slab of less than Rs.1,000/- per month.

Safety perception about this saving mode found to influence the decision. Odds of saving in Insurance Instruments increase 15.37 times among respondents who perceive it to be a safe investment than those who perceive it to be not safe.

Age has significant influence in selection of this saving mode among the respondents. With increase in age, odds of saving in Insurance Instruments is found to be increasing. The odds increase 4.86 times and 1.40 times in the age group 41-60 years compared to age group 18-25 years and 26-40 years respectively.

Positions of respondents in their households influence the prediction of respondents opting for this saving mode. 'Only earners' possess lesser odds than the 'one of the earners' in the family.

Respondents who strongly disagrees that attitude of banks' staff need to be changed for bringing more people to banking fold, possess 5.43 times higher odds of saving in Insurance Instruments than the respondents who feel that change is required.

Table 7.11: Logistic Regression predicting unbanked urban adults saving in Insurance Instruments

Factor	*Category*	*Significance (p-value)*	*Odds Ratio (Exp B)*
Place	Tinsukia (Reference)	0.005	-
	Guwahati	0.001	0.085
	Nagaon	0.388	0.392
	Silchar	0.001	0.022
	Dibrugarh	0.492	0.522
Awareness –FD	Adequately aware (Reference)	0.080	-
	Not aware	0.028	0.185
	Somewhat aware	0.106	0.387
Earnings per month in Rs.	>10000 (Reference)	0.261	-
	<1000	0.078	3.226
	1000 - <3000	0.043	4.418
	3000 - <6000	0.033	4.533
	6000 - <10000	0.072	5.000
Safety of deposit	Very safe (Reference)	0.122	-
	Not safe	0.015	0.124
	Somewhat safe	0.053	0.256
	Not considered the safety aspect	0.159	0.407
	Safe	0.676	1.906
Position in the household	Dependent (Reference)	0.120	-
	Only earner	0.089	0.317
	One of the earners	0.050	0.382
Change of attitude of branch staff is required to bring more people to banking fold	Strongly Agree (Reference)	0.140	-
	Strongly Disagree	0.520	1.761
	Disagree	0.499	0.571
	Do not know	0.828	0.866
	Agree	0.037	0.324
Age	>60 years (Reference)	0.035	-
	18-25 years	0.170	0.204
	26-40 years	0.740	0.707
	41-60 years	0.994	0.992

Nagelkerke $R^2 = 0.585$

Variables found to be not significant in the model are Gender, Education level, Dwelling Type, Household Size, Safety of deposit, Awareness level (about Savings Bank account, Current Account, Recurring Deposit, No frill account), Perception about banks (Service Standard is uniform for all customers), Time required to reach the nearest bank branch (from residence and workplace).

Table 7.12: Collinearity Statistics for dependent variable 'Saving in Insurance Instruments'

Independent Variables	*Collinearity Statistics*	
	Tolerance	*VIF*
Dwelling type	0.912	1.096
Place	0.792	1.262
Awareness - SB A/c	0.531	1.882
Awareness – CA	0.365	2.737
Awareness – FD	0.445	2.245
Awareness – RD	0.491	2.037
Earnings per month	0.770	1.298
Safety of deposit	0.858	1.166
Household Size	0.938	1.066
Position in the household	0.722	1.385
No Frill a/c Awareness	0.812	1.231
Opinion on Service Standard	0.804	1.243
Attitude Change	0.840	1.191
Gender	0.840	1.191
Age	0.551	1.813
Education	0.746	1.341

7.2.2(vi) Saving in kinds

29.2% of the urban unbanked adults surveyed save in kinds viz., jewellery, landed property, livestock, food grains etc. To identify the factors influencing this saving mode, a regression analysis was run with various factors. The factors which are found to have significant influence on the dependent variable i.e., 'Saving in kind' are presented in the Table 7.13. The analysis shows that all the factors included in the regression analysis are independently related to the dependent variable.

The analysis shows that Place and Age have significant influence in predicting respondents' choice of 'Saving in kinds'.

Place of domicile significantly influence the choice of saving in kinds. The odds is highest among respondents from Dibrugarh and lowest among respondents from Silchar.

Analysis of the surveyed sample shows that with increasing age, odds of saving in kinds also increase. The odds of saving in kinds increase 3.33 times among people in the age group of 26-40 years compared to age group 18-25 years. Likewise odds increase to 1.96 times in the age group 41-60 years compared to the age group 26-40 years.

Table 7.13: Logistic Regression predicting unbanked urban adults' saving in kinds

Factor	*Category*	*Significance (p-value)*	*Odds Ratio (Exp B)*
Place	Tinsukia (Reference)	0.001	-
	Guwahati	0.084	0.335
	Nagaon	0.758	0.748
	Silchar	0.000	0.009
	Dibrugarh	0.405	2.00
Age	>60 years (Reference)	0.001	-
	18-25 years	0.000	0.061
	26-40 years	0.014	0.203
	41-60 years	0.138	0.398

Nagelkerke $R^2 = 0.469$

Variables found to be not significant in the model are Education level, Income level, Dwelling Type, Position of the respondent in the household, Household Size, Safety of deposit, Awareness level (about Savings Bank account, Current Account, Fixed Deposit, Recurring Deposit, No frill account), Perception about banks (Change of attitude of branch staff is necessary, Service Standard is uniform for all customers), Time required to reach the nearest bank branch (from residence and workplace).

Table 7.14: Collinearity Statistics for dependent variable 'Saving in kinds'

Independent Variables	*Collinearity Statistics*	
	Tolerance	*VIF*
Residence	0.907	1.103
Place	0.719	1.391
Awareness - SB A/c	0.522	1.915
Awareness – CA	0.360	2.779
Awareness – FD	0.436	2.294
Awareness – RD	0.492	2.034
Earnings per month	0.748	1.336
Safety of deposit	0.851	1.176
Household Size	0.933	1.071
Position in the household	0.694	1.440
No Frill a/c Awareness	0.789	1.267
Opinion on Service Standard	0.807	1.240
Attitude Change	0.817	1.224
Gender	0.831	1.204
Education	0.535	1.868
Age	0.729	1.373
Time required to reach the nearest bank branch from residence	0.733	1.364
Time required to reach the nearest bank branch from workplace	0.845	1.183

7.2.2 (vii) Saving at SHG

14.27% of the urban unbanked adults surveyed save in SHGs. To identify the factors influencing this saving mode, a regression analysis was run with various variables shown in the Table 7.15. The factors which are found to have significant influence on the dependent variable i.e., 'Saving in SHG' are presented in Table 5.18. The analysis shows that all the factors tested in the regression analysis are independently related to the dependent variable.

The analysis shows that among the dependent variables, Place, Awareness about RD, Safety of deposit and Time required reaching the nearest bank branch from residence have significant influence in predicting respondents' choice of saving in SHG.

Place of domicile significantly influence the choice of saving in SHG. The odds are highest in Dibrugarh and lowest in Silchar.

Awareness about Recurring Deposit (RD) shows that more the respondents are aware about RD, more is the odd of saving in SHG. Respondents who are aware about RD are with 43.8 times odds of saving in SHGs compared to the ones who are not aware of.

Perception about safety of deposits significantly influence the choice of saving in SHGs. Perception of safety about saving in SHGs is adversely related to the odds of saving in this mode.

Time required reaching the nearest bank branch from respondent's residence also significantly influence saving in this mode. As the time required is higher, odds also increases. The odd has increased by 3.25 times when time required has increased from 5-15 minutes to 16-30 minutes.

Table 7.15: Logistic Regression predicting unbanked urban adults saving in SHGs

Factor	*Category*	*Significance (p-value)*	*Odds Ratio (Exp B)*
Place	Tinsukia (Reference)	0.014	-
	Guwahati	0.633	1.657
	Nagaon	0.223	6.118
	Silchar	0.997	0.000
	Dibrugarh	0.002	67.364
Awareness –RD	Adequately aware (Reference)	0.015	-
	Not aware	0.008	0.063
	Somewhat aware	0.219	0.276
Safety of deposit	Very safe (Reference)	0.033	-
	Not safe	0.009	127.419
	Somewhat safe	0.594	1.590
	Not considered the safety aspect	0.547	1.775
	Safe	0.604	0.661
Time required to reach the nearest bank branch from residence	>30 mnts (Reference)	0.227	-
	<5 mnts	0.998	0.000
	5-15 mnts	0.272	2.704
	16-30 mnts	0.039	8.796

Nagelkerke $R^2 = 0.665$

Variables found to be not significant in the model are Age, Gender, Education, Dwelling Type, Position of the respondent in the household, Household Size, Income, Awareness level(about Savings Bank account, Current Account, Fixed Deposit, No frill account), Perception about banks (Change of attitude of branch staff is necessary, Service Standard is uniform for all customers), Time required to reach the nearest bank branch from workplace.

Table 7.16: Collinearity Statistics for dependent variable 'Saving in SHGs'

Variables	*Collinearity Statistics*	
	Tolerance	*VIF*
Residence	0.907	1.103
Place	0.719	1.391
Awareness - SB A/c	0.522	1.915
Awareness – CA	0.360	2.779
Awareness – FD	0.436	2.294
Awareness – RD	0.492	2.034
Earnings per month	0.748	1.336
Safety of deposit	0.851	1.176
Household Size	0.933	1.071
Position in the household	0.694	1.267
No Frill a/c Awareness	0.789	1.240
Opinion on Service Standard	0.807	1.224

Attitude Change	0.817	1.204
Gender	0.831	1.868
Education	0.535	1.373
Age	0.729	1.364
Time required to reach the nearest bank branch from residence	0.733	1.183
Time required to reach the nearest bank branch from workplace	0.845	1.063

7.2.2(viii) Saving in Religious Institutions, Mutual Funds and Bank account of others

4.3% of the urban unbanked adults surveyed save in Religious Institutions, 12.1% save in Mutual Funds and 5.4% save in other's bank account. To identify the factors influencing each of these saving modes, three separate regression analysis were run with variables listed in the Table 7.17. The regression analysis shows that none of these variables is having significant influence in predicting respondents' choice of saving in Religious Institutions or Mutual Funds. Nagelkerke R^2 of the models is as below

Saving Mode	*Nagelkerke R^2*
Religious Institutions	0.569
Mutual Funds	1.000
Bank Account of Others	0.470

Analysis shows that all the factors tested in the regression analysis are independently related to the dependent variable.

Table 7.17: Collinearity Statistics for dependent variables 'Saving in Religious Institutions', 'Saving in Mutual Funds' and 'Saving in Bank account of others'

Independent Variables	*Collinearity Statistics*					
	Religious Institutions		*Mutual Funds*		*Bank account of others*	
	Tolerance	*VIF*	*Tolerance*	*VIF*	*Tolerance*	*VIF*
Residence	0.913	1.096	0.912	1.096	0.912	1.096
Place	0.785	1.274	0.786	1.272	0.786	1.272
Awareness - SB A/c	0.533	1.876	0.533	1.877	0.533	1.877
Awareness – CA	0.369	2.710	0.368	2.716	0.368	2.716
Awareness – FD	0.448	2.230	0.447	2.238	0.447	2.238
Awareness – RD	0.496	2.018	0.494	2.023	0.494	2.023
Earnings per month	0.778	1.285	0.769	1.300	0.769	1.300
Safety of deposit	0.858	1.166	0.858	1.166	0.858	1.166
Household Size	0.937	1.067	0.938	1.066	0.938	1.066
Position in the household	0.717	1.395	0.715	1.400	0.715	1.400
No Frill a/c Awareness	0.821	1.219	0.821	1.218	0.821	1.218

Opinion on Service Standard	0.807	1.240	0.802	1.247	0.802	1.247
Attitude Change	0.840	1.190	0.838	1.193	0.838	1.193
Gender	0.839	1.192	0.831	1.203	0.831	1.203
Education	0.557	1.795	0.552	1.811	0.552	1.811
Age	0.748	1.337	0.745	1.343	0.745	1.343
Time required to reach the nearest bank branch from residence	0.761	1.314	0.760	1.316	0.760	1.316
Time required to reach the nearest bank branch from workplace	0.868	1.152	0.867	1.154	0.867	1.154

7.2.2(ix) Summary

Table -7.18: Summary Table on analysis of factors affecting the saving instrument choice

Saving instrument	*Variables having significant effect on prediction of choice of saving instrument* *	*Remarks*
At home in cash	✓ Position in the Household ✓ Income Level (Mixed) ✓ Safety of Deposit (-ve) ✓ Awareness level about RD (-ve) ✓ Perception that change of attitude of bank staff in necessary (+ve)	Only earner in the Households are more likely to save in cash at home
ROSCAs	✓ Safety of Deposit (+ve)	
SHGs	✓ Place ✓ Awareness about RD (+ve) ✓ Safety of Deposit (-ve) ✓ Time required to reach the nearest bank branch (+ve)	Dibrugarh possesses the highest odds
In kinds (viz., jewellery, landed property, livestock, food grains etc.)	✓ Place ✓ Age (+ve)	Dibrugarh possesses the highest odds
NBFCs	✓ Age (+ve) ✓ Education Level (Mixed) ✓ Place ✓ Awareness about RD and CA(-ve) ✓ Safety of Deposit (+ve) ✓ Perception that change of attitude of bank staff in necessary (+ve) ✓ Time required to reach the nearest bank branch from work place (+ve)	Nagaon possesses the highest odds

Saving instrument	*Variables having significant effect on prediction of choice of saving instrument **	*Remarks*
Post Offices	✓ Age (+ve) ✓ Dwelling Type ✓ Place ✓ Awareness about FD (+ve) and No-frill accounts (-ve) ✓ Perception that change of attitude of bank staff in necessary (+ve) ✓ Time required to reach the nearest bank branch from work place (+ve)	Dibrugarh possesses the highest odd
Insurance Instruments	✓ Place ✓ Awareness level about FD (+ve) ✓ Income Level (+ve) ✓ Safety of Deposit (+ve) ✓ Position in the household ✓ Perception that change of attitude of bank staff in necessary (+ve) ✓ Age (+ve)	'One of the earners' in the household possesses more odds than 'the only earner'

*
'+ve' implies odds increases with the increase in the level of response towards the independent variable
'-ve' implies odds decreases with the increase in the level of response towards the independent variable
'Mixed' implies there is a mixed reaction of odds with the level of response towards the independent variable

7.3. CREDIT

After saving, credit is a very important phenomenon to be addressed by the financial inclusion initiatives. Trend analysis of availability of formal bank credit and its contribution to the overall Financial Inclusion has been analysed in Chapter 5 in detail based on secondary data.

The study also attempts to capture the respondents' experience with banks on credit applications. Further, in the absence of bank's credit facilities, how the credit requirement of the respondents are met, what are the self reported reasons for choosing such alternatives and to identify the socio-economic factors influencing the choice of a particular source of credit are studied. The analysis in the following sections brings insight to the various sources of credit used by the respondents and the factors determining selection of a particular source. These factors can be broadly classified as socio-economic factors, individual characteristics, awareness levels, past experience with banks and financial factors like earnings, savings etc. Like in Savings analysis, here also cross frequencies and regression analysis is used extensively. The analysis attempts to bring out the relative contribution of each factor affecting the choice of a particular source of credit.

7.3.1. Borrowing from bank

It is observed that only 5.9% of the respondents had applied for loan from banks. Out of them, a mere 1.9% has received the loan and the remaining 4% of respondents' loan application was rejected by banks for various reasons. 94.1% of respondents have not ever approached the bank for their credit requirement.

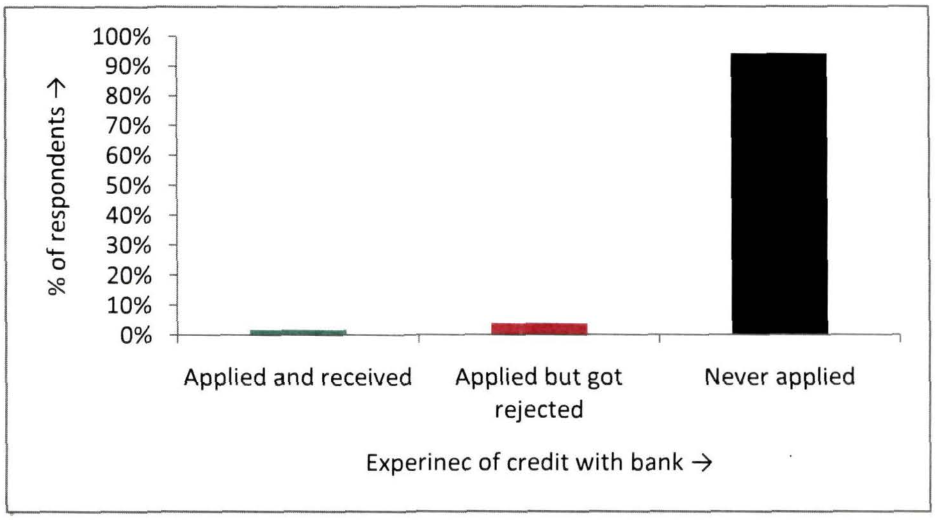

Figure 7.4: Availing credit from banks

It has been attempted to analyse the refusal reasons of loan applications by banks as perceived by respondents. It may be noted that the loan applications were perceived to be rejected for multiple reasons. The main refusal reasons are –

Table 7.19 : Reasons for rejection of loan applications by banks

Refusal reasons	*Total*
Not having steady income	33.3%
Not having any guarantor for the loan	38.1%
Not having enough earnings	23.8%
Not having a job	14.35%
Incurring losses	4.8%
Other reason	19.4%

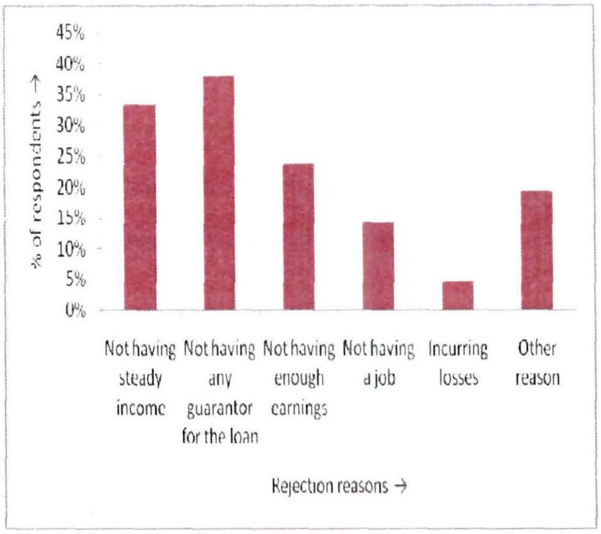

Figure 7.5: Reasons for rejection of loan applications by banks

It may be noted that the above reasons are not mutually exclusive, most of the cases loan applications were refused for multiple reasons. Not having a guarantor for the loan is found to be the most prominent reason for refusal of loan applications of the respondents.

7.3.2. Alternate Sources of credit and their usage

In absence of credit from Banks, the following alternate sources of credit are used by the respondents at times required.

Respondents (94.6%) mostly depend on their family and friends to meet their credit requirement. It is followed by ROSCAs, NGO/SHGs and Employer. From employer mostly credit is availed in terms of salary drawn in advance. Loans from Money lenders are also availed by 14.9% of the respondents. 13.6% of respondents avail it from Private Institutions. A mere (0.8%) number of respondents availed loan from public institution, mostly under subsidy/ grant linked schemes.

The various sources of credit availed by the respondents are ranked in terms of mean scores of use as below –

Table 7.20: Ranks of credit sources in terms of use

Ranks	*Credit source*	*Mean Score*
1	Family and friends	2.54
2	ROSCAs	0.58
3	NGO/ SHG	0.47
4	Employer	0.45
5	Money Lender	0.28
6	Private Institution	0.25
7	Other sources	0.02
8	Public Institution	0.01

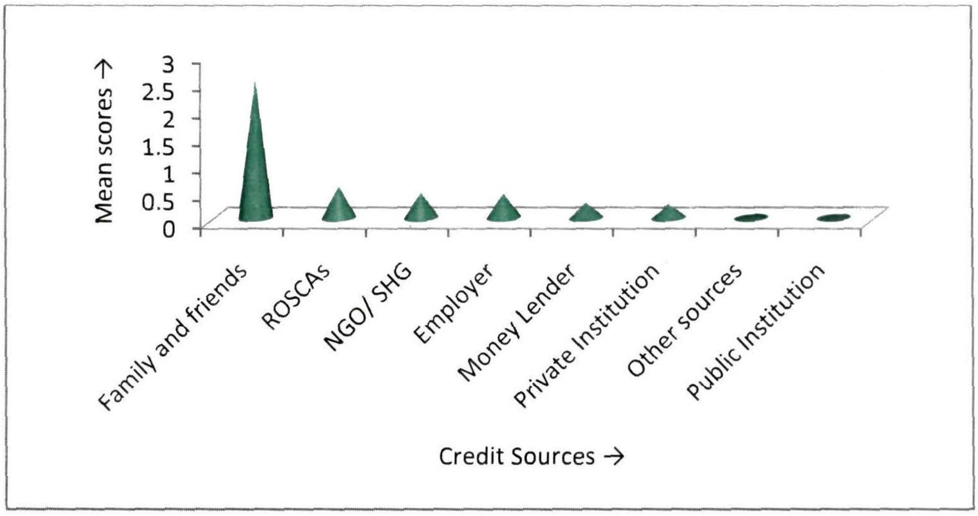

Figure 7.6: Mean scores of use of various sources of credit

7.3.3. IDENTIFICATION OF THE FACTORS AFFECTING THE USE OF A PARTICULAR SOURCE OF CREDIT AND ASSESSING THE EXTENT TO WHICH THESE FACTORS OPERATE

In absence of credit from banks, the respondents avail credit from alternate sources like ROSCAs, NGO/ SHG, Family and Friends, Employer, Money Lender, Public Institution, Private Institution and Others. To identify the factors affecting the choice of a particular source of credit by the respondents, a series of regression analysis, in particular, binary logistic regression analysis with categorical variables were undertaken considering the following independent variables. The analysis shows that all the independent variables considered in the regression analysis are independently related to the dependent variable.

i. Gender

ii. Place

iii. Education level

iv. Religion

v. Income level

vi. Residence occupancy type

vii. Position of the respondent in the household

viii. Household size

ix. Awareness level about the following common loan products of banks

- Credit Card
- Home loan
- Car loan
- Personal loan
- Education loan
- Loan for business

x. Saving alternatives used

-At home in cash
- In kinds
- NBFCs
- Post Offices
- ROSCAs
- Insurance instruments
- Saving in others' account
- SHGs

xi. Past experience with bank on credit

xii. *Time required to reach the nearest ban branch from*

- Residence

- Workplace

xiii. Perception that change of attitude of branch staff is necessary for financial inclusion

xiv. Perception that service standards of banks are uniform for all customer across economic status

7.3.3 (i) Credit from Family and Friends

In absence of credit from banks, majority of the respondents mostly depend on their family including relatives and friends for credit. Analysis shows that 94.6% of the respondents depend on this source of credit. To identify the factors signifying availing credit from this mode, a regression analysis was run with the independent variables mentioned in §7.3.3.

The regression analysis shows that none of these factors are significant in predicting a respondents' choice of availing credit from Family and Friends.

Table 7.21: Collinearity Statistics for Dependent Variable 'Availing credit from family and friends'

Independent Variables	*Collinearity Statistics*	
	Tolerance	*VIF*
Past experience with bank on credit	0.871	1.148
Place	0.662	1.510
Gender	0.791	1.264
Education	0.620	1.614
Religion	0.952	1.051
Earnings per month	0.761	1.315
Residence occupancy type	0.836	1.196
House hold size	0.899	1.112
Position in the household	0.712	1.405
Time required to reach the nearest bank branch from residence	0.772	1.386
Time required to reach the nearest bank branch from workplace	0.857	1.167
Awareness – Credit Card	0.501	1.998
Awareness – Home Loan	0.158	6.321
Awareness – Car Loan	0.118	8.498
Awareness – Personal Loan	0.145	6.883
Awareness – Education Laon	0.222	4.506
Awareness – Business Loan	0.273	3.669
Saving - At Home in cash	0.581	1.720

Saving – ROSCAs	0.813	1.230
Saving – SHGs	0.757	1.321
Saving – In Kinds	0.762	1.312
Saving – Post Offices	0.665	1.503
Saving – NBFCs	0.596	1.679
Saving – Insurance Instruments	0.674	1.484
Saving – Mutual Funds	0.808	1.237
Saving – Others' Bank account	0.915	1.093
No saving because of no surplus generated	0.672	1.487
Saving in any other mode	0.859	1.164
Opinion on Service Standard	0.753	1.329
Opinion on Change of Attitude	0.778	1.286

7.3.3(ii) Credit from ROSCAs

29.7% of the respondents avail credit from ROSCAs. A regression analysis was run with the independent variables to identify the factors signifying availing credit from this mode. It may be noted here that the Table 7.22 consists only the factors which have significant influence on the dependent variable i.e. 'Credit from ROSCAs'.

The analysis shows that Place of residence or occupation; Income level; Saving Modes adopted (such as SHGs, Post offices, NBFCs, Other's account) and Time required to reach the nearest bank branch from residence and workplace are significant factors in predicting a respondents choice of availing credit from ROSCAs.

(a) Place is found to be significant in predicting the respondent's possibility of availing credit from ROSCAs. Respondents from Guwahati possess the highest odds. It is 913 times of that of Dibrugarh, 120 times of Nagaon and 237 times of Silchar.

(b) Income level of respondents is also found to be significant. It shows a mixed trend.

(c)Saving habits also found to be significant. Odds of availing credit from ROSCAs increased with increase in saving in SHGs, NBFCs and Post offices. However, savings in other's account shows an opposite trend.

(d) Time required for a respondent to reach the nearest bank branch from his residence and workplace is also found to be significant factor in respondent's availing credit from ROSCAs. More the time required, more is the odds of availing credit from ROSCAs.

Table 7.22: Logistic Regression predicting unbanked urban adults availing loan from ROSCAs

Factor	*Category*	*Significance (p-value)*	*Odds Ratio (Exp B)*
Place	Tinsukia (Reference)	0.000	-
	Guwahati	0.073	6.396
	Nagaon	0.114	0.053
	Silchar	0.025	0.027
	Dibrugarh	0.005	0.007
Earnings per month in Rs.	>10000 (Reference)	0.001	-
	<1000	0.025	7.902
	1000 - <3000	0.894	1.116
	3000 - <6000	0.059	4.026
	6000 - <10000	0.001	15.524
Saving in SHGs	Mostly (Reference)	0.002	-
	Nil	0.007	0.041
	In between	0.414	0.190
Saving in Post Offices	Mostly (Reference)	0.028	-
	Nil	0.004	0.052
	In between	0.154	0.189
Saving in NBFCs	Mostly (Reference)	0.244	-
	Nil	0.026	0.07
	In between	0.070	0.153
Saving in other's account	Mostly (Reference)	0.147	-
	Nil	0.374	0.284
	In between	0.176	0.059
Time required to reach the nearest bank branch from residence	>30 mnts (Reference)	0.038	-
	<5 mnts	0.005	0.006
	5-15 mnts	0.067	0.075
	16-30 mnts	0.207	0.216
Time required to reach the nearest bank branch from workplace	>30 mnts (Reference)	0.118	-
	<5 mnts	0.022	0.022
	5-15 mnts	0.026	0.032
	16-30 mnts	0.087	0.058

Nagelkerke $R^2 = 0.704$

All other variables mentioned in §7.3.3 and not included in the above table are found to be not significant

Table 7.23: Collinearity Statistics for Dependent Variable 'Availing credit from ROSCAs'

Independent Variables	*Collinearity Statistics*	
	Tolerance	*VIF*
Past experience with bank on credit	0.871	1.148
Place	0.662	1.510
Gender	0.791	1.264
Education	0.620	1.614
Religion	0.952	1.051
Earnings per month	0.761	1.315
Residence occupancy type	0.836	1.196
House hold size	0.899	1.112
Position in the household	0.712	1.405
Time required to reach the nearest bank branch from residence	0.772	1.386
Time required to reach the nearest bank branch from workplace	0.857	1.167
Awareness – Credit Card	0.501	1.998
Awareness – Home Loan	0.158	6.321
Awareness – Car Loan	0.118	8.498
Awareness – Personal Loan	0.145	6.883
Awareness – Education Laon	0.222	4.506
Awareness – Business Loan	0.273	3.669
Saving - At Home in cash	0.581	1.720
Saving – ROSCAs	0.813	1.230
Saving – SHGs	0.757	1.321
Saving – In Kinds	0.762	1.312
Saving – Post Offices	0.665	1.503
Saving – NBFCs	0.596	1.679
Saving – Insurance Instruments	0.674	1.484
Saving – Mutual Funds	0.808	1.237
Saving – Others' Bank account	0.915	1.093
No saving because of no surplus generated	0.672	1.487
Saving in any other mode	0.859	1.164
Opinion on Service Standard	0.753	1.329
Opinion on Change of Attitude	0.778	1.286

7.3.3(iii) Credit from NGO/ SHGs

22.02% of the respondents avail credit from NGO/ SHGs. The regression analysis shows that Place of residence or occupation, Education, Income Level, Past experience of credit with banks, Saving Modes adopted (such as SHGs, NBFCs), Residence occupancy type and Time required to reach the nearest bank branch from respondent's residence are significant factors in predicting a respondents' choice of availing credit from NGO/SHGs.

(a) The odds of availing loan from NGO/SHGs is highest in Guwahti. It is 29.28 times of that of Nagaon, 4.87 times of that of Silchar and 157.96 times of that of Dibrugarh.

(b) Past experience with banks on credit also found to be significant here. Respondents who have availed loan from banks earlier possess 1.04 times more odds than the respondents whose loan applications were rejected by banks.

(c) Education and income level of respondents is found to be significant in predicting the possibility of availing loan from NGO/SHGs. However, a mixed trend is observed here.

(d) More the respondents save in SHGs and NBFCs, more is the odds of them availing loan from NGO/SHGs. The odds of availing loan among respondents who saves mostly in SHGs is 58.82 times of that of respondents who saves nothing in SHGs.

(e) The respondents staying in rented accommodation possess the highest odds of availing credit from NGO/ SHGs.

(f) Time required to reach the nearest bank branch from a respondent's residence is also found to be a significant factor here. A mixed trend is observed here.

Table 7.24: Logistic Regression predicting unbanked urban adults availing loan from NGO/SHGs

Factor	*Category*	*Significance (p-value)*	*Odds Ratio (Exp B)*
Place	Tinsukia (Reference)	0.003	-
	Guwahati	0.015	38.068
	Nagaon	0.888	1.300
	Silchar	0.238	7.813
	Dibrugarh	0.473	0.241
Past experience with bank on credit	Not applied (Reference)	0.048	
	Loan received	0.188	9.440
	Loan application got rejected	0.030	9.059
Education	Vocational/ Technical	0.001	-
	Illiterate	0.998	3.380
	Up to 4^{th} standard	0.998	1.651
	Secondary level	0.998	5.457
	Undergraduate	0.998	4.912
	Graduate	0.998	9.266
	Post Graduate	0.998	1.077

Earnings per month in Rs.	≥10000 (Reference)	0.031	-
	<1000	0.702	0.705
	1000 - <3000	0.257	2.478
	3000 - <6000	0.017	6.103
	6000 - <10000	0.625	1.451
Saving in SHGs	Mostly (Reference)	0.000	-
	Nil	0.000	0.017
	In between	0.595	1.881
Saving in NBFCs	Mostly (Reference)	0.052	-
	Nil	1.000	0.000
	In between	0.018	14.946
Residence occupancy type	Other (Reference)	0.188	-
	Owned	0.016	0.081
	Rented	0.111	0.216
	Illegal	0.205	0.088
	Common	0.236	0.180
	Official	0.080	0.095
Time required to reach the nearest bank branch from residence	>30 mnts (Reference)	0.186	-
	NA	0.235	0.147
	<5 mnts	0.058	0.096
	5-15 mnts	0.037	0.111

Nagelkerke $R^2 = 0.621$

All other variables mentioned in §7.3.3 and not included in the above table are found to be not significant.

Table 7.25: Collinearity Statistics for Dependent Variable 'Availing credit from NGO/ SHG'

Independent Variables	*Collinearity Statistics*	
	Tolerance	*VIF*
Past experience with bank on credit	0.871	1.148
Place	0.662	1.510
Gender	0.790	1.265
Education	0.622	1.608
Religion	0.952	1.051
Earnings per month	0.760	1.315
Residence occupancy type	0.836	1.196
House hold size	0.899	1.112
Position in the household	0.714	1.400
Time required to reach the nearest bank branch from residence	0.720	1.389
Time required to reach the nearest bank branch from workplace	0.855	1.169
Awareness – Credit Card	0.501	1.996
Awareness – Home Loan	0.158	6.320
Awareness – Car Loan	0.118	8.496
Awareness – Personal Loan	0.145	6.911
Awareness – Education Laon	0.222	4.504

Awareness – Business Loan	0.272	3.680
Saving - At Home in cash	0.581	1.722
Saving – ROSCAs	0.816	1.226
Saving – SHGs	0.757	1.321
Saving – In Kinds	0.763	1.311
Saving – Post Offices	0.664	1.505
Saving – NBFCs	0.595	1.680
Saving – Insurance Instruments	0.674	1.484
Saving – Mutual Funds	0.808	1.238
Saving – Others' Bank account	0.915	1.093
No saving because of no surplus generated	0.672	1.487
Saving in any other mode	0.859	1.164
Opinion on Service Standard	0.755	1.325
Opinion on Change of Attitude	0.778	1.285

7.3.3(iv) Credit from Employer

Analysis shows that 20% of the respondents depend on their employer for credit. Many a times, it is in terms of advance salary drawn or a short term credit adjusted out of salary payments. The regression analysis shows that Place of residence or occupation; Income Level; Position of the respondent in the household; Awareness levels about various loan products of banks (such as Credit Card, Home loan, Education loan); Saving Modes adopted (such as At home in cash, Insurance Instruments) and Perception on uniform service standards of banks are significant factors in predicting a respondents' choice of availing credit from Employer.

(a) The odds of availing loan from Employer is highest in Guwahati, it is 1.62 times of that of Dibrugarh, 15.37 times of Nagaon and 4.99 times of Silchar.

(b) The odds of availing loan from Employer increases with the decrease in monthly earning. The odds of availing loan increases 1.60 times in income slab of <Rs.1,000/- compared to income slab of Rs.6,000/- to <Rs.10,000/- per month.

(c) Position of a respondent in the household is also found to be having a significant influence in predicting availing loan from employer. Odds of availing loan from employer among the respondents who are 'one of the earning members in the family' is 3.22 times of the odds among respondents who are 'only earner in the family'.

(d) Awareness about various credit facilities viz., Credit Cards, Home Loan and Education Loan is also found to have significant influence in prediction of availing credit from employer. Odds of availing credit from employer is 7.96 times among respondents who are aware about credit cards compared to that of those who are unaware about it. Same is 2.56 times for Home loan.

(e) The respondents who save in cash at home possess 9.38 times odds of availing loan from Employer compared to the respondents who do not save in this mode.

(f) Respondents, who disagree that the banks offer uniform service standards to all customers across economic class, possess higher odds of availing credit from their employers.

Table 7.26: Logistic Regression predicting unbanked urban adults availing loan from Employer

Factor	*Category*	*Significance (p-value)*	*Odds Ratio (Exp B)*
Place	Tinsukia (Reference)	0.096	-
	Guwahati	0.048	10.081
	Nagaon	0.791	0.656
	Silchar	0.629	2.020
	Dibrugarh	0.234	6.210
Earnings per month in Rs.	≥10000 (Reference)	0.301	-
	<1000	0.037	17.876
	1000 - <3000	0.035	16.372
	3000 - <6000	0.047	13.470
	6000 - <10000	0.098	10.940
Position in the household	Dependent (Reference)	0.000	-
	Only earner	0.012	7.316
	One of the earners	0.000	23.569
Awareness – Credit Card	Adequately aware (Reference)	0.002	-
	Not aware	0.749	1.400
	Somewhat aware	0.014	11.149
Awareness – Home Loan	Adequately aware (Reference)	0.089	-
	Not aware	0.033	0.016
	Somewhat aware	0.085	0.041
Awareness – Education Loan	Adequately aware (Reference)	0.036	-
	Not aware	0.511	0.402
	Somewhat aware	0.083	0.108
Saving at home in cash	Mostly (Reference)	0.060	-
	Nil	0.398	0.396
	In between	0.037	3.714

Banks offer same standard of service to all customers across economic profile	Strongly Agree (Reference)	0.003	-
	Strongly Disagree	0.735	0.673
	Disagree	0.128	0.221
	Do not know	0.003	0.032
	Agree	0.010	0.053

Nagelkerke $R^2 = 0.575$

All other variables mentioned in §7.3.3 and not included in the above table are found to be not significant.

Table 7.27: Collinearity Statistics for Dependent Variable 'Availing credit from Employer'

Independent Variables	*Collinearity Statistics*	
	Tolerance	*VIF*
Past experience with bank on credit	0.871	1.148
Place	0.663	1.509
Gender	0.788	1.268
Education	0.621	1.611
Religion	0.951	1.051
Earnings per month	0.761	1.314
Residence occupancy type	0.839	1.192
House hold size	0.897	1.115
Position in the household	0.710	1.409
Time required to reach the nearest bank branch from residence	0.724	1.381
Time required to reach the nearest bank branch from workplace	0.849	1.178
Awareness – Credit Card	0.500	1.998
Awareness – Home Loan	0.155	6.446
Awareness – Car Loan	0.117	8.531
Awareness – Personal Loan	0.145	6.906
Awareness – Education Laon	0.222	4.505
Awareness – Business Loan	0.267	3.747
Saving - At Home in cash	0.577	1.734
Saving – ROSCAs	0.808	1.237
Saving – SHGs	0.768	1.302
Saving – In Kinds	0.761	1.314
Saving – Post Offices	0.665	1.503
Saving – NBFCs	0.599	1.670
Saving – Insurance Instruments	0.678	1.476
Saving – Mutual Funds	0.807	1.239
Saving – Others' Bank account	0.915	1.093
No saving because of no surplus generated	0.657	1.523
Saving in any other mode	0.856	1.168
Opinion on Service Standard	0.755	1.324
Opinion on Change of Attitude	0.778	1.285

7.3.3 (v) Credit from Money Lender

Analysis shows that 14.9% of the respondents avail credit from Money Lenders. The regression analysis shows that Place of residence or earning livelihood, Past experience with banks on credit, Earnings, Education, Position of the respondent in the household, Awareness (about Home loan, Car Loan), Saving Modes adopted (such as At home in cash, NBFCs, Insurance Instruments, No saving due to no surplus), Residence occupancy type and time required to reach the nearest bank branch from residence are significant factors in predicting a respondents' choice of availing credit from Money Lenders.

(a) The odds of availing loan from Money Lenders is distinctly very high in Silchar, it is 2185 times of that of Nagaon, which possess the second highest odds after Silchar among the survey locations.

(b) Past experience with banks on credit also significantly influence the odds of availing credit from money lenders. It is found that the respondents who had availed bank credit in past possess 35.60 times odds compared to those whose loan applications were rejected by banks.

(c) Education levels of respondents also found to be significantly influence availing of loan from money lenders. Lesser is the education level; higher is the odd of availing loan from money lenders. Illiterate respondents possess maximum odds. It is 141.25 times when compared with the odds of graduate respondents.

(d) Earning also has significant bearing here. A mixed trend is observed here.

(e) Position of a respondent in the household is also found to be having a significant influence in predicting availing loan from employer. Odds of availing loan from Money lenders among the respondents who are 'only earner in the family' is 6752.01 times of the odds among respondents who are 'one of the earning members in the family'.

(f) Awareness about various credit facilities viz., Credit card, Car Loan and Home Loans is also found to have significant influence in prediction of availing credit from Money lenders. Odds of availing credit from Money lenders is higher among respondents who are aware about such facilities compared to those who are unaware about it.

(g) Saving habits of the respondents (such as saving at home in cash, SHGs, NBFCs, Insurance instruments) are found to be significant factors in predicting the odds of availing loan from moneylenders. The respondents who cannot save due to not having sufficient surplus, possess 93.19 times odd of availing loan from money lenders than that of those who save.

(h) Type of occupancy of residence is also found to be a significant factor. The odds of availing loan from moneylenders are low among respondents who stay at their own residence or official accommodation compared to those who are on rent, staying at illegal places or sharing common infrastructures.

(i) Time required to reach the nearest bank branch from residence is also a significant factor which has mixed influence in availing loan from money lenders.

Table 7.28: Logistic Regression predicting unbanked urban adults availing loan from Money lenders

Factor	*Category*	*Significance (p-value)*	*Odds Ratio (Exp B)*
Place	Tinsukia (Reference)	0.081	-
	Guwahati	0.005	0.000
	Nagaon	0.736	0.126
	Silchar	0.333	275.339
	Dibrugarh	0.358	0.008
Past experience with bank on credit	Not applied (Reference)	0.077	
	Loan received	0.028	73.060
	Loan application got rejected	0.891	2.052
Education	Vocational/ Technical	0.306	-
	Illiterate	0.015	76519.654
	Up to 4th standard	0.010	17765.196
	Secondary level	0.033	11527.164
	Undergraduate	0.068	422.647
	Graduate	0.169	125.774
	Post Graduate	0.704	0.087
Earnings per month in Rs.	>10000 (Reference)	0.185	-
	<1000	0.033	1293947.993
	1000 - <3000	0.151	3186.607
	3000 - <6000	0.113	3035.914
	6000 - <10000	0.037	1998295.096
Position in the household	Dependent (Reference)	0.033	-
	Only earner	0.011	277838.364
	One of the earners	0.161	41.149

Awareness – Credit Card	Adequately aware (Reference)	0.075	-
	Not aware	0.076	5626.155
	Somewhat aware	0.032	59850.379
Awareness – Home Loan	Adequately aware (Reference)	0.045	-
	Not aware	0.084	0.000
	Somewhat aware	0.016	0.000
Awareness – Car Loan	Adequately aware (Reference)	0.040	-
	Not aware	0.029	5.268
	Somewhat aware	0.016	7.598
Saving at home in cash	Mostly (Reference)	0.097	-
	Nil	0.104	1081.946
	In between	0.025	9986.162
Saving in SHGs	Mostly (Reference)	0.101	-
	Nil	0.020	0.000
	In between	0.017	0.000
Saving in NBFCs	Mostly (Reference)	0.258	-
	Nil	0.065	0.001
	In between	0.029	0.000
Saving in Insurance Instruments	Mostly (Reference)	0.078	-
	Nil	0.028	5.729
	In between	0.056	1.792
No saving due to no surplus to save	Mostly (Reference)	0.205	-
	Nil	0.039	2.368
	In between	0.165	220.768
Residence occupancy type	Other (Reference)	0.214	-
	Owned	0.724	0.113
	Rented	0.298	397.160
	Illegal	0.206	3331.992
	Common	0.027	6680.007
	Official	0.997	0.000
Time required to reach the nearest bank branch from residence	>30 mnts (Reference)	0.025	-
	NA	0.039	0.000
	<5 mnts	0.696	4.307
	5-15 mnts	0.427	0.028

Nagelkerke $R^2 = 0.865$

All other variables mentioned in §7.3.3 and not included in the above table are found to be not significant.

Table 7.29: Collinearity Statistics for Dependent Variable 'Availing credit from Money lenders'

Independent Variables	*Collinearity Statistics*	
	Tolerance	*VIF*
Past experience with bank on credit	0.871	1.148
Place	0.663	1.509
Gender	0.788	1.268
Education	0.621	1.611
Religion	0.951	1.051
Earnings per month	0.761	1.314
Residence occupancy type	0.839	1.192
House hold size	0.897	1.115
Position in the household	0.710	1.409
Time required to reach the nearest bank branch from residence	0.724	1.381
Time required to reach the nearest bank branch from workplace	0.849	1.178
Awareness – Credit Card	0.500	1.998
Awareness – Home Loan	0.155	6.446
Awareness – Car Loan	0.117	8.531
Awareness – Personal Loan	0.145	6.906
Awareness – Education Laon	0.222	4.505
Awareness – Business Loan	0.267	3.747
Saving - At Home in cash	0.577	1.734
Saving – ROSCAs	0.808	1.237
Saving – SHGs	0.768	1.302
Saving – In Kinds	0.761	1.314
Saving – Post Offices	0.665	1.503
Saving – NBFCs	0.599	1.670
Saving – Insurance Instruments	0.678	1.476
Saving – Mutual Funds	0.807	1.239
Saving – Others' Bank account	0.915	1.093
No saving because of no surplus generated	0.657	1.523
Saving in any other mode	0.856	1.168
Opinion on Service Standard	0.755	1.324
Opinion on Change of Attitude	0.778	1.285

7.3.3(vi) Credit from Private Institutions

Analysis shows that 13.69% of the respondents avails credit from Private Institutions. The regression analysis shows that Place of residence or earning livelihood, Education, Household size, Saving Modes adopted (such as At home in cash, SHGs, Insurance Instruments), Time required to reach the nearest bank branch and Perception about necessity of change of attitude of branch staff are significant in predicting a respondents' choice of availing credit from Private Institutions.

(a) The odds of availing loan from Private Institutes is highest in Nagaon, it is 32.37 times of that of Guwahati, which possesses the second highest odds.

(b) The odds of availing loan from Private Institutes increases with the decrease in education levels.

(c) Size of respondent's household and saving habits (such as saving in SHGs and Insurance Instruments) have mixed influence without any particular trend.

(d) Time required to reach the nearest bank branch from respondents' workplace negatively influence the odds of availing credit from private institutions.

(e) Perception regarding necessity of change of attitude of branch staff has mixed influence.

Table 7.30: Logistic Regression predicting unbanked urban adults availing loan from Private Institutions

Factor	*Category*	*Significance (p-value)*	*Odds Ratio (Exp B)*
Place	Tinsukia (Reference)	0.049	-
	Guwahati	0.015	376.537
	Nagaon	0.005	12189.349
	Silchar	0.290	16.454
	Dibrugarh	0.997	0.000
Education	Vocational/ Technical (Reference)	0.306	-
	Illiterate	0.015	76519.654
	Up to 4th standard	0.010	17765.196
	Secondary level	0.033	11527.164
	Undergraduate	0.068	422.647
	Graduate	0.169	125.774
	Post Graduate	0.704	0.087
Household Size	>10 (Reference)	0.011	-
	<3	0.030	0.003
	3-5	0.003	0.001
	6-10	0.008	0.002

Saving in SHGs	Mostly (Reference)	0.001	-
	Nil	0.000	0.003
	In between	0.001	0.003
Saving in Insurance Instruments	Mostly (Reference)	0.017	-
	Nil	0.002	0.000
	In between	0.009	0.001
Time required to reach the nearest bank branch from workplace	>30 mnts (Reference)	0.038	-
	NA	0.042	0.027
	<5 mnts	0.393	0.156
	5-15 mnts	0.056	0.020
	16-30 mnts	0.016	0.006
Change of attitude of branch staff is necessary for financial inclusion	Strongly Agree (Reference)	0.156	-
	Strongly Disagree	0.034	0.022
	Disagree	0.251	8.288
	Do not know	0.103	10.763
	Agree	0.144	5.006

Nagelkerke R^2= 0.697

All other variables mentioned in §7.3.3 and not included in the above table are found to be not significant.

Table 7.31: Collinearity Statistics for Dependent Variable 'Availing credit from Private Institutions'

Independent Variables	*Collinearity Statistics*	
	Tolerance	*VIF*
Past experience with bank on credit	0.871	1.148
Place	0.663	1.509
Gender	0.788	1.268
Education	0.621	1.611
Religion	0.951	1.051
Earnings per month	0.761	1.314
Residence occupancy type	0.839	1.192
House hold size	0.897	1.115
Position in the household	0.710	1.409
Time required to reach the nearest bank branch from residence	0.724	1.381
Time required to reach the nearest bank branch from workplace	0.849	1.178
Awareness – Credit Card	0.500	1.998
Awareness – Home Loan	0.155	6.446
Awareness – Car Loan	0.117	8.531
Awareness – Personal Loan	0.145	6.906
Awareness – Education Laon	0.222	4.505
Awareness – Business Loan	0.267	3.747
Saving - At Home in cash	0.577	1.734
Saving – ROSCAs	0.808	1.237

Saving – SHGs	0.768	1.302
Saving – In Kinds	0.761	1.314
Saving – Post Offices	0.665	1.503
Saving – NBFCs	0.599	1.670
Saving – Insurance Instruments	0.678	1.476
Saving – Mutual Funds	0.807	1.239
Saving – Others' Bank account	0.915	1.093
No saving because of no surplus generated	0.657	1.523
Saving in any other mode	0.856	1.168
Opinion on Service Standard	0.755	1.324
Opinion on Change of Attitude	0.778	1.285

7.3.3(vii) Credit from Public Institutions

Analysis shows that only 0.08% of the respondents availed credit from Public Institutions. To identify the factors having significant influence in predicting availing credit from this mode, a regression analysis was run with independent variables mentioned in §5.4. However, none of the factors is found to have significant influence in predicting respondents' choice of availing credit from Public Institutions.

7.3.3(viii) Summary

Table 7.32: Summary of analysis of factors affecting the choice of Source of Credit

Source of Credit	*Variables having significant effect on prediction of choice of Source of Credit**	*Remarks*
ROSCAs	✓ Place ✓ Earnings (Mixed) ✓ Saving in SHGs (+ve) NBFCs (+ve) Post offices (+ve) Other's account (-ve) ✓ Time required to reach the nearest bank branch from Residence(+ve) Workplace(+ve)	-Highest odd in Guwahti
NGOs/ SHGs	✓ Place ✓ Past experience with bank on credit ✓ Residence ownership type ✓ Education (Mixed) ✓ Earnings (Mixed) ✓ Saving in SHGs (+ve) NBFCs (+ve) ✓ Time required to reach the nearest bank branch from residence(Mixed)	-Highest odds in Guwahati -Respondents who had availed bank credit in past possess high odds -Odds of saving is high among respondents residing at rented accommodation
Employer	✓ Place ✓ Earnings (-ve) ✓ Position in the household ✓ Awareness about Credit cards(+ve) Home loan (+ve) Education loan (mixed) ✓ Saving At home in cash(+ve) ✓ Perception that banks service standards are uniform for all customers across economic status (+ve)	-Highest odds in Guwahati -'One of the earning members' possess higher odds than the 'only earners' -Respondents disagreeing to this, possess high odds

Money lenders	✓ Place ✓ Past experience with bank on credit ✓ Education (-ve) ✓ Earnings(mixed) ✓ Residence ownership type ✓ Position in the household ✓ Awareness Credit Card (+ve) Car Loan (+ve) Home Loan (+ve) ✓ Savings in SHGs (mixed) NBFCs(mixed) Insurance Instruments(mixed) No surplus to save(mixed) ✓ Time required to reach the nearest bank branch from residence (mixed)	-Highest odds in Silchar -Respondents who had availed bank credit in past possess high odds -respondents staying at their own residence and official accommodation possess lower odd -Only earners possess higher odds
Private Institutions	✓ Place ✓ Education (-ve) ✓ Household size (mixed) ✓ Saving in SHGs (mixed) Insurance Instruments (mixed) ✓ Time required to reach the nearest bank branch from workplace (-ve) ✓ Perception that change of attitude of bank staff in necessary (mixed)	-Highest odds in Nagaon
Public Institutions	✓ NIL	

*

'+ve' implies odds increases with the increase in the level of response towards the independent variable

'-ve' implies odds decreases with the increase in the level of response towards the independent variable

'Mixed' implies there is a mixed reaction of odds with the level of response towards the independent variable

7.4. TRANSACTIONS

One of the most important aspects of financial inclusion is to provide convenient transaction or remittance services to all. From the analysis we find that 69.2% of respondents feel the need of a bank account as it provides convenient transaction services. From the analysis of primary data it is found that in absence of bank accounts, the respondents adopt the following modes to transfer money to others -

- ✓ Visiting personally and delivering cash (t1)
- ✓ Take help of others to deliver cash (t2)
- ✓ Through commission agents (t3)
- ✓ Through Money Orders/ Demand Drafts (t4)
- ✓ Depositing cash in beneficiaries bank account (t5)
- ✓ Through other's bank account (t6)
- ✓ Any other mean than above (t7)

In the Figure 7.7, the mean scores of these adopted modes of transferring money have been plotted. It is observed that visiting personally to deliver cash is the most prominent mode of transferring money by respondents. As the urban marginal population is mostly of migratory nature and living in urban areas for earning livelihood leaving dependents in other semi-urban or rural areas, not having access to transaction banking, specially remittance service cause inconvenience to the respondents. The alternatives adopted by the respondents are costly and also mostly not safe.

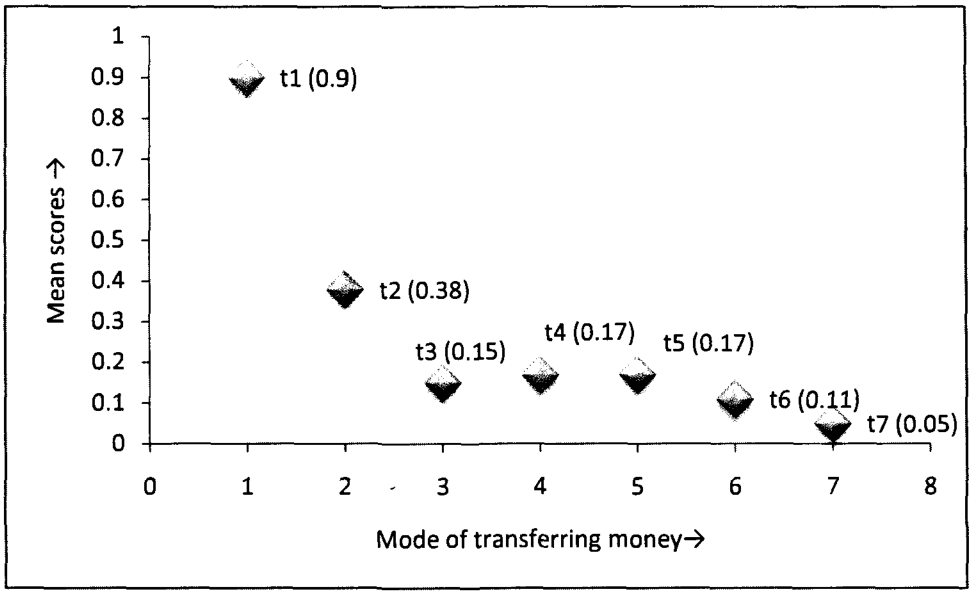

Figure 7.7: Mode of transferring money

7.5. FINDINGS :

From the above analysis of the data collected from the survey on usage of non-banking financial services, we find that -

7.5.1. In absence of bank account, saving at home in cash is the mostly adopted saving style.

7.5.2. Safety, convenience and returns have been ranked top by respondents among various other factors while deciding to opt for a particular saving mode.

7.5.3. The factors which have significant influence in predicting the choice of a particular saving instrument by the respondents are age, education, place, dwelling type, income, position in the household, perceived safety of deposits, awareness levels, perception that change of attitude of bank staff is necessary and time required to reach the nearest banking unit.

7.5.4. A meager portion of presently unbanked had applied for credit from bank and mostly got rejected due to lack of guarantor for the loan.

7.5.5. Family and friends have been the most prominent source of credit for the unbanked.

7.5.6. The factors which have significant influence in predicting the choice of a particular source of credit by the respondents are place, income, position in the household, various modes of savings adopted, awareness levels and prior experience with banks.

7.6. CONCLUSION :

In this chapter, habits as well as alternatives used for critical financial services viz., Saving, Credit and Transaction has been analysed using the primary data collected through a survey conducted among urban unbanked adults. Along with socio-economic factors, past experience with banks and perception about bankers are also taken into account in the analysis. With help of binary logistic regression analysis various factors are identified which have significant influence in predicting a respondent's usage of a particular saving mode or credit source. Further, it is attempted to measure the extent to which these factors influence the respondent's decisions. These findings may be used for designing appropriate products by banks to cater to various segments of presently unbanked population.

Chapter 8

Supply Side Survey

8. Supply Side Survey

8.1. INTRODUCTION :

The main player in the supply side of Financial Inclusion in India is the banking system. Bank branches are the focal points for urban financial inclusion. It is the bank branches which can take banking to the mass or alternatively may restrict it to the privileged lot. On advice/ instructions from RBI, banks have devised their policies for Financial Inclusion. However, success of such initiatives in true spirit largely depends on the performance of the bank branches. So, it is very important to know how these policies are being perceived by the branches and their observation on the issues of financial inclusion/ exclusion. In this back drop, it is attempted to study the perception of the bank Branch Managers (BM) as representative of branches of various banks located at the urban banking locations of the State.

8.2. THE SAMPLE :

The survey covers 100 branches of 30 banks operating in Assam. This consists of 75 branches of Public Sector Banks (PSBs) and 25 branches of Private Sector Banks (PVSB). Data is collected through a questionnaire designed especially for the purpose. The questionnaire is placed in Appendix II. It is attempted to collect data through 12 number of questions mostly dealing with perception of the respondents on various aspects of Financial Inclusion captured mostly on ordered response. The 13^{th} question is an open one asking the respondents' view on why bankable people go to informal providers of financial services. Tools adopted for analysis of the primary data collected through the sample survey has been discussed in Chapter 3 (refer §3.2.2)

Table 8.1: Components of respondents

Name of bank	*Number of branches covered by the survey in each location*					*Total*
PSB	*Dibrugarh*	*Guwahati*	*Nagaon*	*Silchar*	*Tinsukia*	
Assam Co-operative Apex Bank Ltd.	-	1	1	-	-	2
Assam Gramin Vikash Bank	-	-	1	1	1	3
Allahabad Bank	1	2	1	1	-	5
Bank of Baroda	1	3	-	-	-	4
Bank of India	-	2	-	-	-	2
Bank of Maharashtra	-	1	-	-	-	1
Canara Bank	1	4	-	1	1	7
Central Bank of India	-	4	3	-	-	7
Dena Bank	-	1	-	-	-	1
IDBI Bank Ltd.	-	1	-	1	-	2
Indian Bank	-	1	-	-	-	1
Indian Overseas Bank	-	1	-	-	-	1
Oriental Bank of Commerce	-	3	-	-	-	3
Punjab and Sind Bank	-	-	-	1	-	1
Punjab National Bank	-	3	-	1	1	5
State Bank of India	-	5	1	2	-	8
Syndicate Bank	-	1	-	-	-	1
United Bank of India	1	5	1	1	-	8
Union Bank	1	5	-	1	-	7
UCO Bank	-	1	-	-	1	2
Vijaya Bank	-	4	-	-	-	4
Sub- total (PSB)	*5*	*48*	*8*	*10*	*4*	*75*
PVSB						
Axis Bank Ltd.	1	2	-	1	1	5
Bank of Rajasthan	-	1	-	-	-	1
Federal Bank	-	1	-	1	1	3
HDFC Bank Ltd.	1	2	-	1	1	5
ICICI Bank Ltd.	1	1	1	1	-	4
IndusInd Bank	-	1	-	1	1	3
Karnataka Bank Ltd.	-	2	-	-	-	2
Kotak Mahindra Bank	-	1	-	-	-	1
Standard Chartered Bank	-	1	-	-	-	1
Sub- total (Pvt. Banks)	*3*	*12*	*1*	*5*	*4*	*25*
Grand Total	**8**	**60**	**9**	**15**	**8**	**100**

Information on various aspects of Financial Inclusion collected from this survey have been analysed and placed in the subsequent sections below -

8.3. ASSIGNMENT OF TARGETS FOR FINANCIAL INCLUSION

Only opening of basic banking accounts or no-frill accounts have been assigned as targets to the urban branches surveyed. 76% of the Bank managers of urban bank branches surveyed in the state have been assigned targets to open no-frill accounts. Out of PSB respondents, 77.3% have been assigned a target where as 22.7% are not having any such target. Among PVSB respondents, it is found that 72% have been assigned target and 28% of them are not having any such target. It is seen that there is no significant difference in assigning targets under Financial Inclusion across bank ownership.

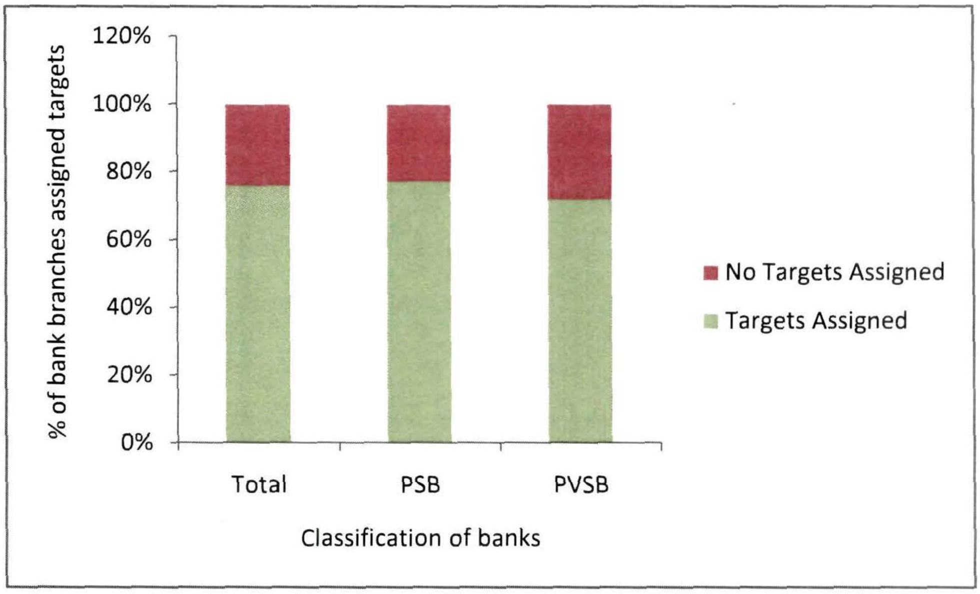

Figure 8.1 : Assignment of targets for Financial Inclusion

8.4. REASONS OF REMAINING UNBANKED

Branch managers' opinion on the reasons of remaining unbanked of the underprivileged is obtained in respect of following five factors

i) Lack of KYC documents

ii) Poor economic condition

iii) Ignorance

iv) Unwillingness

v) Unsuitable products and services offered by banks

The respondents were requested to rank each factor in terms of its perceived importance in a scale of 1-5, 1 for the most important and 5 for the least important. However, many respondents have given the same rank to more than one factor.

8.4.1. Lack of KYC documents

Majority of respondents (49%) have placed 'Lack of KYC documents' in the first rank. According to 52% respondents from PSB and 40% of PVSB, this has been the most important factor hindering banking inclusion.

However, there has been wide disparity on the responses from various locations which is found to be significant (p=0.000 in Kruskal-Wallis Test at df 4). For examples, it has been ranked first in Nagaon (with mean score of 1.56) and Silchar (with mean score of 1). Contrary to this, majority respondents (50%) in Tinsukia, feel that it is the least important factor, so ranked it in fourth position (with mean score of 1.56).

8.4.2. Poor economic condition

This has been ranked in the second position by majority of respondents (32%). In both categories of respondents i.e., from PSB (29.3%) and PVSB (40%), most respondents have ranked it in second position in terms of importance.

Perception of respondents towards this factor varies significantly among locations (p=0.000 in Kruskal-Wallis Test at df 4). In Silchar, 46.7% of respondents ranked 'Poor economic condition' in second position with mean score of 1.47. Contrary to this, in Tinsukia, it is ranked as the least important factor with mean score of 2.33.

8.4.3. Ignorance

40% of the PSB respondents and 36% of PVSB respondents have ranked it in second position. There has been disparity among the responses from different locations, however, the same is not found to be statistically significant.

8.4.4. Unwillingness

It has been perceived as the least important factor by majority of respondents (31%). Among the PSB respondents, it has been ranked equally (30.77%) in third and forth positions. Majority respondents of PVSB (32%) have ranked it in forth position.

There is wide difference between ranks assigned to this factor among responses received in different locations. This difference is found to be significant (p=0.001 in Kruskal-Wallis Test at df 4).

8.4.5. Unsuitable products and services offered by banks

Like 'Unwillingness', most of the respondents (49%) have ranked this factor as the least important in terms of its influence on a person remaining unbanked. Same response was observed across PSB (52%) and PVSB (40%).

Majority respondents from Guwahati(49.2%), Nagaon (44.4%) and Silchar (100%) have placed it in fourth rank. The disparity among responses from different locations has been significant (p=0.008 in Kruskal-Wallis Test at df 4).

Although it was aimed to collect the relative ranks of the above factors as perceived by the respondents, as mentioned earlier, many respondents preferred to give same rank to more than one factor. So, by calculating only frequency, it might lead to distorted results. To eliminate this, mean of the scores have been calculated and ranks has been given as per the mean score. The reasons of being unbanked are ranked as below based on mean score –

- ✓ Rank 1 Ignorance about banking services
- ✓ Rank 2 Lack of KYC Documents
- ✓ Rank 3 Poor economic condition
- ✓ Rank 4 Unwillingness
- ✓ Rank 5 Unsuitability of bank's products and services

The Table 8.2 summarises the findings of ranking of reasons of being unbanked in various locations

Table 8.2 : Summary of findings : Ranking of reasons of remaining unbanked $

Reasons of remaining unbanked	*Total*		*Dibrugarh*		*Guwahati*		*Nagaon*		*Silchar*		*Tinsukia*	
	R	*MS*	*R*	*MS*	*R*	*MS*	*R*	*MS*	*R*	*MS*	*R*	*MS*
Ignorance	1	1.89	2	1.57	1	3.29	2	1.78	3	2.53	2	1.33
Lack of KYC Documents	1	1.89	4	2.57	2	3.47	1	1.56	1	1	4	2.33
Poor Economic Condition	2	2.28	5	3.14	3	3.86	3	2.00	2	1.47	4	2.33
Unsuitable products and services of banks	3	2.53	3	2.43	5	5.38	4	2.56	5	4.00	1	1.17
Unwillingness	4	2.65	1	1.43	4	4.33	4	2.56	4	2.67	3	2

$ R-Rank, MS-Mean Score

8.5. PERCEPTION ABOUT CRITICAL ASPECTS OF INCLUSION

To have insight on the perception, the BMs were asked to rank the following seven statements on a five-point scale from 'Highly Disagree' (-2 score) to 'Highly Agree' (+2 score).

- **Perception 1.** 'No-frill account' is a cost proposition for banks (P1)
- **Perception 2.** Although 'No-frill accounts' are aimed for the underprivileged, there is lack of awareness among them about such services of banks (P2)
- **Perception 3.** It is difficult to motivate your staff for opening of 'No-frill accounts' as there is barely any recognition or reward for this activity (P3)
- **Perception 4.** Your town does not have adequate banking infrastructure to cater to all class of customers (P4)
- **Perception 5.** Financial inclusion initiatives by regulator/ Governments/ banks are not getting proper importance in urban areas in comparison to rural areas (P5)
- **Perception 6.** Products and services of banks do not suitably cater to the needs of the underprivileged (P6)
- **Perception 7.** The underprivileged avoid coming to the bank due to their perception that bank staff will not welcome them (P7)

8.5.1. No-frill account is a cost proposition (P1)

Banks welcome the no-frill accounts. However, it is difficult to incur more expense for marketing of such accounts as it is a cost proposition as per majority of BMs (52.5%) of urban areas of the state. 53.3% of PSB respondents and 50% of PVSB respondents also consider it as a cost proposition.

Among the bank branches who have been assigned targets for opening no-frill accounts, a majority (59.2%) feel that it is a cost proposition. Further, 43.4% of respondents who do not have any such target also feel that it is a cost proposition against 34.8% of the same group disagreeing to it.

There is a wide variation in the opinion among various locations in this phenomenon. The difference is found to be significant (p=0.000 in Kruskal-Wallis Test at df 4). Between locations, only in Guwahati majority of respondents (50%) disagrees that it is a cost proposition and only 36.2% agrees to it. 13.8% are neutral about this phenomenon.

"Banks welcome no-frill accounts but it is difficult for banks to incur more expenses for its marketing as it is a cost proposition" Responses to this statement is summarized below –

	Strongly Disagree	*Disagree*	*Don't know*	*Agree*	*Strongly Agree*
Dibrugarh	22.2%	22.2%	0%	55.6%	0%
Guwahati	6.9%	43.1%	13.8%	34.5%	1.7%
Nagaon	0%	22.2%	0%	66.7%	11.1%
Silchar	0%	0%	0%	100%	0%
Tinsukia	0%	12.5%	0%	75%	12.5%
Total	*6.1%*	*30.3%*	*8.1%*	*52.5%*	*3%*

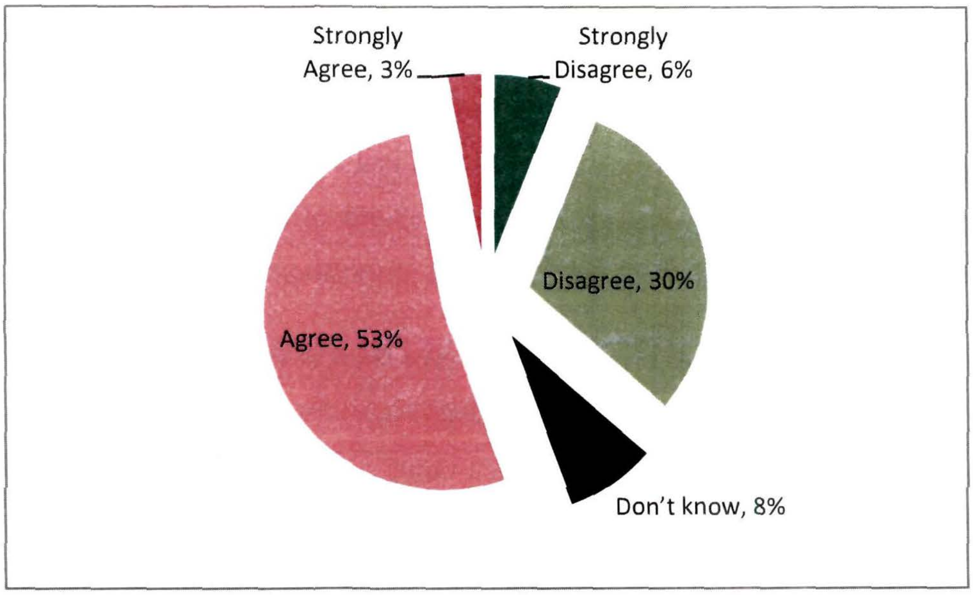

Figure 8.2: No frill account is a cost proposition

8.5.2. Awareness among underprivileged groups (P2)

No Frill Accounts/ Basic Banking Accounts/ Sabka Accounts are intended for the underprivileged groups which ensure opening of account with minimum KYC requirements and a very less or nil account balance requirement. However, 89% of the Bank Managers surveyed agrees that there is lack of awareness among people from the underprivileged groups about these services of banks. This finding is in consistent with the finding of the demand side analysis of primary data collected at the same locations. It was found that 90% of the unbanked adults in those locations are not aware about no-frill accounts. 86% of the PSB respondents and 96% of PVSB respondents feel that there is lack of awareness. Across all locations same opinion was received.

"There is lack of awareness among people from the underprivileged groups about these services of banks." Responses to this statement is summarized below -

	Strongly Disagree	*Disagree*	*Don't know*	*Agree*	*Strongly Agree*
Dibrugarh	0%	0%	0%	88.9%	11.1%
Guwahati	0%	6.8%	8.5%	81.4%	3.4%
Nagaon	0%	11.1%	11.1%	66.7%	11.1%
Silchar	0%	0%	0%	100%	0%
Tinsukia	0%	0%	0%	100%	0%
Total	*0%*	*5%*	*6%*	*85%*	*4%*

Total response on the statement is presented graphically in the pie-diagram placed in Figure 8.3 below.

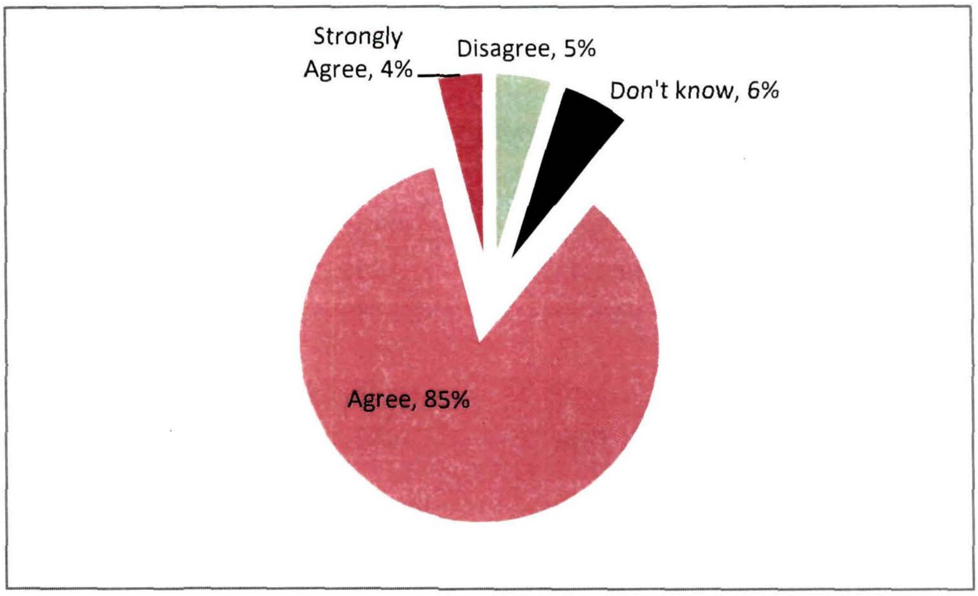

Figure 8.3: There is widespread unawareness among underprivileged about No-frill accounts

8.5.3. Motivating the staff (P3)

Majority of the BMs (78%) do not feel that there is any difficulty in motivating their staff for opening of no frill accounts. However, 13% of the respondents agree that it becomes difficult for them to motivate their staff as there is barely any recognition or reward for opening no-frill accounts.

Contrary to the general perception, there is no significant difference on the responses to this parameter between PSB and PVSB. On the other hand, significant difference has been observed between responses received in various locations (p=0.008 in Kruskal-Wallis Test at df 4).

"It is difficult for you to motivate your staff for opening of no-frill accounts as there is barely any recognition or reward for this activity" Responses to this statement is summarized below -

	Strongly Disagree	*Disagree*	*Don't know*	*Agree*	*Strongly Agree*
Dibrugarh	33.3%	55.6%	0%	11.1%	0%
Guwahati	15.3%	64.4%	10.2%	10.2%	0%
Nagaon	11.1%	44.4%	22.2%	22.2%	0%
Silchar	46.7%	53.3%	0%	0%	0%
Tinsukia	25%	12.5%	12.5%	37.5%	12.5%
Total	*22%*	*56%*	*9%*	*12%*	*1%*

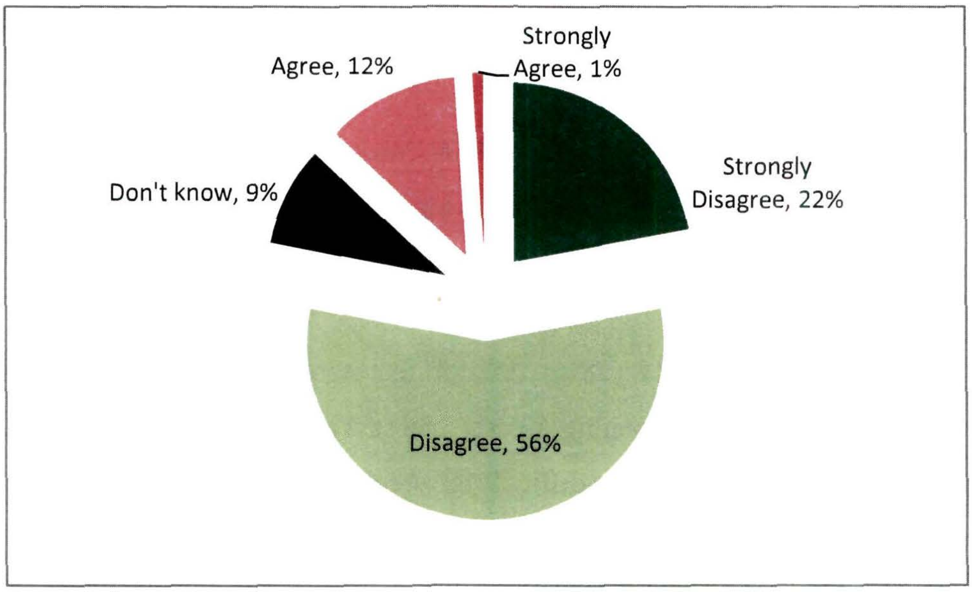

Figure 8.4: Difficulty in motivating the branch staff for financial inclusion

8.5.4. Inadequate Banking Infrastructure (P4)

Majority of the respondents (94%) feel that there is adequate banking infrastructure available at their respective locations to cater to all types of customers. There is locational disparity observed in the responses. However, this difference is not statistically significant (p=0.159 in Kruskal-Wallis Test at df 4).

Further, PSB and PVSB banks have shown difference in perception. 100% of the respondents from PVSBs feel that infrastructure is adequate whereas 92% of

PSB feel the same. However, this difference is not statistically significant (p=0.273 in Kruskal-Wallis Test at df 1).

Inadequacy of banking infrastructure in the town to cater to all class of customers

	Strongly Disagree	*Disagree*	*Don't know*	*Agree*	*Strongly Agree*
Dibrugarh	0%	88.9%	0%	0%	11.1%
Guwahati	33.9%	57.6%	0%	8.5%	0%
Nagaon	33.3%	66.7%	0%	0%	0%
Silchar	6.7%	93.3%	0%	0%	0%
Tinsukia	37.5%	62.5%	0%	0%	0%
Total	*27%*	*67%*	*0%*	*5%*	*1%*

A pictorial presentation of the above responses about availability of adequate banking infrastructure is in Figure 8.5 below

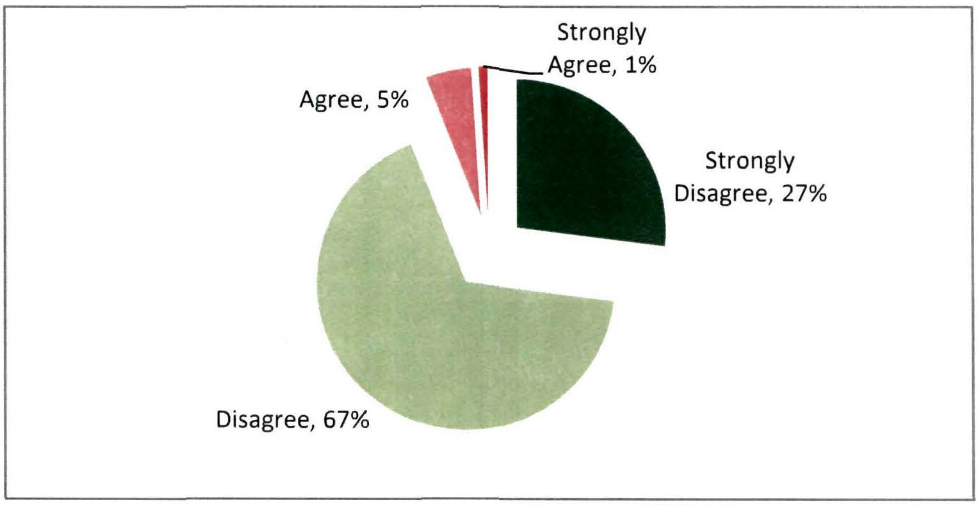

Figure 8.5: Inadequate availability of banking infrastructure

8.5.5. Importance given in urban areas under Financial Inclusion drive (P5)

There is a general feeling that 'Financial Inclusion' drive by regulators, Governments and banks is not getting proper importance in urban areas in comparison to rural areas. The study tried to gather opinion about it from the respondents. It was found that majority (63%) of the respondents do not subscribe to the idea that urban areas are not getting proper importance. 64% of PSB respondents and 60% of PVSB respondents have expressed the same feeling. There has been significant difference (p=0.008 in Kruskal-Wallis Test at df 4) between responses received in different locations. For example, in Tinsukia 62.5% feel that it is not getting proper importance compared to rural areas and in Silchar 100% of respondents feel that the importance it is receiving is proper.

"Financial Inclusion drive is not getting proper importance in urban areas in comparison to rural areas". Opinions of respondents are shown in percentage terms below

	Strongly Disagree	*Disagree*	*Don't know*	*Agree*	*Strongly Agree*
Dibrugarh	11.1%	44.4%	22.2%	22.2%	0%
Guwahati	3.4%	54.2%	15.3%	25.4%	1.7%
Nagaon	0%	77.8%	11.1%	0%	11.1%
Silchar	0%	100%	0%	0%	0%
Tinsukia	0%	25%	12.5%	50%	12.5%
Total	*3%*	*60%*	*13%*	*21%*	*3%*

Pictorial presentation of response to the above statement by the sample population is presented in the Figure 8.6.

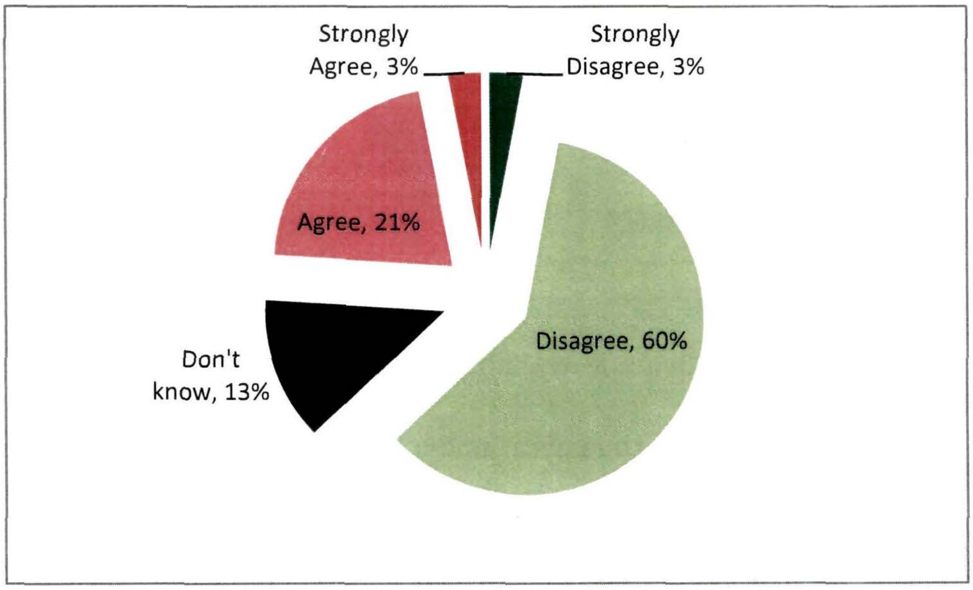

Figure 8.6 : There is inadequate importance for financial inclusion in urban areas

8.5.6. Unsuitability of products and services (P6)

76% of the BMs feel that the products and services offered by banks suitably cater to the needs of the underprivileged. 78.7% of PSB respondents and 68% of the PVSB respondents expressed the same view.

There is significant difference (p=0.003 in Kruskal-Wallis Test at df 4) between responses to this parameter received in various locations. Among PSB respondents, in Guwahati 23.4% and in Dibrugarh 16.7% respondents feel that the products and services offered by banks are unable to cater suitably the needs of the underprivileged. Among PVSB respondents, in Guwahati 25% and in Tinsukia 75% also expressed the same view.

"Products and Services of banks do not suitably cater to the needs of the underprivileged." Responses to this statement by bank managers in the surveyed location is summarized below –

	Strongly Disagree	*Disagree*	*Don't know*	*Agree*	*Strongly Agree*
Dibrugarh	22.2%	55.6%	11.1%	11.1%	0%
Guwahati	6.8%	66.1%	3.4%	23.7%	0%
Nagaon	11.1%	66.7%	22.2%	0%	0%
Silchar	40%	60%	0%	0%	0%
Tinsukia	0%	50%	12.5%	37.5%	0%
Total	*13%*	*63%*	*6%*	*18%*	*0%*

The total response has been presented graphically in Figure 8.7.

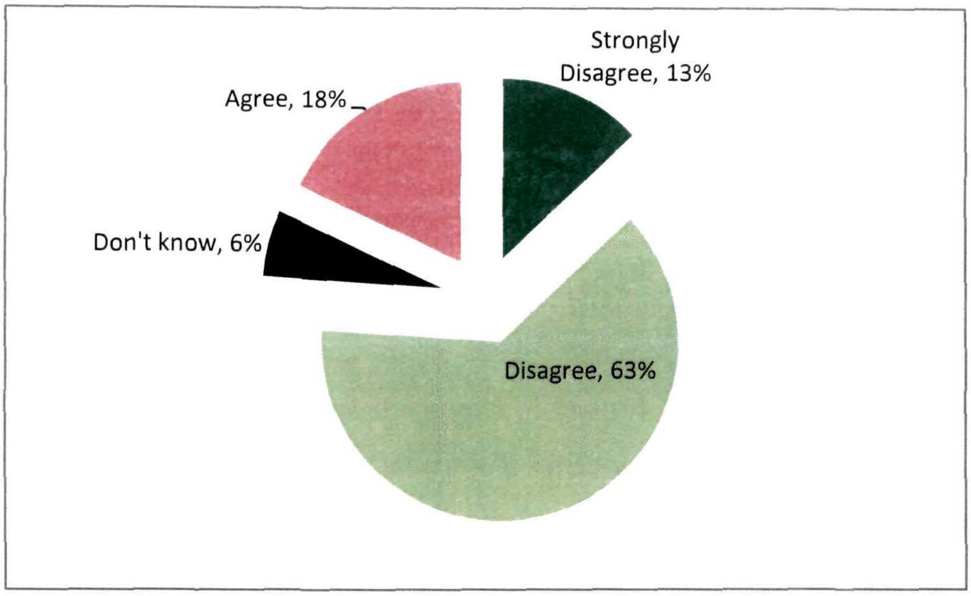

Figure 8.7 : Unsuitability of products and services of banks

8.5.7. Perception about branch staff's behavior (P7)

There is a general feeling that the underprivileged avoid coming to the bank due to their perception that the branch staff are not welcoming them. However, it is observed that 74% of the respondents disagree to it and 18% of the respondents agree to this. 77.4% and 64% respondents from PSB and PVSB respectively disagree to it.

"The underprivileged avoid coming to the banks due to their perception that bank staff are not welcoming them." Responses to this statement is summarized below -

	Strongly Disagree	*Disagree*	*Don't know*	*Agree*	*Strongly Agree*
Dibrugarh	44.4%	0%	11.1%	44.4%	0%
Guwahati	23.7%	54.2%	8.5%	10.2%	3.4%
Nagaon	11.1%	33.3%	33.3%	22.2%	0%
Silchar	0%	100%	0%	0%	0%
Tinsukia	0%	62.5%	25%	12.5%	0%
Total	*19%*	*55%*	*11%*	*13%*	*2%*

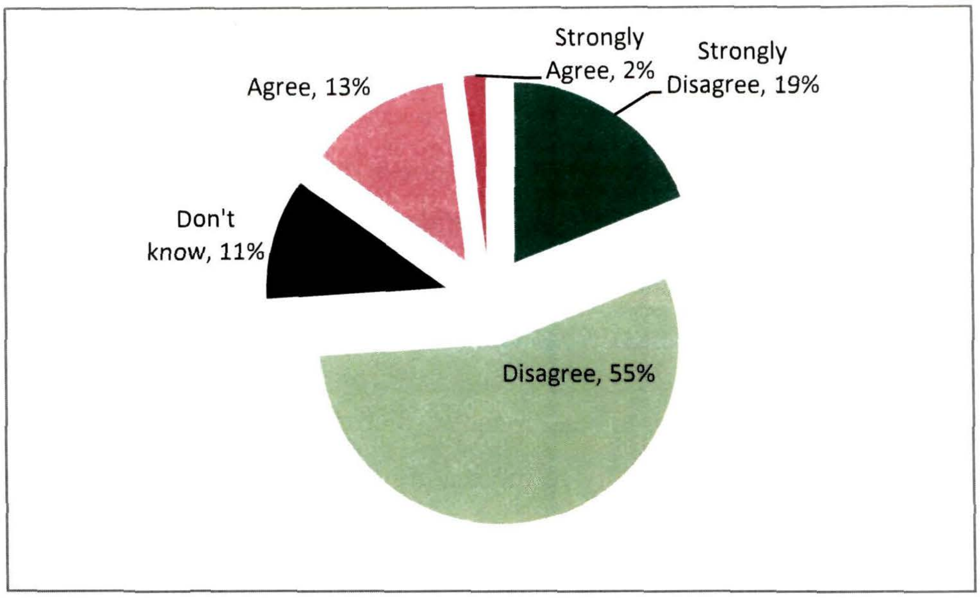

Figure 8.8 : Unwelcoming approach of branch staff towards underprivileged

It may be noted here that each of the above seven statements indicates a situation which is adverse to financial inclusion. Therefore, a positive mean score in perception of any of these statements is an indication towards a limitation of financial inclusion.

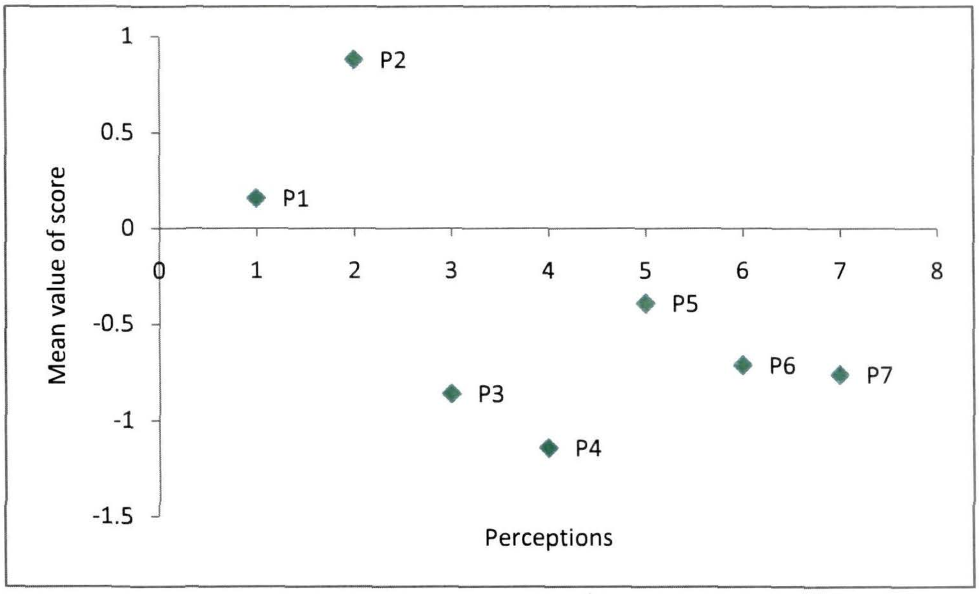

Figure 8.9 : Mean Score of Perception

From Figure 8.9, it is observed that the BMs agrees that 'No frill accounts' are actually 'Cost Proposition' (P1) depicting an adverse situation for Financial Inclusion. It is crucial to observe that a majority (59.2%) of the BMs who have been assigned targets for opening no-frill accounts, also consider that it is a cost proposition.

Likewise, another adverse situation has been depicted from analysis of result for perception P2 is observed. 89% of the BMs surveyed agree that there is lack of awareness among people from the underprivileged groups about these services of banks.

Analysis of perception about P3 shows that majority of the BMs (78%) do not feel that there is any difficulty in motivating their staff for opening of no frill accounts. However, 13% of the BMs agree that it becomes difficult for them to motivate their staff as there is barely any reward or recognition for opening no-frill accounts. Further, 74% of the BMs disagree to P7 and only 15% of them agree that the marginal sections may avoid coming to the bank due to the perception that the branch staff might not welcome them. Although no difficulty is perceived for motivating the branch staff, 82% of BMs feel that there is necessity to change the attitude of the branch staff to make the financial inclusion effective. These contradictory findings establish that there is some motivation or focus lacking on the part of the branch staff which needs to be addressed to make the initiatives of financial inclusion effective.

P5 is disagreed by 94% of BMs (including 27% strongly disagreeing) So, it may be concluded that infrastructure is not a bottleneck for inclusion in urban areas of the state.

P6 is disagreed by 76% of BMs (including 13% strongly disagreeing) as they perceive that the products and services offered by banks suitably cater to the needs to the underprivileged. However, due to lack of awareness about such products and services, the marginal sections are unable to derive benefits of such services of banks.

8.6. AWARENESS AMONG BRANCH STAFF

To make Financial Inclusion effective, awareness among the branch staff is very important. 95% of the BMs surveyed believe that their staffs are adequately aware about no-frill accounts, the main device used for financial inclusion presently.

Among various locations, Dibrugarh records lowest favourable response in terms of this parameter (88.9%), followed by Guwahati (93.2%). Other locations record 100% in terms of awareness among the branch staff.

Even though there is variation in terms of responses on this parameter between types of banks, locations, target assignments, these variations are not found to be significant in Kruskal-Wallis Test.

Summary of responses of the branch managers is presented in Table 8.3.

Table 8.3: Awareness among the branch staff

Type of bank	*Whether the branch staffs are adequately aware of*	*Locations*					*Total*
		Dibrugarh	*Guwahati*	*Nagaon*	*Silchar*	*Tinsukia*	
PSB	Yes	83.3%	91.5%	100%	100%	100%	93.3%
	No	16.7%	6.4%	0%	0%	0%	5.3%
	Do not know	0%	2.1%	0%	0%	0%	1.3%
PVSB	Yes	100%	100%	100%	100%	100%	100%

8.7. EQUALITY OF SERVICE STANDARD (P8)

According to 77.5% of respondents, banks offer same standard of service across economic classes of customers. However, wide difference in opinion in this regard is observed among PSB and PVSB respondents. 85% of PSB respondents and 56% of PVSB respondents subscribe to the statement that same standard of service is offered to all class of customers. A large portion of PVSB respondents (44%) is of the opinion that the service standard varies with the economic class of customers. This difference in opinion is found to be significant (p=0.020 in Kruskal-Wallis Test at df 1).

In all locations majority of respondents have agreed that the equality of service standard is maintained. In Silchar, cent percent respondents agree to it. However, in other locations some respondents disagrees to it (varies from 21.1% to 37.5%). This variation is not found to be statistically significant.

"Banks offer the same standard of service to all customers, be it rich or poor."
Responses to this statement is summarized below -

	Strongly Disagree	*Disagree*	*Don't know*	*Agree*	*Strongly Agree*
Dibrugarh	0%	33.3%	0%	22.2%	44.4%
Guwahati	0%	21.1%	1.8%	52.6%	24.6%
Nagaon	0%	33.3%	0%	44.4%	22.2%
Silchar	0%	0%	0%	66.7%	33.3%
Tinsukia	0%	37.5%	0%	50%	12.5%
Total	*0%*	*21.4%*	*1%*	*51%*	*26.5%*

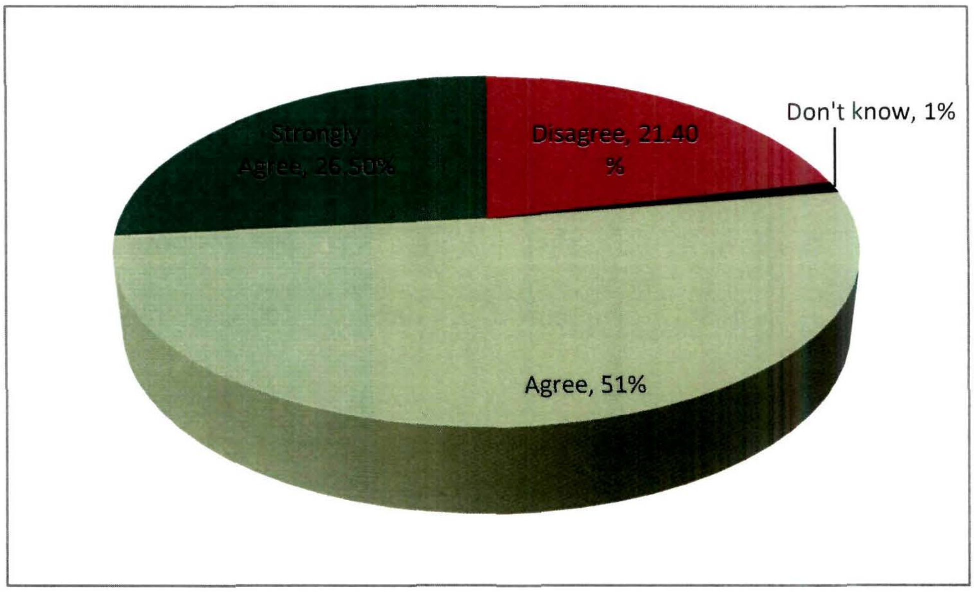

Figure 8.10 : Equality of service standard of banks

8.8. Necessity of change of attitude of branch staff (P9)

82% of the respondents feel that change in the attitude of the bank staff is very important to include more and more people from the underprivileged sections of the society into the banking fold. 80% of PSB respondents and 88% of the PVSB respondents agrees to it. Majority respondents across all locations agree that to make

Financial Inclusion measures effective, change in the attitude of the branch staff is necessary.

"Change of attitude of bank staff is very important to include more and more people from the marginal section of society into the banking fold." Responses to this statement is summarized below -

	Strongly Disagree	*Disagree*	*Don't know*	*Agree*	*Strongly Agree*
Dibrugarh	11.1%	0%	0%	66.7%	22.2%
Guwahati	3.4%	16.9%	3.4%	66.1%	10.2%
Nagaon	0%	11.1%	0%	55.6%	33.3%
Silchar	0%	0%	0%	100%	0%
Tinsukia	0%	25%	0%	75%	0%
Total	*3%*	*13%*	*2%*	*71%*	*11%*

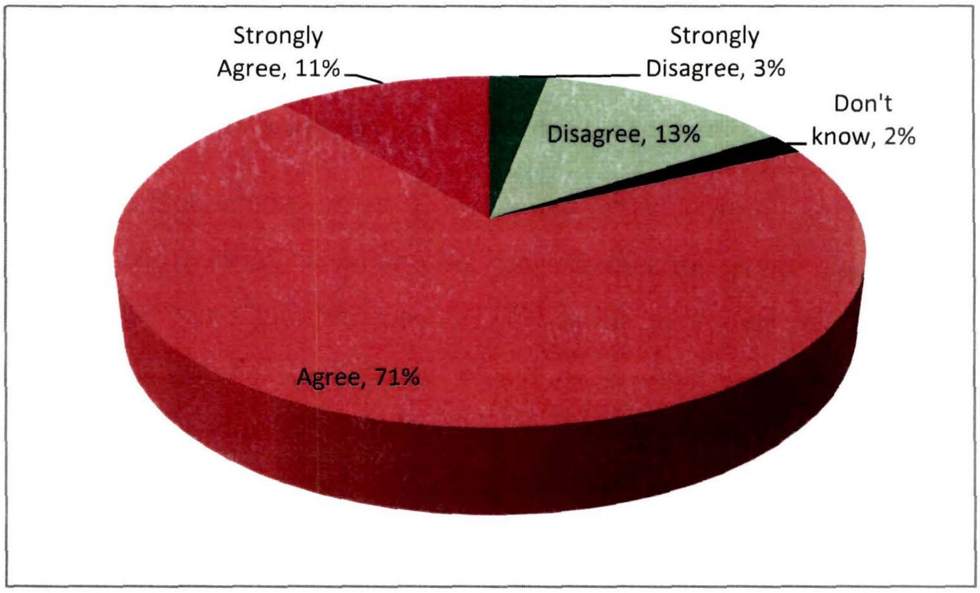

Figure 8.11: Necessary to change the attitude of bank staff

8.9. Reasons for bankable people preferring informal providers

In view of BMs perceiving that there is adequate banking infrastructure, suitable products and services, Government policies and well informed and motivated staff to make financial inclusion effective, the next question comes is "Why so many bankable people prefer going to informal providers than a bank branch?" Branch Managers have been requested to put forward their view point in this regard. Various reasons identified by the BMs are presented in Figure 8.12.

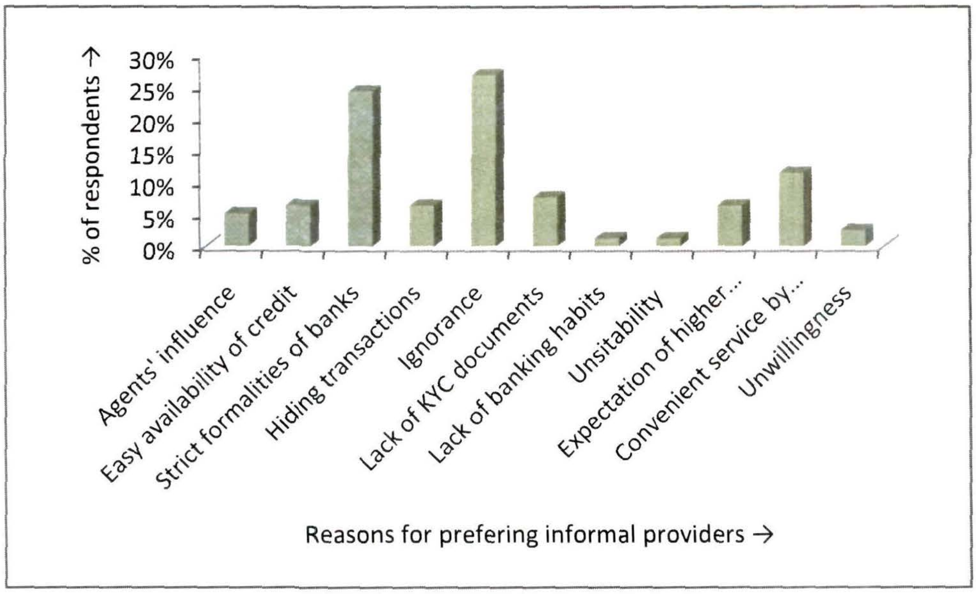

Figure 8.12: Reasons for bankable people preferring informal providers

According to respondents 'Ignorance' is the most dominant reason for many bankable people opting for informal service providers. Further, people who think formalities of the banks are strict, KYC documents might not be available and products and services of banks might not be suitable for them may also be termed as ignorant about the services of bank specially about 'No-frills account'. If clubbed together, it accumulates to a sizable 60.26% of respondents pointing any of these reasons as the main reason for opting for informal financial services.

11.54% of respondents feel that it is due to 'convenient service provided by informal providers'. It can also be termed as flexible services to suit the requirement of the clients such as delivery modes, frequency of deposit or repayments, door step services etc. Though such services are also available in banks, however, most of them are limited to very affluent customers and not to the marginalized sections.

The informal service providers lure the ignorant customers with abnormally 'high returns' on their deposits. As per 6.41% of respondents, many bankable people opt for informal providers on expectation of such high rate of return.

Further, informal sources provide 'credit in easier terms' than banks, which also attracts many bankable people to avail credit from such sources as per 6.41% respondents. Though these credits are offered at very high cost, most of the customers are ignorant about it.

Many 'bankable' and 'banked' people also route some transactions through informal providers to hide such transactions from the eye of statutory authorities. Such transactions are mostly related to undeclared or illegal source of income.

According to 5.13% of respondents, the 'agents' also play a vital role in leading the bankable people to the informal providers. The agents mostly belong to the same locality or community and provide doorstep services at convenient time of the customers.

Unwillingness, Lack of Banking Habits and Unsuitable products and services are also identified by a small portion of respondents as reasons for bankable people opting for services by informal providers.

8.10. Findings

Significant findings from the survey among the BMs of banks located at urban centres of Assam are as below -

a) Banking infrastructure is not perceived as a bottleneck for urban financial inclusion.

b) Among the reasons of being unbanked, the respondents have ranked in the following manner (1 being the most important reason and so on) –

- ✓ Rank 1 Ignorance about banking services
- ✓ Rank 2 Lack of KYC Documents
- ✓ Rank 3 Poor economic condition
- ✓ Rank 4 Unwillingness
- ✓ Rank 5 Unsuitability of bank's products and services

c) Majority of the BMs perceive that proper importance for Financial Inclusion has been given by regulators, banks and Governments in urban areas also. Most of the branches have been given targets of opening 'No-frill accounts' as a measure to improve financial inclusion. However, most of the branch managers feel that the targeted group is unaware about this account.

d) Most of the BMs welcome 'No-frill accounts'. However, they are of the opinion that it is difficult to incur expenses for marketing of such products as they consider it as a costly proposition.

e) Although there is no reward or recognition for the branch staff for opening 'No-frill accounts', majority of BMs do not see much difficulty in motivating them for such activities. The branch staff ensures same standard of service to all customers across economic class as per most of the respondents.

f) Although majority of respondents do not subscribe to the fact that the underprivileged avoid coming to banks as there is perceived impression of not welcomed by the branch staff, majority of the respondents agree to the fact that it is necessary for the bank staff to change their attitude to make Financial Inclusion effective.

g) Considering No-frill accounts as cost proposition and lack of awareness among the underprivileged are found to be main limiting factors for financial inclusion.

h) Bankers perceive the factors such as Ignorance, Strict formalities of banks, Convenient service by informal providers, Lack of KYC Documents to be responsible for many bankable people to go to informal providers. It is followed by Expectation of higher returns, Easy availability of credit, Hiding transactions from statutory authorities and agents influence. A little number of BMs feel that many bankable people go to informal provider as they are unwilling to avail banking services, they lack banking habits and find products and services of banks to be unsuitable.

8.11. CONCLUSION

As banks are the main driver of the supply side of Financial Inclusion, bank branches are the focal points. To understand the perception of BMs on critical issues of Financial Issues, the survey is undertaken. Findings of the survey may be used to design a road map to change the outlook of the bankers in making banking available to everyone.

Chapter 9

Conclusion

9. Conclusion

9.1. CONCLUSION

From the findings of the study discussed in Chapter 5, 6, 7 and 8, following conclusions can be derived.

9.1.1. Non- inclusive Growth:

The growth in the banking system has not been inclusive over the years. It is true for Assam and India as a whole and also for urban areas.

9.1.2. State lags behind:

During the entire period of study, the level of Financial Inclusion in the State could never match the level of national achievement (as described in Chapter 5).

The overall level of inclusion in the State during the entire period of study is found 'low' whereas for India, it is 'medium' during 1991-2005 and 'high' since 2006. The overall level of achievement in Financial Inclusion in Urban Assam has been 'medium' since 2008 where as for Urban India it is 'high' since 2006.

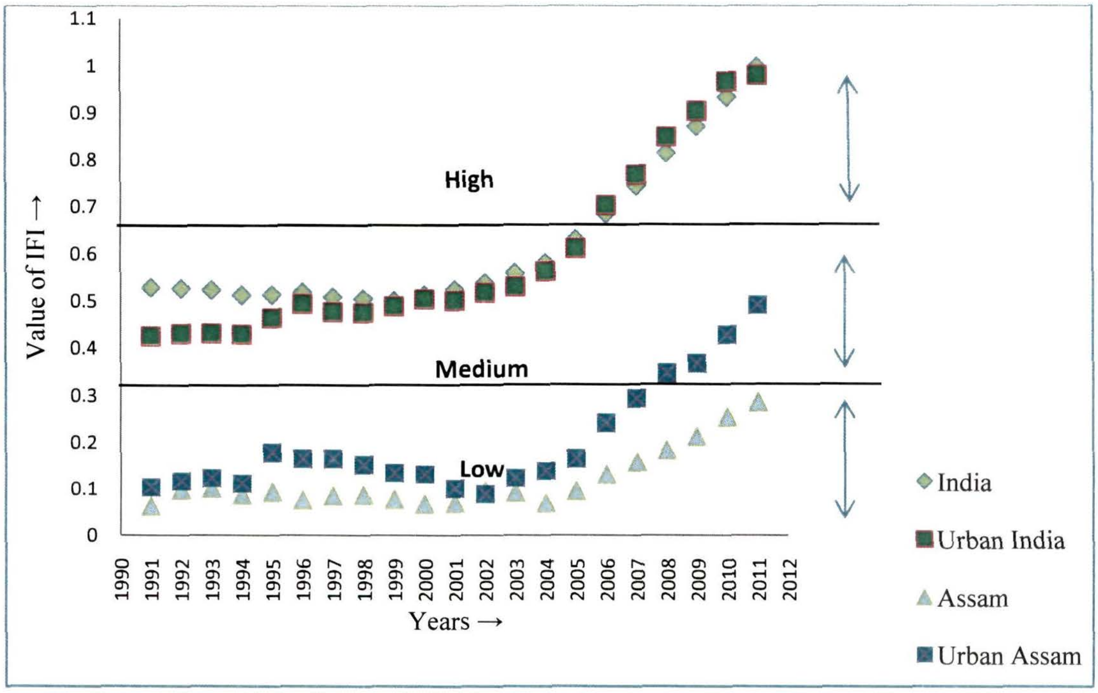

Figure 9.1 : Level of Financial Inclusion

9.1.3. Banking Infrastructure :

Banking infrastructure is not a bottleneck for Financial Inclusion in urban areas of the State.

9.1.4. Awareness :

a) Awareness about banking services is very low.

b) Awareness about 'no frills account' – the main device for combating Financial Exclusion is very low among the people for whom this account is intended. The banking community is adequately aware about it but the information is not getting transmitted.

9.1.5. Involuntary Exclusion:

The problem of exclusion is involuntary in nature as majority of respondent unbanked urban adults feel the necessity of having a bank account for various economic reasons. Having a bank account is not perceived as a tool for improving social status.

9.1.6. Gap between the Unbaked and the Banks

a) Both the banks and the unbanked population lag behind approaching each other.

b) Along with various socio-economic factors, past experience with banks and perception about bankers also found to be influential in excluded people's financial decisions. There is very wide variation in perception between the bankers and the unbanked. It is evident from analysis and comparison of perception of bankers and unbanked on following common issues -

- ✓ **Perception I**. Banks do not offer the same standard of service to rich and poor (PI)
- ✓ **Perception II**. Change in the attitude of bank staff is very important to make baking more inclusive (PII)

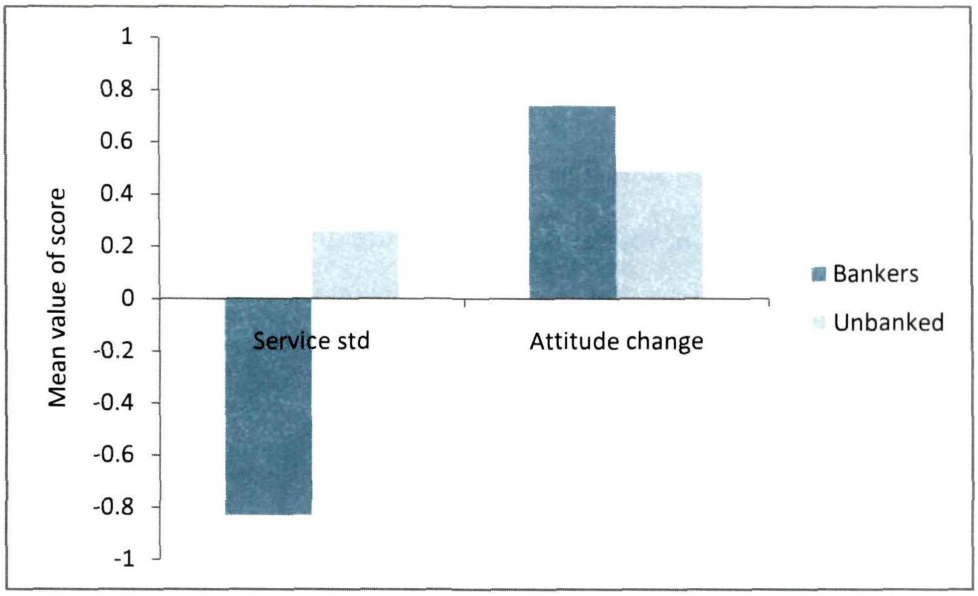

Figure 9.2: Comparison of perception between BMs and Unbanked Adults

Figure 9.2 shows that though bankers mostly disagree to PI, the unbanked people perceive that standard of services do vary between the rich and poor customers. This gap in perception needs attention of the bankers to act.

Interestingly, compared to the unbanked, bankers found to be more strongly agreeing to the fact that change in the attitude of bank staff is very important to bring more and more people from the underprivileged sections of the society to the banking fold.

c) Bankers consider main reasons of exclusion as 'Ignorance about banking services', 'Lack of KYC documents' and 'Poor economic condition'.

d) Although banks welcome 'No frills account', they consider it as a cost proposition.

9.1.7. Factors influential in selection of saving instruments

The factors which have significant influence in predicting the choice of a particular non-banking saving instrument by the respondents are age, education, place, dwelling type, income, position in the household, perceived safety of deposits, awareness levels, perception that change of attitude of bank staff is necessary and time required to reach the nearest banking unit.

Safety, convenience and expected returns are the prominent self reported factors affecting selection of saving instrument.

9.1.8. Factors influential in selection of source of credit

The factors which have significant influence in predicting the choice of a particular source of credit by the respondents are place, income, position in the household, various modes of savings adopted, awareness levels and prior experience with banks.

9.2. RECOMMENDATIONS

Based on the findings of this study, the following recommendations are put forward for effective Financial Inclusion in the urban areas of Assam.

9.2.1. Awareness Creation

(i) Awareness about various banking facilities to be created on a mission mode among the marginal sections of the society. It will empower the marginal sections to take informed decisions. The awareness programs should emphasis on the various 'economic benefits' and 'safety' than 'swabhiman' or 'self-respect' as having bank accounts are not perceived as a mean for improving social status among their peers.

(ii) Mass awareness to be created about 'No-frills accounts' and specially the important features of it such as 'Nil minimum balance requirement' and 'Minimum KYC requirement'. It is a very suitably designed product, but due to unawareness among the population for which it is intended, it is not taking off.

(iii) Awareness about Recurring Deposits and easy remittance service of banks will go a long way to attract many to the banking fold in urban areas.

9.2.2. Financial Literacy

Financial Literacy is to be given immense importance to make the Financial Inclusion drive a success in true spirit. It is recommended to compulsorily include Financial Literacy in school curriculum and in adult literacy programs to have a lasting impact in the society. NGOs and other Voluntary Organisations may be associated in the literacy campaign as these organisations have deeper reach out among the marginal sections.

9.2.3. Special focus on Urban Financial Inclusion

Like rural areas, special focus on Urban Financial Inclusion is to be given with appropriately designed approach taking into account the characteristics of the urban marginal sections. Like villages, municipal wards of urban areas may be assigned to various banks for Financial Inclusion.

9.2.4. Special facilitation desk at bank branches

It is recommended to introduce a special desk at each urban bank branch to facilitate the customers being included to formal banking for the first time. It will enable the banks to offer tailored services and required handholding. Further, the marginal section will feel privileged for the special attention given.

9.2.5. Introduction of phone-in-service

It is recommended to introduce a toll free phone-in-service for basic financial counseling. It should be available 24x7 and in local language. Such services introduced in Agriculture and Health care sector is proved to be effective. It may be funded under FIF.

9.2.6. Mobile Banking

Mobile banking to be introduced as a pilot project for financial inclusion in urban areas as penetration of cellular phones is very high in urban areas. If successful, same may be used as a tool for financial inclusion.

9.2.7. Credit Delivery

From the calculation of Index for Financial Inclusion It has been observed that for improving overall inclusion in urban areas of the State, CDR and per capita availability of credit accounts need to be improved.

For improving credit delivery, facility of General Credit Cards to be expanded to urban areas too on experimental basis. If successful, it may be expanded in all urban areas. Presently it is found very effective in rural and semi-urban areas.

9.2.8. Banking Correspondents

Emphasis on Banking Correspondents at the urban areas is to be given. BCs, being from the community, enjoy wider acceptance than bank branches among the marginal sections. In urban areas, branches being located nearby, BCs can be effectively monitored and it will reduce the workload of the branches.

9.2.9. Cost sharing by the Government

Considering Financial Inclusion initiative as a 'cost proposition' by bankers will always hinder the drive. It is recommended that cost of undertaking Financial Inclusion drive by banks is to be partly funded for a reasonable period by the Government to encourage banks to undertake such activities.

9.2.10. Training and motivational campaign for bank staff

Banks should undertake training and motivational campaign among its staff for bringing positive attitude towards Financial Inclusion. Reward and recognition for bank staff to be introduced for their contribution towards Financial Inclusion.

9.2.11. In built insurance coverage

Government and regulators may work out providing a basic in-built insurance coverage along with No-frills accounts. It may be used as a motivator to bring more people to banking fold and it also enable to improve insurance coverage. Another separate drive for insurance inclusion will be costly.

9.2.12. Financial Inclusion mandate in Government Schemes

All social benefit schemes of the Government should involve some Financial Inclusion mandate as the inclusion drive in India has been policy driven rather than voluntary. It should be a co-ordinated effort among Government departments/ agencies to ensure that the efforts are directed towards the desired goal and are not duplicated.

9.3. SOME RECENT INITIATIVES

During the course of the study, the Government and the regulator have introduced some initiatives which merit mentioning here as they are directed to address some concerns about Financial Inclusion included in §9.1 and §9.2 above.

9.3.1. Unique Identification (UID) Number

Government of India on January 28, 2009 has constituted the Unique Identification Authority of India (UIDAI) under the aegis of the Planning Commission with an aim of issuing unique identification numbers (also referred as *Aadhaar*) to each residents of the country which can be verified and authenticated in an online, cost-effective manner, which is robust enough to eliminate duplicate and false identities. UID enrolment is done with help of State Government machinery and other registrars. The target is to get 600 million enrolled into the system by 2014. By November 2012, already 270 million people are enrolled into the system while UID numbers have been issued to 220 million. By mid 2013, it is expected to enroll 400 million people. It is already the world's largest database based on biometrics like iris scan, finger printing technology. This initiative of Government is expected contribute hugely towards financial inclusion initiatives in the country as the major problem of KYC can be addresses by the UID. RBI on September 28, 2011 has allowed banks to accept Aadhaar letter as KYC document for opening low value accounts. Further on November 30, 2011, RBI has advised banks to open Aadhaar Enabled Bank Accounts (AEBA) by updating Aadhaar numbers wherever applicable in case of existing customers so that the direct benefit transfers can be effective. It is the opportunity for banks to leverage on the opportunities provided by UIDAI for financial inclusion. More and more banks have become partners with UIDAI for enabling its customers and non-customers for Aadhaar enrolment, acting as Registrars and opening AEBAs. As on February 2013, 23 number of Public Sector Banks have become partners with UIDAI.

However, in the state of Assam, Aadhaar card issuance is unlikely to be rolled out as the Home Ministry has advised that Aadhaar numbers to be issued on the basis of National Register for Citizens (NRC). There is security concerns that cards may be falling in to the hands of the illegal migrants from neighbouring countries and subsequent misuse of cards to avail of the Government scheme. However, updating of NRC in Assam is yet to start due to various socio-political issues involved. Hence, it calls for looking at solution beyond Aadhar for resolving the issue of KYC and ensuring DBT for the eligible beneficiaries.

9.3.2. Direct Benefit Transfer (DBT)

On November 26, 2012, the Prime Minister of India has announced a policy initiative of transferring the vast majority of the central and state Government benefits, entitlements and subsidies as cash directly to AEBA of eligible beneficiaries. According to the Prime Minister -

> "The twin pillars for the success of the system of Direct Cash Transfers that we have envisioned are the Aadhaar Platform and Financial Inclusion"

Globally such scheme in its various forms has been implemented in a number if countries such as Bolsa Familia in Brazil, Oportunidales in Mexico, Samrudhi Kosh in Srilanka and similar other programme in Bangladesh, Iran, Namibia and many more countries of Asia and Africa.

The first phase of DBT scheme has been rolled out in 20 districts of the country with seven schemes under its ambit. The success of the DBT depends critically on the expansion of the banking network in the country. To overcome this problem, the scheme envisages the BC model, use of ATMs or utilization of the Common Service Centres. DBT will ultimately push Financial Inclusion by increasing the number of accounts and transactions in these accounts.

9.3.3. National Strategy for Financial Literacy

All other policy initiatives would result effective implementation only when targeted beneficiaries are aware about the benefits of Financial Inclusion. Financial literacy can be considered as pre-requisite for achieving the objectives under Financial Inclusion. Increased emphasis has been given towards creating awareness and financial literacy. A broad national objective was felt required as a large number of stake holders were involved in spreading financial literacy. A national strategy would ensure that all agencies work in tandem with the broad strategy. In this regard, a draft national strategy prepared under the aegis of the Sub-committee of

Financial Stability and Development Council has been released during 2011-12. Adoption as a national strategy is expected to provide the required impetus towards spreading financial literacy in the country.

9.3.4. Urban Financial Inclusion - Launch of campaign to ensure at least one bank Account for each family

In order to provide banking services to entire population residing in Urban and Metro Centers, so as to financially include the urban poor, slum dwellers and the inhabitants of urban / metro villages and facilitate electronic benefit transfer in respect of benefits/ subsidies under various Government schemes directly into the account of the beneficiaries residing at these centres, on July 24, 2012 GoI had advised banks to ensure one bank account per family in such urban areas for the purpose of Urban Financial Inclusion .

9.4. RECOMMENDATIONS FOR FUTURE RESEARCH

By considering the constraints within which the study has been completed and the constant advancement in the field of banking, the following areas are recommended for the further research

9.4.1. Although many 'No frills accounts' opened in the State during recent years specially 2005 onwards, effectiveness or usage of these accounts has not been studied in detail. Research in this regard would be helpful for the policy makers and bankers to assess the effectiveness of Financial Inclusion drive and take necessary corrective steps or modifications if any required.

9.4.2. Another area of future research could be Cost Benefit Analysis of Financial Inclusion drive for the banks. This research would be helpful for the banks to know the breakeven point for such drives. Further, findings of such research can be used by the policy makers to design policies for incentivizing the banks till their Financial Inclusion drive breaks even.

9.4.3. Financial inclusion of 'firms' may be studied as this study does not include it. Financial Inclusion of firms is very crucial for their growth.

9.4.4. Segmentation and profiling of the unbanked population may be undertaken to design specific products to make it attractive and effective for the unbanked.

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Appendix I

Questionnaire for Demand Side Survey

Dear Respondent,

Thank you for your participation in this survey which is aimed at studying Financial Inclusion in Urban Areas of Assam as a part of my academic research at Tezpur University, Assam.

With regards,

Ajanta,

Research Scholar,

Dept of Business Administration,

Tezpur University, Assam

Please tick ✓ in the □ against your answer

1) What are the banking services you are aware of?

	i) Not aware of	ii) Somewhat aware of	iii) Adequately aware of
a) Personal Saving Bank a/c			
b) Current a/c for business transactions			
c) Cheque Facility			
d) Pass Book			
e) Fixed Deposits			
f) Recurring Deposits (saving in small amounts in equal installments)			
g) ATM cards			
h) Debit cards			
i) Credit cards			
j) Home loan			
k) Auto loan			
l) Personal loan			
m) Education loan			
n) Loan for business purpose			
o) Internet banking			

p) Telebanking			
q) Mobile banking			
r) Any other (pls specify)			

2) Distance (in km) to the nearest

	i) From Workplace	ii) From Residence
a) Bank Branch		
b) ATM		

3) Most convenient mode of transport for you and the time required to reach the nearest

	i) From Workplace		ii) From Residence	
	Mode of transport	**Time reqd. in minutes**	**Mode of transport**	**Time reqd. in minutes**
a) Bank Branch				
b) ATM				

4) Your dwelling type

a) Owned & Permanent ☐ b) Rented ☐ c) Illegal dwelling ☐

d) Common Facility ☐ e) Official Accommodation ☐ f) Other................. ☐

5) Your dwelling is a

a) Owned & Permanent ☐ b) Shack or Room ☐ c) Common facility ☐

6) Since when you are using this dwelling

a) Less than 6 months ☐ b) 6 months – 1 year ☐ c) More than a year ☐

7) How frequently you change the dwelling

a) Frequently (more than once in 6 months) ☐ b) Once in 6 month-1 year ☐ c) Infrequent – staying in the same dwelling for more than a year ☐

8) You possess or have easy access to which of the following

	You possess	Have easy access
a) Mobile Phone		
b) TV		
c) Radio		
d) Computer		

9) Do you feel, you need a bank a/c?

a)Yes ☐ b) No ☐

9.1) If yes, why?

	Strongly Agree	Agree	Cannot say	Disagree	Strongly Disagree
a) It guarantees safety of your deposits					
b) It helps you to save					
c) It would help you in getting a loan					
d) It is convenient & fast to operate					
e) Money transactions will be easy and safe					
f) It gives a separate status among your peers					
g) Other (pls specify ……………………………….)					

9.2 If no, why?

____

10) What are the services you would like to avail from bank?

a) Personal Saving Bank a/c ☐
b) Current a/c for business transactions ☐
c) Cheque facility ☐
d) Pass Book ☐
e) Fixed Deposits ☐
f) Recurring Deposits (saving in small amounts in equal installments) ☐
g) Daily collection from home or workplace ☐
h) ATM/ Debit/ Credit/ Cash cards ☐
i) Loans ☐
j) Internet/ Tele/ Mobile banking ☐
k) Any other (pls specify) ☐

11) Your Earning per month

a) Less than Rs.1000/- ☐
b) Rs.1000/- to less than Rs.3000/- ☐
c) Rs.3000/- to less than Rs.6000/- ☐
d) Rs.6000/- to less than Rs.10000/- ☐
e) Rs.10000/- and above ☐

12) How & where do you save? Pls ✓ against the options according to your practice

	Mostly	In between	Not at all
a) At home in cash			
b) ROSCAs			
c) Religious institutions			
d) SHGs/JLGs			
e) Savings in kind (e.g., Jewellary/land/ gold/ livestock/ food grain etc.)			
f) Post offices			
g) NBFCs (eg., Sahara etc.)			
h) Insurance Instruments			
i) Mutual Funds			
j) Savings in bank in other's a/c			
k) You do not generate surplus to save			
l) Other (Pls specify……………………………………………………)			

13) Why you are saving in the above modes?

	Strongly Agree	Agree	Cannot say	Disagree	Strongly Disagree
a) These are the only options available to you					
b) Your peers have opted for the same					
c) Agents are known to you					
d)Safety					
e) Convenience of transaction					
f) Good returns					
g) Other (Pls specify…………………………………)					

14) Have you heard of/ come across incidences of losing money/ interest by any depositor who also saves in the same place where you save?

a)Yes ☐ b) No ☐

15) How safe is your saving?

Very Safe | Safe | Have not considered the safety aspect | Somewhat safe | Not safe

16) For your deposits, pls ✓ against the options in a scale of 1-4 as per IMPORTANCE to you (most important is marked 1 and the least important is marked 4)

a) Safety ☐
b) Returns ☐
c) Convenience of transaction ☐
d) Transaction cost ☐

17) How do you transact money?

a) Go personally and deliver/ collect the cash ☐
b) Take help of others to deliver/ receive cash ☐
c) Through commission agents ☐
d) Through Money orders/ Demand Drafts ☐
e) Deposit cash in the beneficiaries bank a/c ☐
f) Ask to deposit the amount in other's bank a/c ☐
g) Others (pls specify...) ☐

18) Why you are not having any bank a/c? Please tick in the relevant boxs

	Strongly Agree	Agree	Don't know	Disagree	Strongly Disagree
a) You do not feel the necessity of having one					
b) You are not aware of the facilities it would provide					
c) Transactions are too complicated and time consuming					
d) The bank is not conveniently located					
e) The a/c opening process is cumbersome					
f) You lack the documents required to open a a/c					
g) Minimum balance requirement is difficult to be met					
h) Banks does not offer services suitable for your needs					
i) Anything else, pls specify -------					

19) Whether you have been approached by any bank to open an account?

a)Yes ☐ b) No ☐

20) Whether at any point of time, you had a bank a/c

a)Yes ☐ b) No ☐

20.1) If yes, why you have stopped transacting?

a) Not necessary now ☐
b) It was opened for a specific purpose (like deposit of scholarship, encashment of instrument, loan etc.) ☐
c) Your a/c was closed by bank ☐
d) Transactions were complicated & time consuming ☐
e) Minimum balance requirement was high for you ☐
f) Transaction charges were high ☐
g) You or the bank has shifted from the original location ☐
h) Your loan application was rejected ☐
h) Any other reason, pls specify... ☐

21) Have you ever applied for a bank a/c and were refused?

a)Yes ☐ b) No ☐

21.1) If yes, what was the refusal reason?

---

22) Out of the following, please tick the documents you possess at present and it is within the validity period?

a) Telephone bill ☐
b) Electricity bill ☐
c) Ration Card ☐
d) Life insurance policy ☐
e) Driving license ☐
f) Voter's ID Card ☐
g) PAN card ☐
h) Identity card issued by a Govt. Dept/ PSU ☐
i) Trade License ☐
j) VAT Registration Certificate ☐
k) Passport ☐

23) Please tick whichever is relevant for you

a) Applied and received a loan from a bank (Business loan/ Personal loan) ☐
b) Applied and but did not receive a loan from a bank ☐
c) Did not apply for loans from bank ☐

23.1) If your loan was refused by a bank, what was the reason?

a) You did not have a steady income

b) You did not have any guarantor

c) You did not have enough earnings

d) You did not have a job

e) Returns were less than expenses

f) Any other reason, pls specify......................

24) Your credit/loan requirement is met by

	Mostly	In between	Not at all
a) ROSCAs			
b) NGO/SHGs			
c) Family/ Friends			
d) Employer			
e) Money lenders			
f) Private Institution			
g) Public institution			
h) Others, pls specify			

25) Your household Size

a) Less than 3 members

b) 3-5 members

c) 6-10 members

d) Above 10 members

26) Your position in the household

a) Only earning member of the household

b) One of the earning member of the household

c) Dependent member of the household

27) What are the insurance products you are aware of?

a) Life Insurance
b) Health Insurance
c) Personal Accident Insurance
d) Insurance of home contents
e) vehicle Insurance
f) Other (pls specify ....)

28) Do you have any insurance coverage?

a) Yes
b) No

28.1) If yes, which cover?

i) Life (Pls mention the insurance company's name)

____

ii) Non Life (Pls mention the insurance company's name)

28.2) How did you buy the policy?

a) You walked to the insurance company's office ☐
b) Agents approached you ☐
c) It was arranged by your office ☐

28.3) If no, why?

a) Not aware of ☐
b) Not sufficient money to invest/ pay the premium ☐
c) Do not feel the necessity of any cover ☐
d) Nobody had approached yet ☐

29) No Frill a/cs are offered by every bank for people from underprivileged groups which ensures opening of a/c with minimum documents and a very less or nil a/c balance requirement. Are you aware about it?

a)Not aware of ☐ b) Somewhat aware of ☐ c) Adequately aware of ☐

30) Banks maintain the same service standard for all customers, be it rich or the poor.

Do you agree?

Strongly agree	Agree	Don't know	Disagree	S :rongly disagree

31) Change in the attitude of the bank staff is very important to include more and more people from the marginal sections of society into the banking fold.

Do you agree?

Strongly agree	Agree	Don't know	Disagree	Strongly disagree

Thank you for your valuable response.

Your name (Optional) :

Locality you live in :

Your Religion:

Gender

a) Male ☐
b)Female ☐

Age

a) 18-25 years ☐
b) 26-40 years ☐
c) 41-60 years ☐
d) Above 60 years ☐

Education

a) Illiterate ☐
b) Up to 4^{th} standard ☐
c) Secondary Level ☐
d) Undergraduate ☐
e) Graduate ☐
f) Post Graduate ☐
g) Vocational/ technically Educated ☐

Occupation

a) Student ☐
b) Unemployed ☐
c) Service in Govt. organization ☐
d) Service in Pvt. organisation ☐
e) Business ☐
f) Self employed professional ☐
g) Labourer / Domestic Help ☐
h) Others ☐
(Please specify..) ☐

======================

Appendix II
Questionnaire for Supply Side Survey

Dear Respondent,

Thank you for your participation in this survey which is aimed at studying **Financial Inclusion in Urban Areas of Assam** as a part of my academic research at Tezpur University, Assam. Information collected would be used with anonymity and purely for academic purpose.

With regards,

Ajanta,

Research Scholar,

Dept of Business Administration,

Tezpur University, Assam

---

1. Your town is not having adequate banking infrastructure to cater to all class of customers.

Do you agree?

Strongly agree | Agree | Don't know | Disagree | Strongly disagree

2. According to you, the underprivileged sections of the society in Urban Areas are unbanked mostly due to

(Pls rank the reasons in a scale of 1-5, 1 for the most important and so on)

i) Lack of KYC documents
ii) Poor economic condition
iii) Ignorance about banking services
iv) Unwillingness
v) Unsuitability of banks' products and services

3. 'Financial Inclusion' drive by regulators/ govts/ banks is not getting proper importance in urban areas in comparison to rural areas.

Do you agree?

Strongly agree | Agree | Don't know | Disagree | Strongly disagree

4. Whether you have been given a target to open 'no-frills' accounts?

a)Yes ☐ b) No ☐

5. Banks welcome 'no-frills' accounts but it is difficult for banks to incur more expenses for its marketing as it is a cost proposition.

Do you agree?

Strongly agree | Agree | Don't know | Disagree | Strongly disagree

6. Your branch staffs are adequately aware about 'no-frills' account

a)Yes ☐ b) No ☐ c) I do not know ☐

7. It is difficult for you to motivate your staff for opening of no-frill accounts as there is barely any recognition or reward for this activity.

Do you agree?

Strongly agree | Agree | Don't know | Disagree | Strongly disagree

8. Products and services of banks do not suitably cater to the needs of the underprivileged.

Do you agree?

Strongly agree | Agree | Don't know | Disagree | Strongly disagree

9. The underprivileged avoid coming to the banks due to their perception that bank staff are not welcoming them.

Do you agree?

Strongly agree | Agree | Don't know | Disagree | Strongly disagree

10) No Frills Accounts/ Basic Banking Accounts/ Sabka Accounts are intended for the underprivileged groups which ensure opening of a/c with minimum KYC requirements and a very less or nil a/c balance requirement. However, there is lack of awareness among people from the underprivileged groups about these services of banks.

Do you agree?

Strongly agree	Agree	Don't know	Disagree	Strongly disagree

11) Banks offer the same standard of service to all customers, be it rich or the poor.

Do you agree?

Strongly agree	Agree	Don't know	Disagree	Strongly disagree

12) Change in the attitude of the bank staff is very important to include more and more people from the underprivileged sections of the society into the banking fold.

Do you agree?

Strongly agree	Agree	Don't know	Disagree	Strongly disagree

13) In urban areas despite of having adequate banking infrastructure, a sizable "bankable people" goes to informal providers of credit & deposit services. Why? Pls share your view on the same.

____

____

____

____

Sincerely appreciate your co-operation and valuable opinion. Thanks a lot.

Appendix III

Questionnaire for Demand Side Survey

(in Assamese)

শ্ৰদ্ধাৰ,

আপোনাৰ বহুমূলীয়া অংশগ্ৰহণৰ বাবে ধন্যবাদ । আপোনাৰ পৰা সংগ্ৰহ কৰা এই তথ্য মোৰ বিদ্যায়তনিক গৱেষণা পত্ৰৰ বাবে ব্যৱহাৰ কৰিম।

ধন্যবাদেৰে,

অজন্তা

তেজপুৰ বিশ্ববিদ্যালয়

আপোনাৰ উত্তৰৰ বিপৰীতে থকা ☐ ত (√) চিন দিব

১। বেংকৰ কি কি সুবিধাৰ বিষয়ে আপুনি জ্ঞাত?

	I) অজ্ঞাত	II) সামান্যভাবে জ্ঞাত	III) ভালদৰে জ্ঞাত
ক) ছেভিং বেংক একাউণ্ট			
খ) কাৰেণ্ট একাউণ্ট (ব্যৱসায়ৰ লেনদেনৰ বাবে			
গ) ফিক্সড ডিপ'জিট			
ঘ) ৰেকাৰিং ডিপ'জিট			
ঙ) এ. টি. এম. কাৰ্ড			
চ) ডেবিট কাৰ্ড			
ছ) ক্ৰেডিট কাৰ্ড			
জ) গৃহ ঋণ			
ঝ) গাড়ীৰ বাবে ঋণ			
ঞ) ব্যক্তিগত ঋণ			
ট) শিক্ষাৰ বাবে ঋণ			
ঠ) ব্যৱসায়ৰ বাবে ঋণ			
ড) ইণ্টাৰনেট বেংকিং			
ঢ) টেলি বেংকিং			
ণ) অন্যান্য __________			

২। আপোনাৰ আটাইতকৈ ওচৰত থকা বেংকলৈ দূৰত্ব (কিলোমিটাৰ)

	I) কামৰ পৰা দূৰত্ব	II) ঘৰৰ পৰা দূৰত্ব
ক) বেংকৰ শাখা		
খ) এ. টি. এম.		

৩। বেংক / এ. টি. এম.লৈ যোৱাৰ আটাইতকৈ সুবিধাজনক ব্যৱস্থা

	I) কামৰ পৰা দূৰত্ব		II) ঘৰৰ পৰা দূৰত্ব	
	ক) যোৱাৰ ব্যৱস্থা	খ)সময়ৰ দৰকাৰ	ক) যোৱাৰ ব্যৱস্থা	খ) সময়ৰ দৰকাৰ
ক) বেংকৰ শাখা				
খ) এ. টি. এম.				

৪। আপোনাৰ বাসভৱন

ক) নিজস্ব আৰু স্থায়ী ☐ খ) সমূহীয়া নিৱাস ☐

গ) ভাড়া ☐ ঘ) কাৰ্য্যালয়ৰ পৰা দিয়া ☐

ঙ) বে-আইনী ☐ চ) অন্যান্য ________ ☐

৫। আপোনাৰ বাসভৱনটো

ক) এটা পূৰ্ণাংগ ঘৰ/ ফ্লেট ☐ খ) সমূহীয়া নিবাস ☐

গ) জুপুৰি / একোঠালীৰ ☐ ঘ) অন্যান্য ________ ☐

৬) আপুনি কেতিয়াৰ পৰা এই বাসভৱনত আছে ?

ক) ৬ মাহতকৈ কম সময় ☐ খ)) ৬ মাহ -১ বছৰ ☐ গ) ১ বছৰকৈ বেছি ☐

৭। আপুনি কিমান সঘনাই বাসস্থান সলায়?

ক) প্ৰায়ে (ছমাহত একাধিকবাৰ) ☐ গ) এবছৰত এবাৰ ☐

খ) স্থায়ী এবাৰ ☐ ঘ) কাচিৎ ☐

৮। তলত উল্লেখ কৰা কি কি আপোনাৰ নিজৰ আছে আপুনি সহজতে ব্যৱহাৰ কৰিব পৰাকৈ উপলব্ধ?

	I) নিজৰ আছে	II) সহজতে ব্যৱহাৰ কৰিব পৰাকৈ উপলব্ধ
ম'বাইল ফোন		
টি.ভি		
ৰেডিঅ'		
ইন্টাৰনেট		

৯। আপুনি বেংক একাউন্ট এটাৰ প্ৰয়োজন অনুভৱ কৰেনে?

ক) কৰোঁ ☐ (খ) নকৰোঁ ☐

৯.১। যদি প্ৰয়োজন অনুভৱ কৰে, কিয়?

	সম্পূৰ্ণ সন্মত	সন্মত	নাজানো	অসন্মত	সম্পূৰ্ণ অসন্মত
ক) ই আপোনাৰ সঞ্চিত ধনৰ সুৰক্ষা দিয়ে।					
খ) ই আলোনাক সঞ্চয়ৰ সুবিধা আগবঢ়ায়।					
গ) ই আপোনাক ঋণ পোৱাত সহায় কৰে।					
ঘ) লেনদেনবোৰ ক্ষিপ্ৰ, সুৰক্ষিত আৰু সহজ।					
ঙ) সমাজত আপোনাৰ স্থান উন্নত কৰে।					
চ) অন্যান্য কাৰণ ____________					

৯.২। যদি বেংক একাউণ্টৰ প্ৰয়োজন অনুভৱ নকৰে, তেন্তে কিয় নকৰে?

....

১০। বেংকৰ পৰা আপুনি কি কি সেৱা ব্যৱহাৰ কৰিব বিচাৰে?

ক) ব্যক্তিগত ছেভিং বেংক একাউণ্ট ☐ খ) কাৰেণ্ট একাউণ্ট ব্যৱসায়ৰ লেনদেনৰ বাবে ☐

গ) ছেক বুক ☐ ঘ) পাছ বুক ☐

ঙ) ফিক্সড ডিপ'জিত ☐ চ) ৰেকাৰিং ডিপ'জিত ☐

ছ) দৈনিক অফিচ/ঘৰৰ পৰা ধন সংগ্ৰহ ☐ জ) এ . টি. এম / ডেবিট/ ক্ৰেডিট কাৰ্ড ☐

ঝ) ঋণ ☐ ঞ) ইণ্টাৰনেট / টেলি / ম'বাইল বেংকিং ☐

ট) অন্যান্য ____________ ☐

১১। আপোনাৰ মাহিলি আয়

ক) ১,০০০ টকাতকৈ কম ☐ খ) ১০০০ < ৩,০০০ টকা ☐

গ) ৩,০০০ < ৬০০০ টকা ☐ ঘ) ৬,০০০ < ১০,০০০ টকা ☐

ঙ) ১০,০০০ বা তাতকৈ অধিক। ☐

১২। আপুনি ক'ত আৰু কেনেদৰে সঞ্চয় কৰে?

	আটাইতকৈ বেছি	অলপ পৰিমাণত	প্ৰয়োজ্য বহয়
ক) নগদ টকা ঘৰত ৰাখে			
খ) সঞ্চয় আৰু ঋণ সমিতিত			
গ) গাঁৱত সমিতিত			
ঘ) ধৰ্মীয় সংস্থাত			
ঙ) আত্মসহায়ক গোটত			

চ) এন.জি.অ' . এম. এফ. আইত			
ছ) গহণা/মাটি/সোণ/ঘৰচীয়া জীৱ-জন্তু/ খাদ্যশস্য আদিত সঞ্চয়			
জ) ডাকঘৰত			
ঝ) বিত্তীয় সংস্থাত (বেংক নহয় যেনে-চাহাৰা আদিত)			
ঞ) আনৰ বেংক একাউন্টত			
ট) মিউশ্যৰেল ফাণ্ডত			
ঠ) বীমা কোম্পানীত			
ড) আপোনাৰ হাতত সঞ্চয়ৰ বাবে ধন নাবাচে			
ঢ)অন্যান্য __________			

১৩। আপুনি উপৰিউক্ত ধৰণে কিয় সঞ্চয় কৰে?

	সম্পূৰ্ণ ৰূপে সন্মত	সন্মত	নাজানো	অসন্মত	সম্পূৰ্ণ ৰূপে অসন্মত
ক) আপোনাৰ বাবে সঞ্চয়ৰ মাত্ৰ এইকেইটাই উপায় আছে					
খ) আলোনাৰ চিনাকি মানুহেও ইয়াত সঞ্চয় কৰে।					
গ) এজেন্টজন চিনাকি					
ঘ) নিৰাপদ উপায়					
ঙ) লেনদেন সুবিধাজনক					
চ) লাভালাভ					
ছ) অন্যান্য __________					

১৪। আপোনাৰ দৰে একেদৰে সঞ্চয় কৰা কাৰোবাৰ মুলধন, সুত আদি হেৰুওৱাৰ কথা শুনিছেনে?

(ক) শুনিছোঁ ☐ (খ) নাই শুনা ☐

১৫। আপোনাৰ সঞ্চিত ধন নিৰাপদনে?

ক) সম্পূণ নৰাপদ	খ) নিৰাপদ	গ) মই নিৰাপত্তাৰ কথা ভৰা নাই	ঘ) কিছু পৰিমাণে নিৰাপদ	ঙ) নিৰাপদ নহয়

১৬। সঞ্চয়ৰ বাবে নিম্ন লিখিত কাৰণৰ ভিতৰত আপোনাৰ বাবে গুৰুত্বপূৰ্ণ কাৰণৰ গুৰুত্ব অনুযায়ী নম্বৰ দিয়ক (আটাইতকৈ গুৰুত্বপূৰ্ণ কাৰণত ১ নম্বৰ আৰু সেই ক্ৰমত)

ক) নিৰাপত্তা	
খ) লাভালাভ	
গ) সুবিধাজনক লেনদেন	
ঘ) লেনদেনৰ খৰচ	
ঙ) অন্যান্য ___________	

১৭। আপুনি ধনৰ লেনদেন কেনেদৰে কৰে?

ক) দিবলগীয়াজনক নিজে গৈ নগদ ধন দি আহে/ লৈ আহে। ☐

খ) নগদ ধন দিবৰ বাবে আনৰ সহায় লয়। ☐

গ) কমিছন এজেণ্টৰ জৰিয়তে লেনদেন কৰে। ☐

ঘ) মনি অৰ্ডাৰ / ডিমাণ্ড ড্ৰাফটৰ জৰিয়তে। ☐

ঙ) দিবলগীয়াজনৰ বেংক একাউণ্টত নগদ ধন জমা কৰে। ☐

চ) আনৰ বেংক একাউণ্টত পাবলগীয়া ধন জমা কৰে। ☐

ছ) অন্যান্য ________________ ☐

১৮। আপোনাৰ বেংক একাউণ্ট কিয় নাই?

	সম্পূৰ্ণ ৰূপে সন্মত	সন্মত	নাজানো	অসন্মত	সম্পূৰ্ণ ৰূপে অসন্মত
ক) বেংক একাউণ্টৰ প্ৰয়োজন অনুভৱ নকৰে					
খ)) বেংক সা-সুবিধাবোৰৰ বিষয়ে জ্ঞাত নহয়					
গ) বেংকৰ লেনদেন জটিল আৰু ইয়াৰ বাবে সময়ৰ প্ৰয়োজন।					
ঘ) বেংকৰ শাখা সুবিধাজনক ঠাইত নাই					
ঙ) একাউণ্ট খোলাৰ প্ৰক্ৰিয়াটো জটিল।					
চ) একাউণ্ট খুলিবলৈ প্ৰয়োজনীয় নথিপত্ৰ আপোনাৰ নাই					
ছ) একাউণ্ট চলাই ৰাখিবলৈ প্ৰয়োজনীয় নুন্যতম পুঁজি গোটোৱাটো সহজ নহয়					

জ) আপোনাৰ বাবে লাগতিয়াল সা-সুবিধা বেংকে আগবঢ়ায়					
ঝ) অন্যান্য কাৰণ ___________					

১৯। কোনোৱা বেংকে একাউন্ট খোলাৰ বাবে আপোনাৰ লগত যোগাযোগ কৰিছেনে?

ক) কৰিছে ☐ খ) নাই কৰা ☐

২০। আপোনাৰ কেতিয়াবা বেংক একাউন্ট আছিল নেকি?

ক) আছিল ☐ খ) নাছিল ☐

২০। ১. যদি আপোনাৰ একাউন্ট আছিল, তেন্তে বেংকৰ লগত লেনদেন কিয় বন্ধ কৰিলে?

ক) এতিয়া প্ৰয়োজন নাই ☐

খ) বিশেষ কাৰণত একাউন্ট খোলা হৈছিল (জলপানি/ বৃত্তিৰ ধন জমা কৰিবৰ বাবে, ঋণৰ ☐

সুবিধাৰ বাবে, চৰকাৰী অনুদানৰ বাবে আদি।)

গ) বেংকে নিজ একাউন্ট বন্ধ কৰিছিল ☐

ঘ) বেংকৰ লেনদেনবোৰ জটিল আৰু লেহেমীয়া ☐

ঙ) একাউন্ট চলাই ৰাখিবলৈ প্ৰয়োজনীয় নুন্যতম পুঁজি বজাই ৰখাটো সম্ভৱ নহ'ল ☐

চ) লেনদেনৰ খৰচ বেছি আছিল ☐

ছ) আপুনি বা আপোনাৰ বেংক আগৰ ঠাইত বৰ্তমান নাই ☐

জ) আপোনাৰ ঋণ আবেদন বেংকে নাকচ কৰিছিল ☐

ঝ) অন্যান্য কাৰণ ______________________ ☐

২১। আপুনি বেংক একাউন্ট খুলিবৰ বাবে কৰা আবেদন নাকচ হৈছিল নেকি?

ক) হয় ☐ খ) নহয় ☐

২১,১। যদি নাকচ হৈছিল, তেন্তে কি কাৰণত?

....

২২। তলত উল্লেখ কৰা কি কি নথিপত্ৰ (সময়সীমা উকলি নোযোৱাকৈ) বৰ্তমান আপোনাৰ আছে?

ক) টেলিফোন বিল ☐ খ) বিজুলী বিভাগৰ বিল ☐

গ) ৰেশ্যন কাৰ্ড ☐ ঘ) জীৱন বীমা পলিচী ☐

ঙ) গাড়ীচালনা অনুজ্ঞা পত্ৰ (ড্ৰাইভিং লাইচেন্স) ☐ চ) ভোটাৰ পৰিচয় পত্ৰ ☐

ছ) পেন কাৰ্ড (Pan Card) ☐ জ)চৰকাৰী বিভাগে জাৰী কৰা ☐

পৰিচয় পত্ৰ

ঝ) ভেট (VAT) পঞ্জীয়ন পত্ৰ ☐ ঞ) পাৰ পত্ৰ (passport) ☐

২৩। আপোনাৰ বাবে প্ৰযোজ্য ঠাইত √ চিন দিয়ক।

ক) আপুনি বেংকৰ পৰা ঋণ পাইছে ☐

(ব্যৱসায়িক বা ব্যক্তিগত কাৰণত) ☐

খ) আপুনি বেংকৰ ঋণৰ বাবে আবেদন কৰিছিল কিন্তু ঋণ নাপালে ☐

গ) আপুনি বেংকৰ ঋণৰ বাবে কেতিয়াও আবেদন কৰা নাই ☐

২৩.১। যদি আপোনাৰ ঋণ আবেদন বেংকে নাকচ কৰিছিল, তেন্তে কি কাৰণত?

ক) আপোনাৰ স্থায়ী আয় নাই ☐ খ) ঋণৰ বাবে আপোনাৰ কোনো গেৰাণ্টৰ নাই ☐

গ) আপোনাৰ পৰ্য্যাপ্ত আয় নাই ☐ ঘ) আপোনাৰ কৰ্মসংস্থান নাই ☐

ঙ) আপোনাৰ আয়তকৈ ব্যয় বেছি ☐ চ) অন্যান্য ☐

২৪ । যদি আপুনি বেংকৰ ঋণ লোৱা নাই, তেন্তে আপোনাৰ ঋণৰ প্ৰয়োজন পুৰণ কৰে?

	আটাইতকৈ বেছি	অলপ পৰিমাণত	প্ৰয়োজ্য নহয়
ক) সঞ্চয় আৰু ঋণ সমিতি			
খ) এন.জি.অ'/ আত্মসহায়ক গোট			
গ) পৰিয়াল/ বন্ধু / বান্ধৱ			
ঘ) নিয়োগকৰ্তা/ অফিচ			
ঙ) মহাজন/ কাবুলীৱালা			
চ) ব্যক্তিগত সংস্থা			
ছ) চৰকাৰী সংস্থা			
জ) অন্যান্য __________			

২৫। আপোনাৰ পৰিয়ালৰ সদস্যৰ সংখ্যা (একেটা ঘৰতে বসবাস কৰা)

ক) ৩ জনতকৈ কম ☐ খ) ৬-১০ জন ☐

গ) ৩-৫ কম ☐ ঘ) ১০ জনতকৈ বেছি ☐

২৬। পৰিয়ালত আপোনাৰ স্থান

ক) একমাত্ৰ আয় থকা সদস্য ☐

খ) পৰিয়ালৰ এজন আয় থকা সদস্য ☐

গ) নিৰ্ভৰশীল সদস্য ☐

২৭। তলত উল্লেখ কৰা বীমাবোৰৰ ভিতৰত আপুনি জনা বীমাত √ চিন দিয়ক।

ক) জীৱন বীমা ☐ খ) ঘৰৰ সা-সম্পত্তিৰ বীমা ☐

গ) স্বাস্থ্য বীমা ☐ ঘ) ব্যক্তিগত দুৰ্ঘটনা বীমা ☐

ঙ) মটৰৰ বীমা ☐ চ) অন্যান্য (অনুগ্ৰহ কৰি উল্লেখ কৰক...........)

২৮। আপোনাৰ কোনো ধৰণৰ বীমা আছেনে?

ক) আছে ☐ ঘ) নাই ☐

২৮.১। যদি আছে, তেন্তে কেনেধৰণৰ বীমা আছে?

ক) জীৱন বীমা (অনুগ্ৰহ কৰি বীমা কোম্পানীৰ নাম উল্লেখ কৰিব ....)

খ) অন্য বীমা (অনুগ্ৰহ কৰি বীমা কোম্পানীৰ নাম উল্লেখ কৰিব ....)

২৮.২। আপুনি বীমা (পলিচী) কেনেকৈ কিনিছিল?

ক) আপুনি বীমা কোম্পানীৰ অফিচলৈ গৈছিল ☐

খ) এজেণ্টে আপোনাক নিজে যোগাযোগ কৰিছিল। ☐

গ) আপোনাৰ কাৰ্য্যালয়ে সকলো সুবিধা কৰি দিছিল। ☐

২৮.৩। আপোনাৰ যদি কোনো ধৰণৰ বীমা নাই, তেন্তে কি কাৰণত?

ক) বীমাকৰণৰ বিষয়ে জ্ঞাত নহয়। ☐

খ) বীমাৰ বাবে প্ৰয়োজনীয় ধনৰ অভাৱ। ☐

গ) কোনো ধৰণৰ বীমাৰ প্ৰয়োজনীয় আছে বুলি নাভাবে। ☐

ঘ) কোনো এজেণ্টে এতিয়ালৈ যোগাযোগ কৰা নাই। ☐

২৯। সমাজৰ পিছপৰা শ্ৰেণীৰ বাবে সকলো বেংকে 'নো ফ্ৰিল' একাউণ্ট আগবঢ়ায়, এই একাউণ্ট নুন্যতম ধন (নতুবা ধনৰ প্ৰয়োজন নাই) আৰু নুন্যতম নথিপত্ৰৰ সহজতে খুলিব পাৰি। আপুনি এই বিষয়ে জ্ঞাতনে?

ক) অজ্ঞাত ☐

খ) এই বিষয়ে শুনিছোঁ ☐

গ) ভালদৰে জ্ঞাত। ☐

৩০। বেংকে দুখীয়া সকলো শ্ৰেণীৰ গ্ৰাহকৰ বাবে একে মানৰ সেৱা আগবঢ়ায়

সম্পূৰ্ণ সন্মত সন্মত নাজানো অসন্মত সম্পূৰ্ণ অসন্মত

৩১। সমাজৰ পিছপৰা শ্ৰেণীৰ অধিকাধিক গ্ৰাহকক বেংকলৈ অনাৰ বাবে বেংক কৰ্মচাৰীৰ মনোভাৱ সলনি হোৱাটো গুৰুত্ব পূৰ্ণ

সম্পূৰ্ণ সন্মত সন্মত নাজানো অসন্মত সম্পূৰ্ণ অসন্মত

আপোনাৰ বহুমূলীয়া সময় আৰু মতামতৰ বাবে ধন্যবাদ।

আপোনাৰ নাম (আপোনাৰ ইচ্ছাসাপেক্ষে) ঃ

ঠাইৰ নাম ঃ

ধৰ্ম / জাতি ঃ

লিংগ ঃ ক) পুৰুষ

খ) মহিলা

বয়স ঃ ক) ১৫ – ২৫ বছৰ

খ) ২৬ – ৪০ বছৰ

গ) ৪১ – ৬০ বছৰ

গ) ৬০ বছৰৰ ওপৰত

শিক্ষা ঃ ক) নিৰক্ষৰ

খ) চতুৰ্থ শ্ৰেণীলৈ

গ) হাইস্কুললৈ

ঘ) কলেজলৈ

ঙ) স্নাতক

চ) স্নাতকোত্তৰ

ছ) কাৰিকৰী প্ৰশিক্ষণ

জীৱিকা ঃ ক) ছাত্ৰ

খ) নিবনুৱা

গ) চৰকাৰী চাকৰিয়াল

ঘ) বেচৰকাৰী চাকৰিয়াল

ঙ) ব্যৱসায়

চ) শ্ৰমিক

ছ) নিজস্ব পেচা

জ) অন্যান্য (অনুগ্ৰহ কৰি উল্লেখ কৰক ______________________________)

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Appendix IV

Tables of Index Calculation

Table 5.9 : Calculation of IFI for India : Attribute wise breakdown of the Index I_1

	Individual Contribution								*Percentage Contribution*					
Year	Deposit A/c per 1000 population	Credit A/c per 1000 population	Branch per million population	Per capita deposit	Per capita credit	CDR	I_1	Rank	Deposit A/c per 1000 population	Credit A/c per 1000 population	Branch per million population	Per capita deposit	Per capita credit	CDR
1991	0.0697	0.1171	0.1573	0.0053	0.0049	0.1293	0.4836	10	14%	24%	33%	1%	1%	27%
1992	0.0729	0.1225	0.1545	0.0068	0.0057	0.1164	0.4788	11	15%	26%	32%	1%	1%	24%
1993	0.0737	0.1120	0.1525	0.0082	0.0070	0.1186	0.4721	12	16%	24%	32%	2%	1%	25%
1994	0.0776	0.1045	0.1506	0.0102	0.0075	0.1070	0.4573	15	17%	23%	33%	2%	2%	23%
1995	0.0711	0.0990	0.1485	0.0127	0.0099	0.1147	0.4559	17	16%	22%	33%	3%	2%	25%
1996	0.0685	0.0939	0.1467	0.0142	0.0120	0.1258	0.4610	14	15%	20%	32%	3%	3%	27%
1997	0.0669	0.0896	0.1445	0.0168	0.0131	0.1172	0.4481	18	15%	20%	32%	4%	3%	26%
1998	0.0649	0.0837	0.1427	0.0204	0.0153	0.1134	0.4405	20	15%	19%	32%	5%	3%	26%
1999	0.0639	0.0794	0.1411	0.0246	0.0173	0.1073	0.4335	21	15%	18%	33%	6%	4%	25%
2000	0.0632	0.0810	0.1388	0.0296	0.0214	0.1112	0.4452	19	14%	18%	31%	7%	5%	25%
2001	0.0684	0.0772	0.1395	0.0346	0.0249	0.1117	0.4563	16	15%	17%	31%	8%	5%	24%
2002	0.0702	0.0826	0.1375	0.0395	0.0286	0.1125	0.4709	13	15%	18%	29%	8%	6%	24%
2003	0.0698	0.0863	0.1358	0.0457	0.0349	0.1201	0.4927	9	14%	18%	28%	9%	7%	24%
2004	0.0713	0.0962	0.1349	0.0536	0.0402	0.1181	0.5144	8	14%	19%	26%	10%	8%	23%
2005	0.0722	0.1122	0.1352	0.0597	0.0520	0.1399	0.5712	7	13%	20%	24%	10%	9%	24%
2006	0.0762	0.1236	0.1362	0.0724	0.0693	0.1563	0.6340	6	12%	20%	21%	11%	11%	25%
2007	0.0854	0.1360	0.1393	0.0890	0.0878	0.1622	0.6997	5	12%	19%	20%	13%	13%	23%
2008	0.1041	0.1535	0.1457	0.1083	0.1063	0.1622	0.7801	4	13%	20%	19%	14%	14%	21%
2009	0.1283	0.1559	0.1520	0.1287	0.1234	0.1585	0.8468	3	15%	18%	18%	15%	15%	19%
2010	0.1492	0.1667	0.1607	0.1469	0.1403	0.1580	0.9218	2	16%	18%	17%	16%	15%	17%
2011	0.1667	0.1647	0.1667	0.1667	0.1667	0.1667	0.9981	1	17%	17%	17%	17%	17%	17%

Table 5.10: Calculation of IFI for India : Attribute wise breakdown of the Index $I_{0.75}$

Year	Individual Contribution						$I_{0.75}$	Rank	Percentage Contribution					
	Deposit A/c per 1000 population	Credit A/c per 1000 population	Branch per million population	Per capita deposit	Per capita credit	CDR			Deposit A/c per 1000 population	Credit A/c per 1000 population	Branch per million population	Per capita deposit	Per capita credit	CDR
1991	0.0867	0.1279	0.1596	0.0125	0.0049	0.1378	0.5293	11	16%	24%	30%	2%	1%	26%
1992	0.0896	0.1323	0.1575	0.0150	0.0057	0.1273	0.5275	12	17%	25%	30%	3%	1%	24%
1993	0.0904	0.1237	0.1559	0.0175	0.0070	0.1292	0.5237	14	17%	24%	30%	3%	1%	25%
1994	0.0940	0.1174	0.1545	0.0204	0.0075	0.1195	0.5133	17	18%	23%	30%	4%	1%	23%
1995	0.0880	0.1127	0.1529	0.0242	0.0099	0.1259	0.5136	16	17%	22%	30%	5%	2%	25%
1996	0.0855	0.1084	0.1514	0.0263	0.0120	0.1350	0.5186	15	16%	21%	29%	5%	2%	26%
1997	0.0841	0.1047	0.1498	0.0298	0.0131	0.1279	0.5093	19	17%	21%	29%	6%	3%	25%
1998	0.0822	0.0995	0.1484	0.0345	0.0153	0.1249	0.5046	20	16%	20%	29%	7%	3%	25%
1999	0.0812	0.0956	0.1471	0.0397	0.0173	0.1197	0.5005	21	16%	19%	29%	8%	3%	24%
2000	0.0805	0.0971	0.1453	0.0456	0.0214	0.1230	0.5129	18	16%	19%	28%	9%	4%	24%
2001	0.0854	0.0936	0.1458	0.0513	0.0249	0.1235	0.5245	13	16%	18%	28%	10%	5%	24%
2002	0.0871	0.0985	0.1443	0.0566	0.0286	0.1241	0.5392	10	16%	18%	27%	11%	5%	23%
2003	0.0868	0.1018	0.1429	0.0632	0.0349	0.1304	0.5599	9	16%	18%	26%	11%	6%	23%
2004	0.0882	0.1104	0.1422	0.0712	0.0402	0.1288	0.5809	8	15%	19%	24%	12%	7%	22%
2005	0.0890	0.1238	0.1424	0.0772	0.0520	0.1462	0.6307	7	14%	20%	23%	12%	8%	23%
2006	0.0926	0.1332	0.1433	0.0892	0.0693	0.1588	0.6864	6	13%	19%	21%	13%	10%	23%
2007	0.1010	0.1431	0.1457	0.1041	0.0878	0.1633	0.7450	5	14%	19%	20%	14%	12%	22%
2008	0.1171	0.1567	0.1507	0.1206	0.1063	0.1633	0.8147	4	14%	19%	18%	15%	13%	20%
2009	0.1370	0.1585	0.1555	0.1373	0.1234	0.1605	0.8723	3	16%	18%	18%	16%	14%	18%
2010	0.1534	0.1667	0.1622	0.1516	0.1403	0.1601	0.9343	2	16%	18%	17%	16%	15%	17%
2011	0.1667	0.1652	0.1667	0.1667	0.1667	0.1667	0.9986	1	17%	17%	17%	17%	17%	17%

Table 5.11 : Calculation of IFI for India : Attribute wise breakdown of the Index $I_{0.50}$

	Individual Contribution								*Percentage Contribution*					
Year	Deposit A/c per 1000 population	Credit A/c per 1000 population	Branch per million population	Per capita deposit	Per capita credit	CDR	$I_{0.50}$	Rank	Deposit A/c per 1000 population	Credit A/c per 1000 population	Branch per million population	Per capita deposit	Per capita credit	CDR
1991	0.1078	0.1397	0.1619	0.0297	0.0284	0.1468	0.6143	20	18%	23%	26%	5%	5%	24%
1992	0.1102	0.1429	0.1605	0.0335	0.0310	0.1393	0.6173	19	18%	23%	26%	5%	5%	23%
1993	0.1109	0.1366	0.1594	0.0370	0.0341	0.1406	0.6186	18	18%	22%	26%	6%	6%	23%
1994	0.1137	0.1320	0.1584	0.0411	0.0354	0.1335	0.6141	21	19%	21%	26%	7%	6%	22%
1995	0.1089	0.1284	0.1573	0.0460	0.0406	0.1383	0.6195	17	18%	21%	25%	7%	7%	22%
1996	0.1068	0.1251	0.1564	0.0486	0.0447	0.1448	0.6264	13	17%	20%	25%	8%	7%	23%
1997	0.1056	0.1222	0.1552	0.0529	0.0467	0.1397	0.6223	16	17%	20%	25%	8%	8%	22%
1998	0.1040	0.1181	0.1542	0.0583	0.0505	0.1375	0.6226	15	17%	19%	25%	9%	8%	22%
1999	0.1032	0.1150	0.1533	0.0640	0.0536	0.1337	0.6229	14	17%	18%	25%	10%	9%	21%
2000	0.1026	0.1162	0.1521	0.0702	0.0597	0.1361	0.6370	12	16%	18%	24%	11%	9%	21%
2001	0.1068	0.1134	0.1525	0.0759	0.0645	0.1364	0.6495	11	16%	17%	23%	12%	10%	21%
2002	0.1082	0.1174	0.1514	0.0812	0.0690	0.1369	0.6639	10	16%	18%	23%	12%	10%	21%
2003	0.1079	0.1200	0.1504	0.0873	0.0763	0.1415	0.6833	9	16%	18%	22%	13%	11%	21%
2004	0.1090	0.1266	0.1499	0.0945	0.0819	0.1403	0.7023	8	16%	18%	21%	13%	12%	20%
2005	0.1097	0.1367	0.1501	0.0998	0.0931	0.1527	0.7421	7	15%	18%	20%	13%	13%	21%
2006	0.1127	0.1436	0.1507	0.1098	0.1074	0.1614	0.7856	6	14%	18%	19%	14%	14%	21%
2007	0.1193	0.1505	0.1524	0.1218	0.1210	0.1644	0.8294	5	14%	18%	18%	15%	15%	20%
2008	0.1317	0.1599	0.1559	0.1344	0.1331	0.1644	0.8794	4	15%	18%	18%	15%	15%	19%
2009	0.1462	0.1612	0.1592	0.1465	0.1434	0.1625	0.9190	3	16%	18%	17%	16%	16%	18%
2010	0.1577	0.1667	0.1637	0.1565	0.1529	0.1623	0.9597	2	16%	17%	17%	16%	16%	17%
2011	0.1667	0.1657	0.1667	0.1667	0.1667	0.1667	0.9990	1	17%	17%	17%	17%	17%	17%

Table 5.12: Calculation of IFI for Urban India : Attribute wise breakdown of the Index I_1

Year	*Individual Contribution*						I_1	Rank	*Percentage Contribution*					
	Deposit A/c per 1000 population	Credit A/c per 1000 population	Branch per million population	Per capita deposit	Per capita credit	CDR			Deposit A/c per 1000 population	Credit A/c per 1000 population	Branch per million population	Per capita deposit	Per capita credit	CDR
1991	0.1044	0.0565	0.0668	0.0041	0.0037	0.1203	0.35585	20	29%	16%	19%	1%	1%	34%
1992	0.1045	0.0673	0.0644	0.0057	0.0043	0.1114	0.3577	19	29%	19%	18%	2%	1%	31%
1993	0.1063	0.0548	0.0657	0.0072	0.0058	0.1184	0.3582	18	30%	15%	18%	2%	2%	33%
1994	0.1127	0.0485	0.0649	0.0090	0.0066	0.1119	0.3536	21	32%	14%	18%	3%	2%	32%
1995	0.1141	0.0495	0.0813	0.0116	0.0094	0.1238	0.3897	17	29%	13%	21%	3%	2%	32%
1996	0.1078	0.0505	0.1010	0.0129	0.0119	0.1385	0.4225	11	26%	12%	24%	3%	3%	33%
1997	0.1041	0.0512	0.0834	0.0154	0.0132	0.1319	0.3993	15	26%	13%	21%	4%	3%	33%
1998	0.0999	0.0470	0.0852	0.0189	0.0155	0.1279	0.3945	16	25%	12%	22%	5%	4%	32%
1999	0.0979	0.0523	0.0876	0.0223	0.0181	0.1281	0.4065	14	24%	13%	22%	5%	4%	32%
2000	0.0963	0.0554	0.0873	0.0264	0.0222	0.1333	0.4208	12	23%	13%	21%	6%	5%	32%
2001	0.0910	0.0566	0.0766	0.0288	0.0248	0.1372	0.4150	13	22%	14%	18%	7%	6%	33%
2002	0.0957	0.0566	0.0748	0.0346	0.0302	0.1396	0.4315	10	22%	13%	17%	8%	7%	32%
2003	0.0937	0.0632	0.0731	0.0393	0.0343	0.1404	0.4440	9	21%	14%	16%	9%	8%	32%
2004	0.0949	0.0839	0.0748	0.0479	0.0397	0.1342	0.4754	8	20%	18%	16%	10%	8%	28%
2005	0.0927	0.0989	0.0796	0.0560	0.0517	0.1501	0.5290	7	18%	19%	15%	11%	10%	28%
2006	0.1085	0.1156	0.1074	0.0703	0.0695	0.1619	0.6332	6	17%	18%	17%	11%	11%	26%
2007	0.1146	0.1340	0.1173	0.0886	0.0889	0.1654	0.7089	5	16%	19%	17%	13%	13%	23%
2008	0.1325	0.1577	0.1343	0.1110	0.1094	0.1631	0.8080	4	16%	20%	17%	14%	14%	20%
2009	0.1489	0.1598	0.1481	0.1317	0.1273	0.1604	0.8762	3	17%	18%	17%	15%	15%	18%
2010	0.1651	0.1667	0.1667	0.1508	0.1461	0.1610	0.9564	2	17%	17%	17%	16%	15%	17%
2011	0.1667	0.1472	0.1612	0.1667	0.1667	0.1667	0.9751	1	17%	15%	17%	17%	17%	17%

Table 5.13 : Calculation of IFI for Urban India : Attribute wise breakdown of the Index $I_{0.75}$

Year	Individual Contribution						$I_{0.75}$	Rank	Percentage Contribution					
	Deposit A/c per 1000 population	Credit A/c per 1000 population	Branch per million population	Per capita deposit	Per capita credit	CDR			Deposit A/c per 1000 population	Credit A/c per 1000 population	Branch per million population	Per capita deposit	Per capita credit	CDR
1991	0.1173	0.0740	0.0840	0.0104	0.0096	0.1305	0.4257	21	28%	17%	20%	2%	2%	31%
1992	0.1175	0.0844	0.0817	0.0132	0.0107	0.1232	0.4308	19	27%	20%	19%	3%	2%	29%
1993	0.1190	0.0724	0.0829	0.0158	0.0134	0.1289	0.4325	18	28%	17%	19%	4%	3%	30%
1994	0.1243	0.0660	0.0822	0.0187	0.0148	0.1236	0.4295	20	29%	15%	19%	4%	3%	29%
1995	0.1254	0.0671	0.0973	0.0225	0.0193	0.1333	0.4650	17	27%	14%	21%	5%	4%	29%
1996	0.1202	0.0680	0.1145	0.0244	0.0230	0.1451	0.4951	13	24%	14%	23%	5%	5%	29%
1997	0.1171	0.0688	0.0992	0.0279	0.0249	0.1398	0.4778	15	25%	14%	21%	6%	5%	29%
1998	0.1136	0.0645	0.1008	0.0326	0.0281	0.1367	0.4762	16	24%	14%	21%	7%	6%	29%
1999	0.1118	0.0699	0.1029	0.0369	0.0316	0.1368	0.4899	14	23%	14%	21%	8%	6%	28%
2000	0.1104	0.0730	0.1026	0.0418	0.0367	0.1410	0.5055	11	22%	14%	20%	8%	7%	28%
2001	0.1059	0.0741	0.0930	0.0447	0.0400	0.1440	0.5017	12	21%	15%	19%	9%	8%	29%
2002	0.1100	0.0741	0.0914	0.0513	0.0462	0.1460	0.5189	10	21%	14%	18%	10%	9%	28%
2003	0.1082	0.0806	0.0898	0.0564	0.0509	0.1465	0.5325	9	20%	15%	17%	11%	10%	28%
2004	0.1093	0.0996	0.0914	0.0654	0.0568	0.1417	0.5641	8	19%	18%	16%	12%	10%	25%
2005	0.1074	0.1127	0.0957	0.0736	0.0692	0.1541	0.6127	7	18%	18%	16%	12%	11%	25%
2006	0.1208	0.1266	0.1199	0.0873	0.0864	0.1631	0.7041	6	17%	18%	17%	12%	12%	23%
2007	0.1259	0.1415	0.1281	0.1038	0.1040	0.1657	0.7690	5	16%	18%	17%	13%	14%	22%
2008	0.1403	0.1599	0.1417	0.1229	0.1215	0.1640	0.8504	4	16%	19%	17%	14%	14%	19%
2009	0.1531	0.1615	0.1526	0.1397	0.1362	0.1620	0.9050	3	17%	18%	17%	15%	15%	18%
2010	0.1655	0.1667	0.1667	0.1546	0.1510	0.1624	0.9669	2	17%	17%	17%	16%	16%	17%
2011	0.1667	0.1519	0.1626	0.1667	0.1667	0.1667	0.9811	1	17%	15%	17%	17%	17%	17%

Table 5.14 : Calculation of IFI for Urban India : Attribute wise breakdown of the Index $I_{0.50}$

	Individual Contribution								*Percentage Contribution*					
Year	Deposit A/c per 1000 population	Credit A/c per 1000 population	Branch per million population	Per capita deposit	Per capita credit	CDR	$I_{0.50}$	Rank	Deposit A/c per 1000 population	Credit A/c per 1000 population	Branch per million population	Per capita deposit	Per capita credit	CDR
1991	0.1319	0.0970	0.1055	0.0262	0.0248	0.1416	0.5271	21	25%	18%	20%	5%	5%	27%
1992	0.1320	0.1059	0.1036	0.0308	0.0267	0.1363	0.5353	20	25%	20%	19%	6%	5%	25%
1993	0.1331	0.0956	0.1046	0.0347	0.0311	0.1405	0.5396	18	25%	18%	19%	6%	6%	26%
1994	0.1371	0.0899	0.1040	0.0387	0.0331	0.1366	0.5394	19	25%	17%	19%	7%	6%	25%
1995	0.1379	0.0908	0.1164	0.0439	0.0396	0.1436	0.5724	17	24%	16%	20%	8%	7%	25%
1996	0.1340	0.0917	0.1298	0.0463	0.0445	0.1520	0.5982	14	22%	15%	22%	8%	7%	25%
1997	0.1317	0.0924	0.1179	0.0507	0.0469	0.1482	0.5879	16	22%	16%	20%	9%	8%	25%
1998	0.1291	0.0885	0.1192	0.0562	0.0508	0.1460	0.5898	15	22%	15%	20%	10%	9%	25%
1999	0.1277	0.0934	0.1208	0.0610	0.0550	0.1461	0.6041	13	21%	15%	20%	10%	9%	24%
2000	0.1267	0.0961	0.1206	0.0663	0.0608	0.1491	0.6195	11	20%	16%	19%	11%	10%	24%
2001	0.1232	0.0971	0.1130	0.0693	0.0643	0.1512	0.6181	12	20%	16%	18%	11%	10%	24%
2002	0.1263	0.0971	0.1116	0.0759	0.0709	0.1526	0.6344	10	20%	15%	18%	12%	11%	24%
2003	0.1250	0.1027	0.1104	0.0809	0.0756	0.1530	0.6475	9	19%	16%	17%	12%	12%	24%
2004	0.1258	0.1183	0.1116	0.0893	0.0813	0.1496	0.6759	8	19%	18%	17%	13%	12%	22%
2005	0.1243	0.1284	0.1151	0.0966	0.0928	0.1582	0.7155	7	17%	18%	16%	14%	13%	22%
2006	0.1345	0.1388	0.1338	0.1083	0.1076	0.1643	0.7872	6	17%	18%	17%	14%	14%	21%
2007	0.1382	0.1494	0.1398	0.1216	0.1217	0.1660	0.8368	5	17%	18%	17%	15%	15%	20%
2008	0.1486	0.1621	0.1496	0.1360	0.1350	0.1649	0.8963	4	17%	18%	17%	15%	15%	18%
2009	0.1575	0.1632	0.1571	0.1481	0.1457	0.1635	0.9351	3	17%	17%	17%	16%	16%	17%
2010	0.1659	0.1667	0.1667	0.1585	0.1560	0.1638	0.9776	2	17%	17%	17%	16%	16%	17%
2011	0.1667	0.1566	0.1639	0.1667	0.1667	0.1667	0.9872	1	17%	16%	17%	17%	17%	17%

Table 5.15: Calculation of IFI for Assam : Attribute wise breakdown of the Index I_1

Year	*Individual Contribution*						I_1	Rank	*Percentage Contribution*					
	Deposit A/c per 1000 population	Credit A/c per 1000 population	Branch per million population	Per capita deposit	Per capita credit	CDR			Deposit A/c per 1000 population	Credit A/c per 1000 population	Branch per million population	Per capita deposit	Per capita credit	CDR
1991	0.0000	0.0076	0.0053	0.0000	0.0000	0.0204	0.0334	20	0%	23%	16%	0%	0%	61%
1992	0.0074	0.0130	0.0050	0.0004	0.0007	0.0258	0.0523	8	14%	25%	10%	1%	1%	49%
1993	0.0109	0.0129	0.0047	0.0007	0.0009	0.0240	0.0540	7	20%	24%	9%	1%	2%	44%
1994	0.0141	0.0104	0.0042	0.0015	0.0008	0.0120	0.0430	15	33%	24%	10%	3%	2%	28%
1995	0.0221	0.0106	0.0039	0.0026	0.0011	0.0072	0.0473	11	47%	22%	8%	5%	2%	15%
1996	0.0197	0.0101	0.0035	0.0032	0.0015	0.0000	0.0379	17	52%	27%	9%	8%	4%	0%
1997	0.0247	0.0097	0.0024	0.0044	0.0017	0.0006	0.0437	14	57%	22%	6%	10%	4%	1%
1998	0.0248	0.0080	0.0020	0.0058	0.0019	0.0015	0.0440	13	56%	18%	4%	13%	4%	3%
1999	0.0217	0.0031	0.0016	0.0073	0.0023	0.0021	0.0380	16	57%	8%	4%	19%	6%	5%
2000	0.0163	0.0021	0.0010	0.0094	0.0032	0.0002	0.0322	21	51%	6%	3%	29%	10%	1%
2001	0.0161	0.0000	0.0009	0.0115	0.0042	0.0017	0.0343	18	47%	0%	3%	33%	12%	5%
2002	0.0109	0.0001	0.0002	0.0141	0.0050	0.0207	0.0509	9	21%	0%	0%	28%	10%	41%
2003	0.0099	0.0005	0.0005	0.0158	0.0050	0.0156	0.0473	12	21%	1%	1%	34%	11%	33%
2004	0.0071	0.0016	0.0003	0.0183	0.0065	0.0003	0.0342	19	21%	5%	1%	54%	19%	1%
2005	0.0086	0.0038	0.0003	0.0230	0.0095	0.0039	0.0491	10	17%	8%	1%	47%	19%	8%
2006	0.0168	0.0070	0.0000	0.0267	0.0139	0.0082	0.0726	6	23%	10%	0%	37%	19%	11%
2007	0.0223	0.0092	0.0003	0.0332	0.0180	0.0102	0.0932	5	24%	10%	0%	36%	19%	11%
2008	0.0312	0.0111	0.0010	0.0411	0.0211	0.0086	0.1141	4	27%	10%	1%	36%	18%	8%
2009	0.0512	0.0115	0.0016	0.0515	0.0243	0.0037	0.1438	3	36%	8%	1%	36%	17%	3%
2010	0.0688	0.0149	0.0022	0.0647	0.0294	0.0031	0.1832	2	38%	8%	1%	35%	16%	2%
2011	0.0839	0.0168	0.0026	0.0769	0.0337	0.0022	0.2161	1	39%	8%	1%	36%	16%	1%

Table 5.16 : Calculation of IFI for Assam : Attribute wise breakdown of the Index $I_{0.75}$

	Individual Contribution								*Percentage Contribution*					
Year	Deposit A/c per 1000 population	Credit A/c per 1000 population	Branch per million population	Per capita deposit	Per capita credit	CDR	$I_{0.75}$	Rank	Deposit A/c per 1000 population	Credit A/c per 1000 population	Branch per million population	Per capita deposit	Per capita credit	CDR
1991	0.0000	0.0164	0.0126	0.0000	0.0000	0.0345	0.0636	21	0%	26%	20%	0%	0%	54%
1992	0.0161	0.0246	0.0121	0.0019	0.0029	0.0411	0.0986	8	16%	25%	12%	2%	3%	42%
1993	0.0215	0.0244	0.0114	0.0029	0.0032	0.0389	0.1023	7	21%	24%	11%	3%	3%	38%
1994	0.0262	0.0207	0.0106	0.0048	0.0029	0.0232	0.0884	13	30%	23%	12%	5%	3%	26%
1995	0.0366	0.0211	0.0099	0.0073	0.0037	0.0158	0.0943	11	39%	22%	10%	8%	4%	17%
1996	0.0336	0.0203	0.0092	0.0086	0.0048	0.0000	0.0765	17	44%	27%	12%	11%	6%	0%
1997	0.0398	0.0198	0.0070	0.0109	0.0054	0.0026	0.0856	15	47%	23%	8%	13%	6%	3%
1998	0.0399	0.0171	0.0059	0.0134	0.0059	0.0049	0.0872	14	46%	20%	7%	15%	7%	6%
1999	0.0361	0.0083	0.0050	0.0159	0.0068	0.0062	0.0784	16	46%	11%	6%	20%	9%	8%
2000	0.0292	0.0062	0.0036	0.0194	0.0086	0.0010	0.0679	20	43%	9%	5%	29%	13%	1%
2001	0.0288	0.0000	0.0033	0.0224	0.0105	0.0054	0.0703	18	41%	0%	5%	32%	15%	8%
2002	0.0216	0.0007	0.0011	0.0261	0.0120	0.0348	0.0963	9	22%	1%	1%	27%	12%	36%
2003	0.0201	0.0022	0.0021	0.0285	0.0120	0.0281	0.0929	12	22%	2%	2%	31%	13%	30%
2004	0.0157	0.0052	0.0015	0.0318	0.0146	0.0014	0.0703	19	22%	7%	2%	45%	21%	2%
2005	0.0180	0.0098	0.0014	0.0377	0.0194	0.0101	0.0964	10	19%	10%	1%	39%	20%	10%
2006	0.0298	0.0155	0.0000	0.0422	0.0259	0.0174	0.1307	6	23%	12%	0%	32%	20%	13%
2007	0.0369	0.0189	0.0014	0.0497	0.0314	0.0205	0.1589	5	23%	12%	1%	31%	20%	13%
2008	0.0475	0.0218	0.0037	0.0584	0.0353	0.0180	0.1846	4	26%	12%	2%	32%	19%	10%
2009	0.0688	0.0225	0.0051	0.0690	0.0394	0.0096	0.2144	3	32%	10%	2%	32%	18%	4%
2010	0.0858	0.0272	0.0066	0.0819	0.0454	0.0084	0.2554	2	34%	11%	3%	32%	18%	3%
2011	0.0996	0.0299	0.0073	0.0933	0.0503	0.0064	0.2868	1	35%	10%	3%	33%	18%	2%

Table 5.17: Calculation of IFI for Assam : Attribute wise breakdown of the Index $I_{0.50}$

	Individual Contribution								*Percentage Contribution*					
Year	Deposit A/c per 1000 population	Credit A/c per 1000 population	Branch per million population	Per capita deposit	Per capita credit	CDR	$I_{0.50}$	Rank	Deposit A/c per 1000 population	Credit A/c per 1000 population	Branch per million population	Per capita deposit	Per capita credit	CDR
1991	0.0000	0.0356	0.0298	0.0000	0.0000	0.0584	0.1238	21	0%	29%	24%	0%	0%	47%
1992	0.0350	0.0465	0.0289	0.0085	0.0111	0.0656	0.1956	9	18%	24%	15%	4%	6%	34%
1993	0.0426	0.0463	0.0278	0.0111	0.0120	0.0632	0.2030	7	21%	23%	14%	5%	6%	31%
1994	0.0486	0.0416	0.0266	0.0156	0.0112	0.0448	0.1883	12	26%	22%	14%	8%	6%	24%
1995	0.0606	0.0420	0.0254	0.0207	0.0132	0.0346	0.1965	8	31%	21%	13%	11%	7%	18%
1996	0.0573	0.0410	0.0241	0.0231	0.0156	0.0000	0.1612	17	36%	25%	15%	14%	10%	0%
1997	0.0642	0.0403	0.0201	0.0271	0.0170	0.0104	0.1791	15	36%	22%	11%	15%	10%	6%
1998	0.0642	0.0366	0.0181	0.0310	0.0179	0.0160	0.1838	14	35%	20%	10%	17%	10%	9%
1999	0.0601	0.0226	0.0162	0.0348	0.0198	0.0185	0.1720	16	35%	13%	9%	20%	11%	11%
2000	0.0522	0.0185	0.0129	0.0397	0.0231	0.0054	0.15182	18	34%	12%	9%	26%	15%	4%
2001	0.0518	0.0000	0.0121	0.0438	0.0263	0.0169	0.1508	19	34%	0%	8%	29%	17%	11%
2002	0.0426	0.0044	0.0060	0.0484	0.0288	0.0587	0.1890	11	23%	2%	3%	26%	15%	31%
2003	0.0406	0.0092	0.0090	0.0514	0.0288	0.0509	0.1900	13	21%	5%	5%	27%	15%	27%
2004	0.0345	0.0165	0.0073	0.0553	0.0328	0.0070	0.1534	20	22%	11%	5%	36%	21%	5%
2005	0.0378	0.0252	0.0069	0.0619	0.0397	0.0256	0.1972	10	19%	13%	4%	31%	20%	13%
2006	0.0529	0.0342	0.0000	0.0667	0.0482	0.0369	0.2389	6	22%	14%	0%	28%	20%	15%
2007	0.0610	0.0391	0.0069	0.0744	0.0547	0.0412	0.2774	5	22%	14%	2%	27%	20%	15%
2008	0.0721	0.0430	0.0131	0.0828	0.0592	0.0379	0.3081	4	23%	14%	4%	27%	19%	12%
2009	0.0924	0.0438	0.0164	0.0926	0.0637	0.0249	0.3337	3	28%	13%	5%	28%	19%	7%
2010	0.1071	0.0498	0.0193	0.1038	0.0701	0.0228	0.3729	2	29%	13%	5%	28%	19%	6%
2011	0.1182	0.0530	0.0207	0.1132	0.0750	0.0191	0.3991	1	30%	13%	5%	28%	19%	5%

Table 5.18 : Calculation of IFI for Urban Assam : Attribute wise breakdown of the Index I_1

Year	*Individual Contribution*						I_1	Rank	*Percentage Contribution*					
	Deposit A/c per 1000 population	Credit A/c per 1000 population	Branch per million population	Per capita deposit	Per capita credit	CDR			Deposit A/c per 1000 population	Credit A/c per 1000 population	Branch per million population	Per capita deposit	Per capita credit	CDR
1991	0.0083	0.0015	0.0301	0.0000	0.0037	0.0062	0.0497	20	17%	3%	60%	0%	7%	12%
1992	0.0092	0.0063	0.0294	0.0004	0.0043	0.0070	0.0567	17	16%	11%	52%	1%	8%	12%
1993	0.0132	0.0061	0.0285	0.0004	0.0058	0.0066	0.0606	16	22%	10%	47%	1%	10%	11%
1994	0.0148	0.0029	0.0224	0.0010	0.0066	0.0031	0.0508	19	29%	6%	44%	2%	13%	6%
1995	0.0386	0.0031	0.0498	0.0031	0.0094	0.0024	0.1065	7	36%	3%	47%	3%	9%	2%
1996	0.0316	0.0021	0.0428	0.0033	0.0119	0.0021	0.0937	10	34%	2%	46%	4%	13%	2%
1997	0.0355	0.0024	0.0381	0.0044	0.0132	0.0007	0.0943	9	38%	3%	40%	5%	14%	1%
1998	0.0299	0.0032	0.0304	0.0059	0.0155	0.0004	0.0852	11	35%	4%	36%	7%	18%	0%
1999	0.0244	0.0002	0.0240	0.0068	0.0181	0.0003	0.0738	14	33%	0%	33%	9%	25%	0%
2000	0.0143	0.0005	0.0236	0.0087	0.0222	0.0019	0.07122	15	20%	1%	33%	12%	31%	3%
2001	0.0098	0.0011	0.0037	0.0114	0.0248	0.0037	0.0546	18	18%	2%	7%	21%	45%	7%
2002	0.0038	0.0000	0.0000	0.0132	0.0302	0.0024	0.0496	21	8%	0%	0%	27%	61%	5%
2003	0.0009	0.0001	0.0244	0.0154	0.0343	0	0.0750	13	1%	0%	32%	20%	46%	0%
2004	0.0009	0.0004	0.0238	0.0174	0.0397	0.0011	0.08330	12	1%	1%	29%	21%	48%	1%
2005	0.0000	0.0009	0.0302	0.0214	0.0517	0.0016	0.1058	8	0%	1%	29%	20%	49%	2%
2006	0.0200	0.0019	0.0353	0.0278	0.0695	0.0040	0.1584	6	13%	1%	22%	18%	44%	3%
2007	0.0261	0.0024	0.0500	0.0374	0.0889	0.0027	0.2075	5	13%	1%	24%	18%	43%	1%
2008	0.0274	0.0027	0.0735	0.0473	0.1094	0.0023	0.2625	4	10%	1%	28%	18%	42%	1%
2009	0.0333	0.0029	0.0595	0.0599	0.1273	0.0015	0.2844	3	12%	1%	21%	21%	45%	1%
2010	0.0306	0.0034	0.0936	0.0730	0.1461	0.0014	0.3483	2	9%	1%	27%	21%	42%	0%
2011	0.0411	0.0035	0.1179	0.0896	0.1667	0.0012	0.4201	1	10%	1%	28%	21%	40%	0%

Table 5.19 : Calculation of IFI for Urban Assam : Attribute wise breakdown of the Index $I_{0.75}$

Year	*Individual Contribution*						$I_{0.75}$	Rank	*Percentage Contribution*					
	Deposit A/c per 1000 population	Credit A/c per 1000 population	Branch per million population	Per capita deposit	Per capita credit	CDR			Deposit A/c per 1000 population	Credit A/c per 1000 population	Branch per million population	Per capita deposit	Per capita credit	CDR
1991	0.0175	0.0164	0.0461	0.0000	0.0096	0.0141	0.1037	19	17%	16%	44%	0%	9%	14%
1992	0.0190	0.0246	0.0454	0.0016	0.0107	0.0155	0.1168	17	16%	21%	39%	1%	9%	13%
1993	0.0248	0.0244	0.0443	0.0019	0.0134	0.0148	0.1237	15	20%	20%	36%	2%	11%	12%
1994	0.0271	0.0207	0.0370	0.0037	0.0148	0.0084	0.1117	18	24%	19%	33%	3%	13%	8%
1995	0.0556	0.0211	0.0674	0.0085	0.0193	0.0070	0.1788	7	31%	12%	38%	5%	11%	4%
1996	0.0478	0.0203	0.0601	0.0088	0.0230	0.0062	0.1662	9	29%	12%	36%	5%	14%	4%
1997	0.0523	0.0198	0.0551	0.0110	0.0249	0.0026	0.1657	10	32%	12%	33%	7%	15%	2%
1998	0.0459	0.0171	0.0465	0.0135	0.0281	0.0018	0.1529	11	30%	11%	30%	9%	18%	1%
1999	0.0394	0.0083	0.0390	0.0152	0.0316	0.0016	0.1350	13	29%	6%	29%	11%	23%	1%
2000	0.0264	0.0062	0.0385	0.0182	0.0367	0.0058	0.1318	14	20%	5%	29%	14%	28%	4%
2001	0.0199	0.0000	0.0096	0.0223	0.0400	0.0096	0.1014	20	20%	0%	9%	22%	39%	9%
2002	0.0098	0.0007	0.0000	0.0249	0.0462	0.0068	0.0886	21	11%	1%	0%	28%	52%	8%
2003	0.0032	0.0022	0.0394	0.0279	0.0509	0.0000	0.1236	16	3%	2%	32%	23%	41%	0%
2004	0.0033	0.0052	0.0387	0.0306	0.0568	0.0039	0.1385	12	2%	4%	28%	22%	41%	3%
2005	0.0000	0.0098	0.0463	0.0358	0.0692	0.0052	0.1663	8	0%	6%	28%	21%	42%	3%
2006	0.0340	0.0155	0.0521	0.0435	0.0864	0.0101	0.2417	6	14%	6%	22%	18%	36%	4%
2007	0.0415	0.0189	0.0676	0.0543	0.1040	0.0075	0.2938	5	14%	6%	23%	18%	35%	3%
2008	0.0430	0.0218	0.0902	0.0648	0.1215	0.0067	0.3481	4	12%	6%	26%	19%	35%	2%
2009	0.0498	0.0225	0.0770	0.0774	0.1362	0.0048	0.3676	3	14%	6%	21%	21%	37%	1%
2010	0.0467	0.0272	0.1082	0.0897	0.1510	0.0047	0.4275	2	11%	6%	25%	21%	35%	1%
2011	0.0584	0.0299	0.1286	0.1046	0.1667	0.0042	0.4924	1	12%	6%	26%	21%	34%	1%

Table 5.20: Calculation of IFI for Urban Assam : Attribute wise breakdown of the Index $I_{0.50}$

	Individual Contribution								*Percentage Contribution*					
Year	Deposit A/c per 1000 population	Credit A/c per 1000 population	Branch per million population	Per capita deposit	Per capita credit	CDR	$I_{0.50}$	Rank	Deposit A/c per 1000 population	Credit A/c per 1000 population	Branch per million population	Per capita deposit	Per capita credit	CDR
1991	0.0371	0.0160	0.0708	0.0000	0.0248	0.0322	0.1809	20	21%	9%	39%	0%	14%	18%
1992	0.0392	0.0325	0.0700	0.0077	0.0267	0.0343	0.2104	17	19%	15%	33%	4%	13%	16%
1993	0.0468	0.0318	0.0689	0.0086	0.0311	0.0332	0.2204	15	21%	14%	31%	4%	14%	15%
1994	0.0496	0.0220	0.0611	0.0131	0.0331	0.0228	0.2017	19	25%	11%	30%	6%	16%	11%
1995	0.0802	0.0228	0.0911	0.0229	0.0396	0.0200	0.2766	7	29%	8%	33%	8%	14%	7%
1996	0.0725	0.0189	0.0844	0.0235	0.0445	0.0185	0.2623	8	28%	7%	32%	9%	17%	7%
1997	0.0769	0.0199	0.0797	0.0272	0.0469	0.0105	0.2611	9	29%	8%	31%	10%	18%	4%
1998	0.0706	0.0229	0.0712	0.0312	0.0508	0.0081	0.2548	10	28%	9%	28%	12%	20%	3%
1999	0.0637	0.0052	0.0632	0.0337	0.0550	0.0075	0.2283	14	28%	2%	28%	15%	24%	3%
2000	0.0488	0.0091	0.0627	0.0381	0.0608	0.0178	0.2373	12	21%	4%	26%	16%	26%	7%
2001	0.0404	0.0137	0.0248	0.0436	0.0643	0.0249	0.2118	16	19%	6%	12%	21%	30%	12%
2002	0.0253	0.0000	0.0000	0.0470	0.0709	0.0198	0.1629	21	15%	0%	0%	29%	44%	12%
2003	0.0120	0.0042	0.0637	0.0506	0.0756	0.0000	0.2062	18	6%	2%	31%	25%	37%	0%
2004	0.0122	0.0087	0.0630	0.0538	0.0813	0.0137	0.2326	13	5%	4%	27%	23%	35%	6%
2005	0.0000	0.0124	0.0710	0.0597	0.0928	0.0166	0.25246	11	0%	5%	28%	24%	37%	7%
2006	0.0577	0.0177	0.0767	0.0681	0.1076	0.0258	0.3536	6	16%	5%	22%	19%	30%	7%
2007	0.0659	0.0200	0.0913	0.0789	0.1217	0.0211	0.3990	5	17%	5%	23%	20%	31%	5%
2008	0.0676	0.0211	0.1107	0.0888	0.1350	0.0196	0.4428	4	15%	5%	25%	20%	30%	4%
2009	0.0745	0.0219	0.0996	0.0999	0.1457	0.0157	0.4573	3	16%	5%	22%	22%	32%	3%
2010	0.0714	0.0239	0.1249	0.1103	0.1560	0.0154	0.5019	2	14%	5%	25%	22%	31%	3%
2011	0.0828	0.0242	0.1402	0.1222	0.1667	0.0144	0.5505	1	15%	4%	25%	22%	30%	3%

Table 5.21 : Principal Component Analysis

Variable	*Weights to variables corresponding to the eigenvector of the leading eigen value*			
	India	*Urban India*	*Assam*	*Urban Assam*
Branches per million population	0.34	0.94	0.07	0.91
No. of Credit a/cs per '000 population	0.89	0.92	0.29	0.07
Per Capita Credit amount	0.93	0.99	0.93	0.85
CDR	0.82	0.73	0.19	0.11
No. of Deposit a/cs per '000 population	0.92	0.76	0.89	0.51
Per Capita Deposit amount	0.88	0.98	0.93	0.87

Appendix V

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Urban Financial Inclusion: An Analysis Of Bankers' Perception An Empirical Study In Assam

Prof. Subhrangshu Sekhar Sarkar * & Ajanta Phatowali **

* Head, Department of Business Administration, Tezpur University, Assam
** Deputy General Manager, IDBI Bank Ltd, Guwahati, Assam

Abstract

Banks are playing the leading role in financial inclusion in India. Bank branches are the focal points for urban financial inclusion. This paper is a result of an empirical field study conducted among the bank branches in urban areas of Assam. The paper analyses how the bankers perceive the financial inclusion initiatives. Further, it examines how common issues are perceived differently by the bankers and the unbanked adults of the surveyed areas. Reasons identified by the bankers for sizable bankable people in urban areas opting for informal service providers are analysed. The authors conclude the paper with emphasis on awareness campaign and providing incentives to the bankers for making financial inclusion effective.

Key words : *Urban, Perception, Cost proposition, Attitude, Motivation*

Introduction

Banks are the main drivers of financial inclusion. Role of banks in combating Financial Exclusion has been discussed in many literatures. Bresler et al (2007) had discussed the role of German Savings Banks in preventing financial exclusion. It established that the public mandates of the banks had strong tie with access to financial services in the community and expressed concerns about the increasing pressure on the profitability of the banks that might lead to weaken banks ability to maintain the public mandate thereby increasing exclusion.

There are two schools of thought in analyzing the role of banks in Financial Inclusion, one as a part of bank's social responsibility and the other as a profitable business proposition. Prior and Argandona (2008) while analyzing the importance of banks' social responsibility specially in eradicating property and promoting Financial Inclusion, emphasizes that all decisions should take both dimensions of 'economic' and 'social' into account.

Approaching the goal of financial inclusion by the financial service providers in a profitable way is gaining importance. World Bank (2008) is of the opinion that efforts to improve financial inclusion should also make business sense to the providers to have a lasting effect. Prahlad (2005) has empirically established that innovations in finance may turn banking services to poor as a profitable business proposition. Kochhar (2009) identified that 'not for profit' mandate for providing financial access as a serious shortcomings in the current efforts towards Financial inclusion in India.

Leeladhar's (2005) definition of Financial Inclusion as delivery of *banking services* had received wide recognition in India. Chakravarty (2009) had identified banks as the key driver for inclusive growth specially to mitigate the supply side processes that prevent underprivileged from gaining access to the financial system. Role of banks in tackling Financial Exclusion in India had been analysed by Vats (2007) and Ramakumar (2007).

It has been observed that since 2005, banks in India are adopting policies on Financial Inclusion. The Reserve Bank of India (RBI) has taken many initiatives to give impetus to financial inclusion in the country such as simplified the branch authorization policy; relaxed Know Your Customer(KYC) Norms[i], introduction of 'No-frill' accounts, General Credit Cards, mobile banking; enlarging type of entities to operate as Business Correspondents; introducing CBS in RRBs; establishment of Financial Inclusion Fund and Financial Inclusion Technology Fund; establishment of Financial Literacy and Credit Counseling Centers; SHG bank linkage and Special Package for North Eastern Region etc. All these initiatives are to be implemented through banks more specifically the bank branches located across the wide and diverse geographies of the country. The bank branches are the focal points which can take banking to the mass or alternatively may restrict it to the privileged lot. On advice or instructions from RBI, banks have devised their policies for Financial Inclusion. However, success of such initiatives in true spirit largely depends on the performance of the bank branches. So, it's very important to know how these policies are being perceived by the branches and their observation on the issues of financial inclusion/ exclusion. This paper tries to analyse the perception of Branch Managers (BMs)[ii] as representative of branches so that necessary steps may be taken.

It is observed that studies on Financial Inclusion are mostly general and in Indian context, it is mostly rural based. There is also a tendency of treating urban exclusion as an extension of rural exclusion. In reality, the factors affecting financial exclusion in urban areas might be very different from those in rural areas. In India, population in urban areas is growing faster than in rural areas and at a much faster growth than the overall population growth. For the first time since Independence, the absolute increase in population is more in urban areas than in rural areas as per the census conducted in the country in 2011. The urbanization level in the country in the year 2021 is expected to be about 32%[iii]. This rapid growth of urbanization and urban population is necessitating a separate approach to address the problems with the urban poor as well as urban financial exclusion. The urban areas which have adequate infrastructure and presence of commercial banks, also have a large section of needy population which is deprived of the benefits from formal banking sector. The very existence of flourishing informal financial markets offering urban poor convenient access to money at high prices reveal a huge demand unmet by banks or other formal financial services. As the customers of banks in urban areas are gradually getting highly included in the formal financial system by way of availing more services of banks, the problem of the unbanked becomes more critical to integrate in such situation. Ultimately it may lead to bigger problem of social exclusion if not addressed timely.

Detail data on urban financial inclusion is not available. The report of the Committee on Financial Inclusion in India submitted in January 2008 under the Chairmanship of Mr. C. Rangarajan also noted that there is no clear estimate of the number of people in urban areas without access to organized financial services. Dr. Raghuram Rajan's Committee on Financial Sector Reforms noted that in urban India, 34% of workers in the lowest income quartile have savings and of whom only 60% have bank saving account. However, in the highest income quartile, 92% have financial savings and of whom 96% have saving bank account.

1. Assam

As on March 31, 2010, there is 1477 number of bank branches in Assam out of which 322 branches are located in urban areas. There are six urban banking areas of the state. Out of the total bank branches in the country, 1.69% branches are located in the state. These branches together account for 1.06% of the country's bank deposits and a mere 0.54% of the bank credit[iv]. Availability, penetration and usage of banking services in Assam have been low compared to national average. The *figures 1-4* below compare graphically the status of financial inclusion in Assam and in India for 15 years during 1996-2010 using the available supply side data from Reserve Bank of India sources[v] and published data on population from various government sources.

Analysis of available secondary data for the five parameters of financial inclusion mentioned above, shows that Assam lags behind the national average of the corresponding indicators in all years during 1996-2010, baring the number of credit accounts per thousand population in urban areas during 1996-1998. The gap between the state and national average is widening with time in absolute terms.

2. How bankers perceive?

In this back drop, we tried to study the perception of the BMs of various bank branches located at the urban banking locations of the state. The survey covers 100 branches of 31 banks operating in Assam. This consists of 75 branches of Public Sector Banks (PSBs) and 25 branches of Private Sector Banks.

Only opening of basic banking accounts or no-frill accounts have been assigned as targets to the urban branches surveyed. While examining the preparedness of the branches to meet the targets, it was observed that 95% of the Bank managers surveyed are confident that their staffs are adequately aware about no-frill accounts and such targets.

The BMs have ranked five main factors contributing towards exclusion in the urban areas. Rank 1 being the most important and Rank 5 being the least important factor.

- ✓ Rank 1 Ignorance about banking services
- ✓ Rank 2 Lack of KYC Documents
- ✓ Rank 3 Poor economic condition
- ✓ Rank 4 Unwillingness
- ✓ Rank 5 Unsuitability of bank's products and services

To have insight on the perception, the BMs were asked to rank the following seven statements on a five-point ordered scale from 'Highly Disagree' (-2 score) to 'Highly Agree' (+2 score).

- ➢ **Perception 1**. 'No-frill account' is a cost proposition for banks (P1)
- ➢ **Perception 2**. Although 'No-frill accounts' are aimed for the underprivileged, there is lack of awareness among them about such services of banks (P2)
- ➢ **Perception 3**. It is difficult to motivate your staff for opening of 'No-frill accounts' as there is barely any recognisition or reward for this activity (P3)
- ➢ **Perception 4**. Your town does not have adequate banking infrastructure to cater to all class of customers (P4)

- **Perception 5.** Financial inclusion initiatives by regulator/ governments/ banks are not getting proper importance in urban areas in comparison to rural areas (P5)
- **Perception 6.** Products and services of banks do not suitably cater to the needs of the underprivileged (P6)
- **Perception 7.** The underprivileged avoid coming to the bank due to their perception that bank staff will not welcome them (P7)

It may be noted here that each of the above seven statements indicates a situation which is adverse to financial inclusion. Therefore, a positive mean score in perception of any of these statements is an indication towards a limitation of financial inclusion.

Form Figure 6, we see an adverse result for perception P1 where the BMs agrees that 'No frill accounts' are actually 'Cost Proposition'. From discussions with them it was understood that they welcome the no-frill accounts. However, it is difficult to incur more expense for marketing of such accounts. Analysis of the response shows that it is a cost proposition as per majority (52.5%) of BMs. 53.3% of PSB respondents and 50% of Private bank respondents also consider it as a cost proposition. It is crucial to observe that a majority (59.2%) of the BMs who have been assigned targets for opening no-frill accounts, also consider that it is a cost proposition. Further many policy researchers have observed that 'not for profit' mandate of financial inclusion makes it a non-starter.

Likewise, adverse result for perception P2 is observed. 89% of the BMs surveyed agrees that there is lack of awareness among people from the underprivileged groups about these services of banks. This finding is in consistent with the finding of the demand side analysis of primary data collected at the same locations from 520 number of unbanked adults. It was found that 90% of the unbanked adults in those locations are not aware about no-frill accounts. 86% of the PSB respondents and 96% of Private Bank respondents feel that there is lack of awareness.

Analysis of perception about P3 shows that majority of the BMs (78%) do not feel that there is any difficulty in motivating their staff for opening of no frill accounts. However, 13% of the BMs agree that it becomes difficult for them to motivate their staff as there is barely any reward or recognition for opening no-frill accounts. Further, 74% of the BMs disagree to P7 and only 15% of them agree that the marginal sections may avoid coming to the bank due to the perception that the branch staff might not welcome them. Although no difficulty is perceived for motivating the branch staff, 82% of BMs feel that there is necessity to change the attitude of the branch staff to make the financial inclusion effective. These contradictory findings establish that there is some motivation or focus lacking on the part of the branch staff which needs to be addressed to make the initiatives of financial inclusion effective.

P5 is disagreed by 94% of BMs (including 27% strongly disagreeing) So, it may be concluded that infrastructure is not a bottleneck for inclusion in urban areas of the state.

P6 is disagreed by 76% of BMs (including 13% strongly disagreeing) as they perceive that the products and services offered by banks suitably cater to the needs to the underprivileged. However, due to lack of awareness about such products and services, the marginal sections are unable to derive benefits of such services of banks.

Opinions from BMs as well as the unbanked adults were collected and analysed about the following two statements –

- ✓ **Perception 8**. Banks do not offer the same standard of service to rich and poor (P8)
- ✓ **Perception 9**. Change in the attitude of bank staff is very important to make baking more inclusive (P9)

Figure 7 shows that though BMs mostly disagree to P8, the unbanked adults perceive that standard of services do vary between the rich and poor customers. This gap in perception needs attention of the bankers to act. Wide difference in opinion in this regard is observed among PSB and Private Bank respondents. 85% of PSB respondents and 56% of Private Bank respondents subscribe to the statement that same standard of service is offered to all class of customers. A large portion of Private Bank managers (44%) is of the opinion that the service standard varies with the economic class of customers. This difference in opinion is found to be significant (p=0.020 in Kruskal-Wallis Test at df 1).

Interestingly, compared to the unbanked, bankers found to more strongly agreeing to the fact that change in the attitude of bank staff is very important to bring more and more people from the underprivileged sections of the society to the banking fold.

3. Why so many bankable people prefer going to informal providers than a bank branch?

Let us know the answers of the above question from BMs in view of them perceiving that there is adequate banking infrastructure, suitable products and services, Government policies and well informed and motivated staff to make financial inclusion effective.

According to the BMs *Ignorance* is the most dominant reason for many bankable people opting for informal service providers. Further, people who think formalities of the banks are strict, KYC documents might not be available and products and services of banks might not be suitable for them may also be termed as ignorant about the services of bank specially about 'No-frill accounts'. If clubbed together, it accumulates to a sizable 60.26% of BMs pointing any of these reasons as the main reason for opting for informal financial services.

11.54% of the bank managers feel that it is due to *convenient service provided by informal providers*. It can also be termed as flexible services to suit the requirement of the clients such as delivery modes, frequency of deposit or repayments, door step services etc. Though such services are also available in banks, however, most of them are limited to very affluent customers and not to the marginalized sections.

The informal service providers lure the ignorant customers with abnormally *high returns* on their deposits. As per 6.41% of branch managers, many bankable people opt for informal providers on expectation of such high rate of return. Further, informal sources provide *credit in easier terms* than banks, which also attracts many bankable people to avail credit from such sources as per 6.41% bank managers surveyed. Though these credits are offered at very high cost, most of the customers are ignorant about it.Many 'bankable' and 'banked' people also route some transactions through informal providers *to hide* such transactions from the eye of statutory authorities. Such transactions are mostly related to undeclared or illegal source of resources.

According to many bank managers (5.13%), the *agents* also play a vital role in leading the bankable people to the informal providers. The agents mostly belong to the same locality or community and provide doorstep services at convenient time of the customers.

Unwillingness, Lack of Banking Habits and Unsuitable products and services are also identified by a small portion of branch managers as reasons for bankable people opting for services by informal providers.

4. Concluding remarks :

There are excellent initiatives by RBI and the banks towards making banking more inclusive. But the widespread unawareness about them among the targeted group is making such initiatives less effective. There is urgent need of mass media campaign. Specially designed awareness camps for urban areas need to be conducted.

As the bank branches are the key drivers of the inclusion drive, it is very important for the branches to have staff with the right attitude. Regulator/Govt/ Banks need to deliberate and device ways of reward and recognisition to the deserving staff who contributes significantly towards achieving the goal of financial inclusion. It will definitely go a long way towards changing the attitude of the branch staff and poor will feel welcomed every time they walk in to a bank branch.

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End notes

i KYC norms are guidelines that banks and FIs follow in identifying the customers, accepting them, monitoring their transactions and managing risk involved in the whole process. The objective of KYC guidelines is to prevent banks and FIs from being used, intentionally or unintentionally, by criminal elements for many money laundering activities. In the process, banks and FIs collect some documentary evidences from customers which are popularly known as 'KYC Documents'. These are mostly identification, signature and address verification documents.

ii. The word 'Branch Manager' has been used to mean the 'official' heading a particular bank branch. Designations vary from banks to banks and also as per the business profile of the branch.

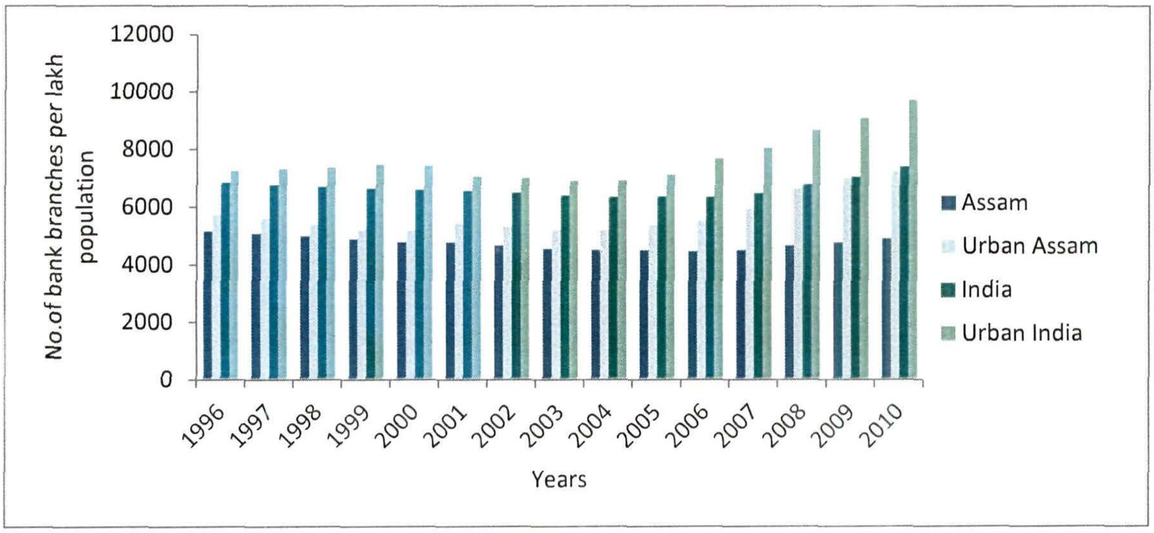
iii. Report of the Steering Committee on Urban Development for 11th Five year plan

iv. Basic Statistical Return of Scheduled Commercial Banks in India. Vol 39. 2010. Reserve Bank of India

v. Banking statistics are used from *Basic Statistical Returns of Scheduled Commercial Banks in India*. Vol 25 to 39. The census population groups are 'rural' and 'urban', whereas the population groups used by RBI are 'rural', 'semi-urban', 'urban' and 'metropolitan'. There is no unique relationship between the two. For comparison purpose, 'rural' and 'semi urban' are taken as 'rural', and 'urban' and 'metropolitan' are combined as 'urban' as applied by Mohan (2006).

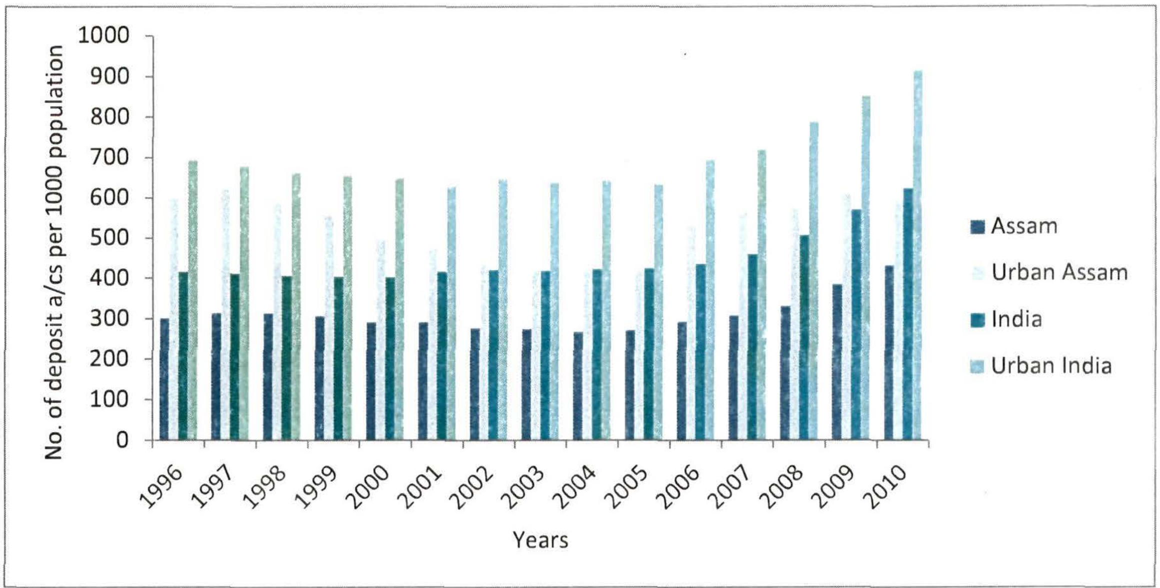
vi. Census data and *Population Projections for India and States 2001-2026 published by the* Office of the Registrar General & Census Commissioner of India are used.

Figure 1. *Availability* : Number of bank accounts per lakh population



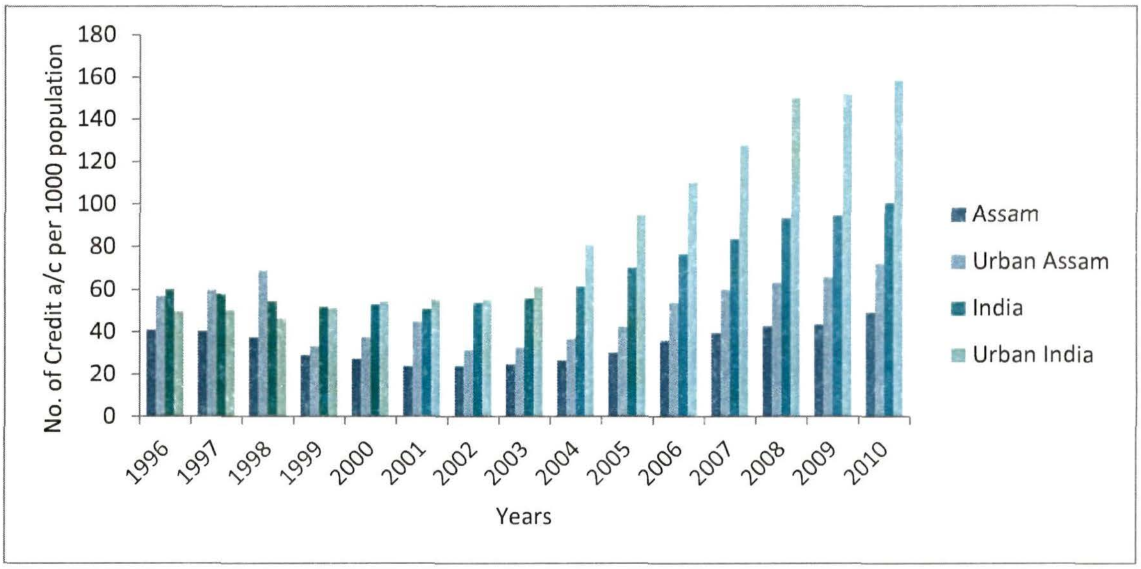
Source : Authors' calculation using RBI's data for Banking and Office of the Registrar General and Census Commissioner's data for population

Figure 2. *Penetration* : Number of Deposit accounts per 1000 population



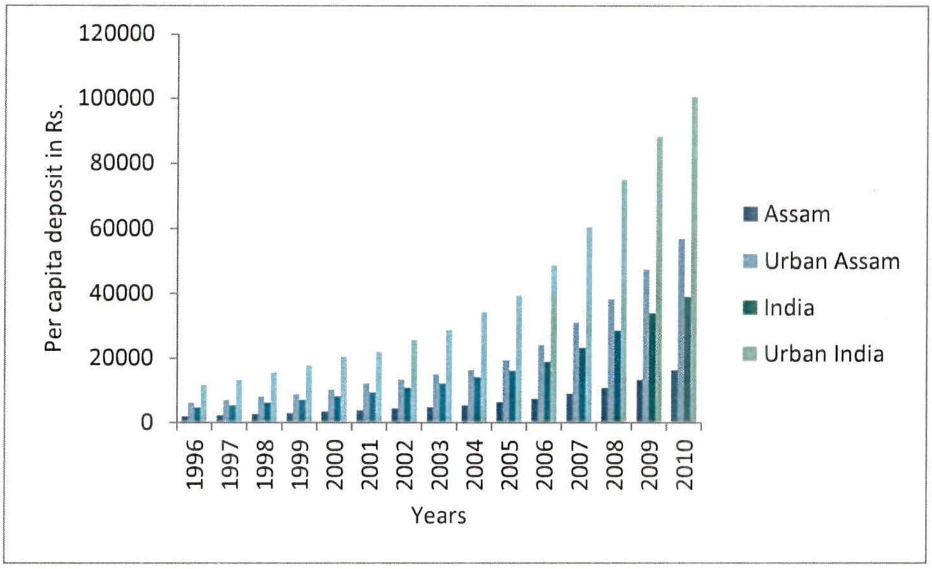
Source : Authors' calculation using RBI's data for Banking and Office of the Registrar General and Census Commissioner's data for population

Figure 3. *Penetration* : Number of Credit accounts per 1000 population



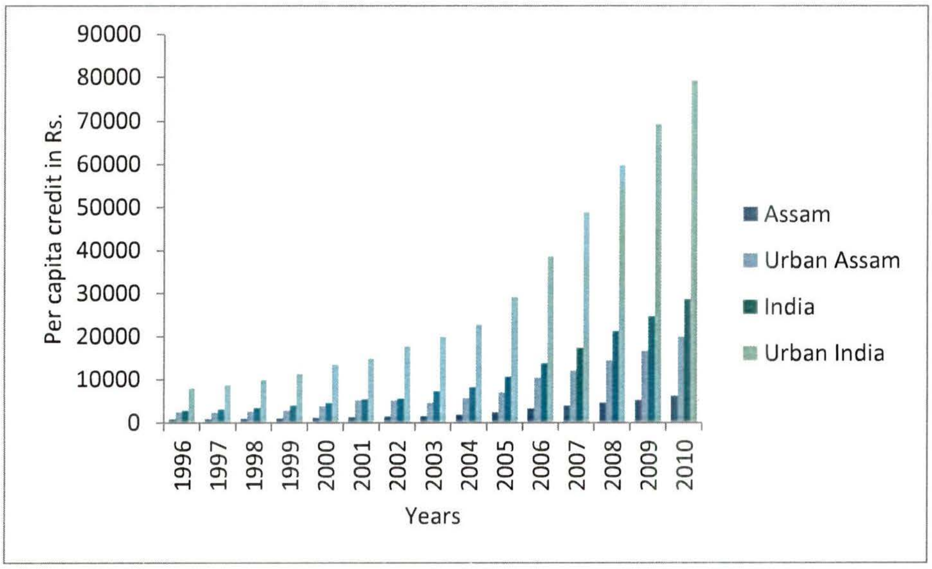
Source : Authors' calculation using RBI's data for Banking and Office of the Registrar General and Census Commissioner's data for population

Figure 4. *Usage* : Per Capita Deposit



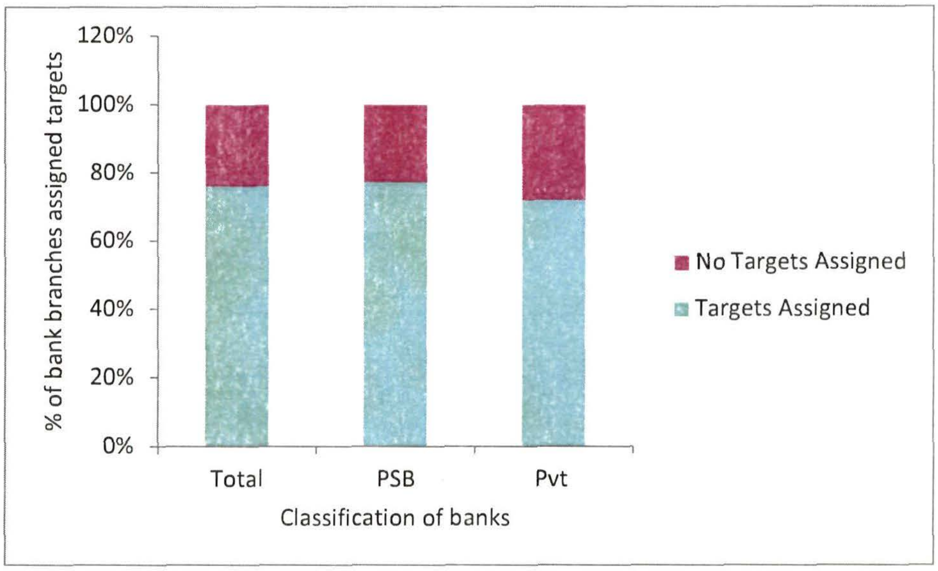
Source : Authors' calculation using RBI's data for Banking and Office of the Registrar General and Census Commissioner's data for population

Figure 5. *Usage* : Per Capita Deposit



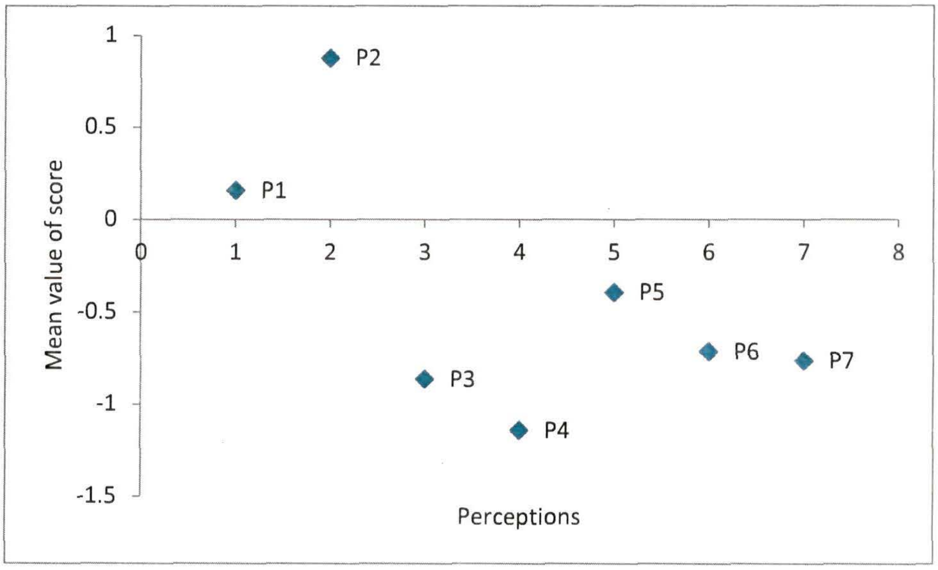
Source : Authors' calculation using RBI's data for Banking and Office of the Registrar General and Census Commissioner's data for population

Figure 6 : Assignment of targets for Financial Inclusion



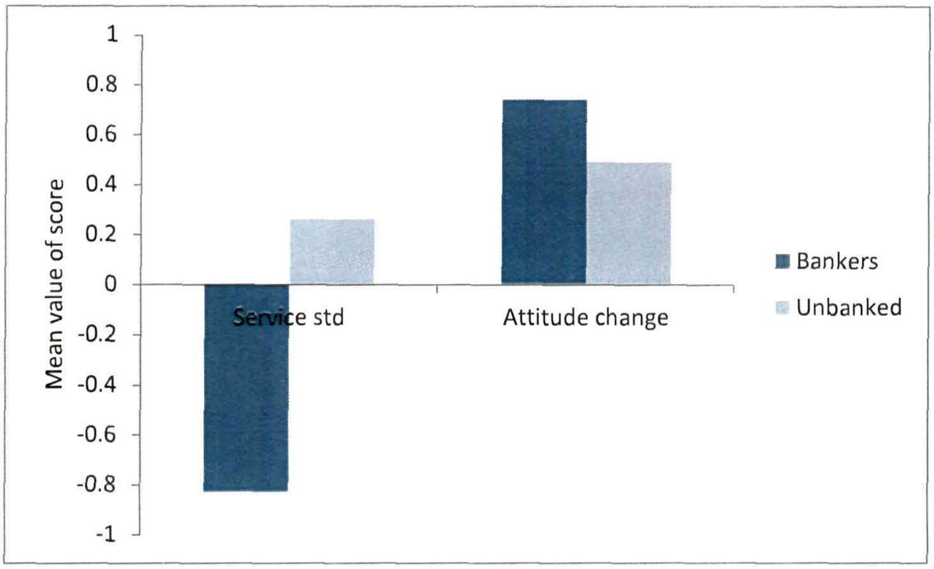
Source: Primary survey conducted by authors

Figure 6. Mean Score of Perception



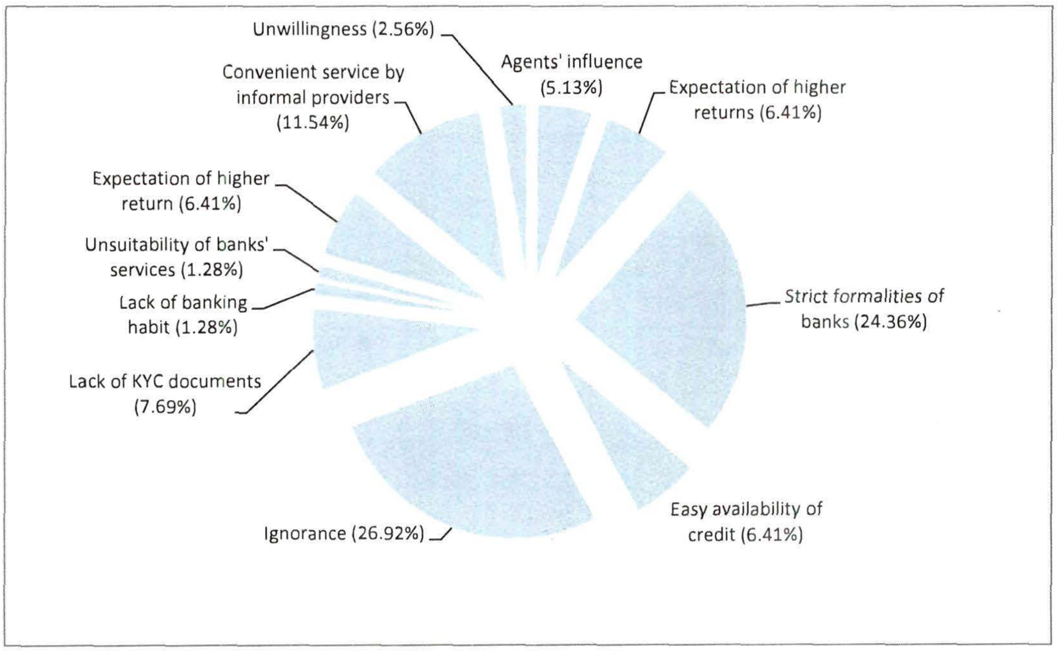
Source: Primary survey conducted by authors

Figure 7. Comparison of perception between BMs and Unbanked Adults



Source: Primary survey conducted by authors

Figure 8: Reasons of bankable people going to informal providers



Appendix VI

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Determinants of Saving Habits of Unbanked Urban Adults: an empirical study in Assam, India

Ajanta Phatowali, Tezpur University, Assam, India
&
Subhrangshu Sekhar Sarkar, Professor and Head, Dept. of Business Administration, Tezpur University

Abstract:

Saving has been the main mode adopted by poor to manage finance as raising loans at the time of need is difficult for them in general. The paper presents a comparative analysis of the saving accounts and amounts in banks for a period of 20 years (1991-2011) between the state of Assam and India. The paper presents an empirical analysis of various saving modes adopted by urban unbanked adults based on a primary survey conducted among urban unbanked adults in Assam. The analysis is done using binary logistic regression to identify the factors having significant effect on prediction of choice of a particular saving mode and measured the extent to which these factors influence.

Key words:
Saving, Unbanked, Urban, Logistic regression

Saving is the main tool adopted by poor people to manage finance. Many assessment studies by multilateral organizations establish that although there is higher demand for saving services, usage of formal financial institutions is low. Contrary to it, informal savings mechanisms are fulfilling key client preferences and being widely used.

Savings help the households to smooth consumption; to meet the large or unexpected expenditure; to prepare them to face economic shocks and to provide for old age when most of the income sources dry up. With systematic savings, the households can face economic shocks with less severity. However, the poor unbanked people are characterized by income which is low, irregular and uncertain. To tap the savings potentials of this customer segment effectively, the saving products of formal financial institutions should take into account these income characteristics.

As a sizable population is unbanked, it is important to know what the alternate saving options they are using are, what are the self reported reasons for choosing such alternatives and to identify the socio-economic factors influencing the choice of a particular saving alternative so that appropriate strategies can be adopted by the banks to tap these savings.

State Scenario:

Assam is a state of India located at the North Eastern part of the country. The state has a population of 3,11,69,272[i] spread over an area of 78,438 sq km. It consists of 2.57% of India's population in 2.38% of its total geographical area. Per capita income in the state is Rs.21,500/- [ii](Rs.35,917 for all India). As on March 31, 2011, there is 1546 number of bank branches in the state out of which 349 branches are located urban areas. There are six urban banking centres in Assam viz, Guwahati, Guwahati(Metro), Nagaon, Silchar, Dibrugarh and Tinsukia. 1.68% of the total bank branches in the country are located in the state. These branches together accounts for 1.09% of the country's bank deposits and a mere 0.52% of the bank credit.[iii]
On an average only 38.8% of population in the state maintains any savings bank account against the national average of 51.6% as on March 31, 2011. Per capita amount in saving account in the state is Rs.7,819/- against Rs.12,115/- for the country. In *Table 1 &2*, we have placed statistics on saving account for last two decades (1991-2010) in India as well as Assam respectively. Likewise same statistics for urban areas in the country as well as the state has been placed in *Table 3 & 4* respectively.

Figure 1: Number of savings accounts per thousand populations in Assam and India

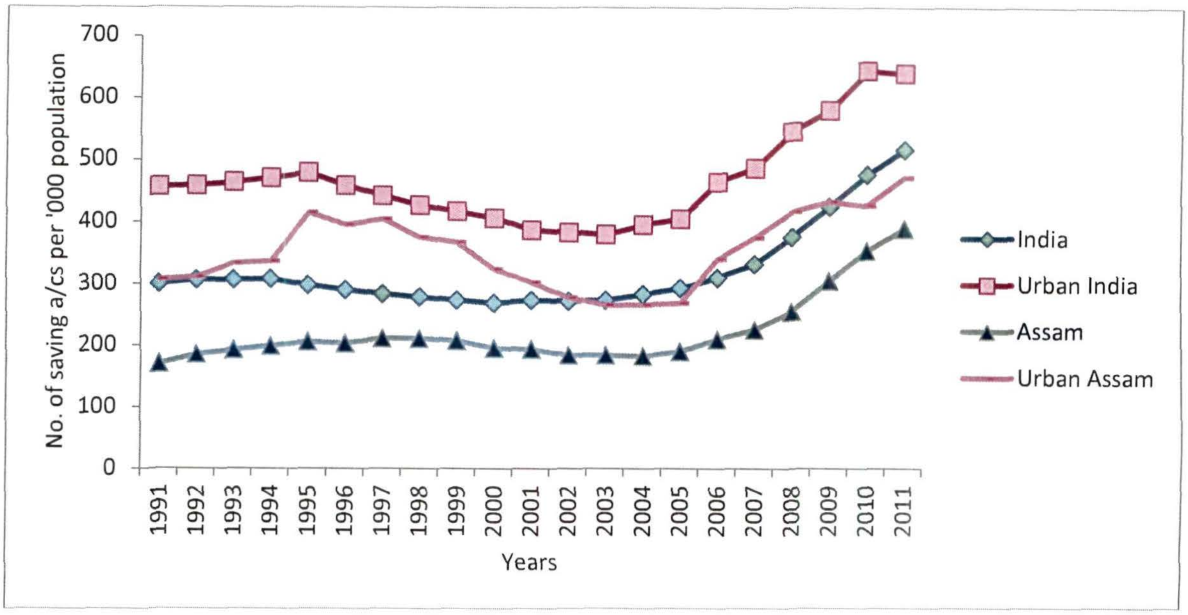
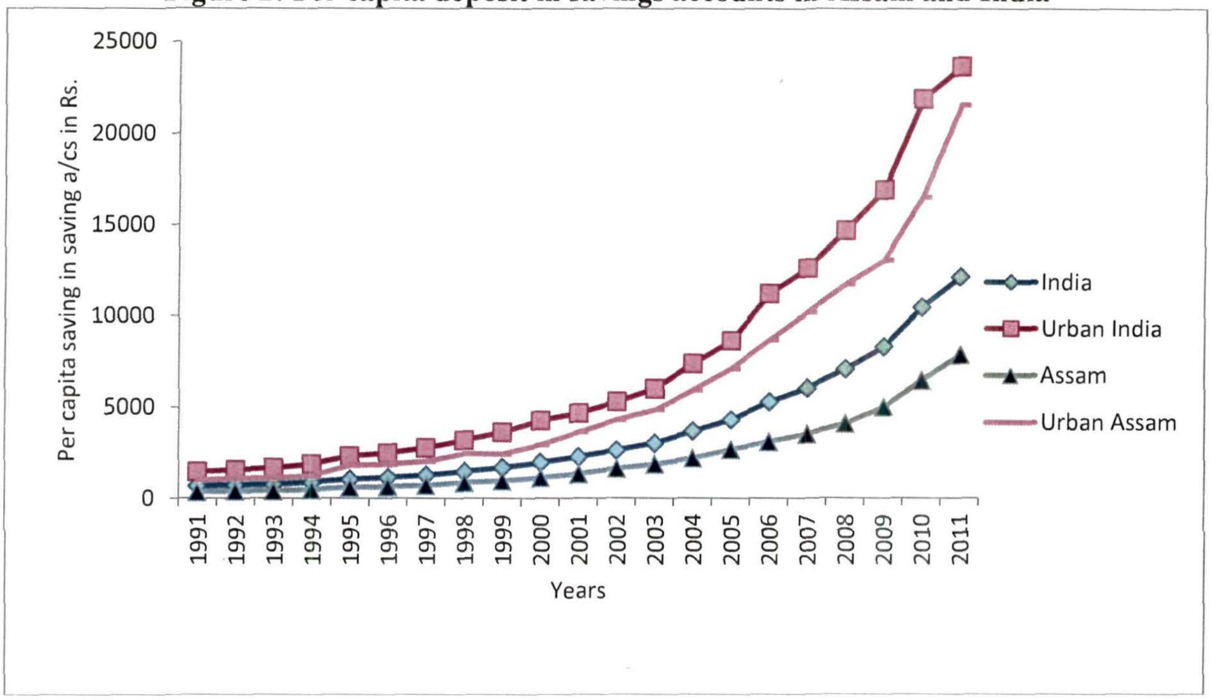


Figure 2: Per capita deposit in savings accounts in Assam and India



We have calculated the Average Annual Growth Rates (AAGR) of these indicators for the 21 years period during 1991-2011.

Table 1 : Saving accounts in India

Year	Population	No of saving a/c	No of saving a/c per 1000 popl	Amounts in the saving a/cs	Per capita amount in saving a/c
1991	846400000	253033505	299	5615193	663.42
1992	864597600	263900927	305	6250239	722.91
1993	883186448	269345349	305	6655546	753.58
1994	902174957	276497353	306	7803041	864.91
1995	921571719	273159000	296	9457257	1026.21
1996	941385511	272226000	289	10502535	1115.65
1997	961625299	271371000	282	11941489	1241.80
1998	982300243	272367000	277	14241200	1449.78
1999	1003419698	273210000	272	16701856	1664.49
2000	1024993222	274376000	268	19973368	1948.63
2001	1028600000	280026000	272	23224071	2257.83
2002	1045547000	283173000	271	27254253	2606.70
2003	1062388000	289211000	272	31894567	3002.16
2004	1079117000	304350000	282	39510161	3661.34
2005	1095722000	319999000	292	47072881	4296.06
2006	1112186000	343418000	309	58690436	5277.03
2007	1128521000	373511000	331	67907076	6017.35
2008	1144734000	429135000	375	80541170	7035.80
2009	1160813000	492136000	424	95968425	8267.35
2010	1176742000	559511000	475	123048621	10456.72
2011	1210193422	623997000	516	146621166	12115.52

Table 2 : Saving accounts in Assam

Year	Population	No of saving a/c	No of saving a/c per 1000 popl	Amounts in the saving a/cs	Per capita amount in saving a/c
1991	22400000	3793420	169	75400	336.61
1992	22823360	4219213	185	85759	375.75
1993	23254722	4462354	192	90271	388.18
1994	23694236	4690631	198	107371	453.15
1995	24142057	4947000	205	138517	573.76
1996	24598342	4973000	202	153165	622.66
1997	25063250	5275000	210	173246	691.24
1998	25536945	5371000	210	215247	842.88
1999	26019594	5379000	207	244610	940.10
2000	26511364	5161000	195	298398	1125.55
2001	26655528	5139000	193	352816	1323.61
2002	27071000	4966000	183	437659	1616.71
2003	27478000	5038000	183	505846	1840.91
2004	27878000	5071000	182	607602	2179.50
2005	28273000	5350000	189	750777	2655.46

2006	28665000	5993000	209	883094	3080.74
2007	29053000	6528000	225	1020787	3513.53
2008	29435000	7483000	254	1205168	4094.34
2009	29814000	9058000	304	1487335	4988.71
2010	30191000	10641000	352	1946987	6448.90
2011	31169272	12109000	388	2437122	7818.99

Table 3 : Saving accounts in Urban India

Year	Population	No of saving a/c	No of saving a/c per 1000 popl	Amounts in the saving a/cs	Per capita amount in saving a/c
1991	217778720	99230568	456	3084389	1416.29
1992	224595194	102744158	457	3439715	1531.52
1993	229423991	106095123	462	3735795	1628.34
1994	234356606	110020866	469	4314766	1841.11
1995	239395273	114331333	478	5462416	2281.76
1996	244542271	111875751	457	5972487	2442.31
1997	249799930	110121576	441	6826701	2732.87
1998	255170629	108656269	426	8054459	3156.50
1999	260656798	108294569	415	9374299	3596.41
2000	266260919	107829643	405	11296001	4242.46
2001	286100000	110205488	385	13258963	4634.38
2002	293041000	111886828	382	15404258	5256.69
2003	300043000	113560910	378	17923699	5973.71
2004	307111000	121041036	394	22483189	7320.87
2005	314234000	126867301	404	26993831	8590.36
2006	321400000	149061494	464	35980159	11194.82
2007	328616000	159685312	486	41356739	12585.13
2008	335891000	182895055	545	49255594	14664.16
2009	343213000	198764581	579	57946072	16883.41
2010	350569000	225381242	643	76760767	21896.05
2011	377105760	240917741	639	89196804	23652.99

Table 4 : Saving accounts in Urban Assam

Year	Population	No of saving a/c	No of saving a/c per 1000 popl	Amounts in the saving a/cs	Per capita amount in saving a/c
1991	2421440	739176	305	23226	959.18
1992	2523726	781061	309	26543	1051.74
1993	2630333	872276	332	28845	1096.63
1994	2741443	918655	335	32682	1192.15
1995	2857246	1181526	414	50501	1767.47
1996	2977941	1173455	394	53947	1811.55
1997	3103735	1250469	403	61644	1986.12
1998	3234842	1209053	374	77714	2402.40
1999	3371488	1233755	366	80586	2390.22
2000	3513906	1132581	322	101756	2895.81
2001	3439240	1033618	301	123912	3602.89

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2002	3545000	978565	276	150780	4253.31
2003	3653000	963901	264	176161	4822.37
2004	3761000	996115	265	221337	5885.06
2005	3871000	1034516	267	272964	7051.51
2006	3983000	1349426	339	343800	8631.68
2007	4097000	1531665	374	416135	10157.07
2008	4213000	1752111	416	493147	11705.36
2009	4330000	1870898	432	563171	13006.26
2010	4449000	1891503	425	733877	16495.32
2011	4388756	2066890	471	945827	21551.14

Table 5 : AAGR of saving account indicators

Indicators	AAGR during 1991-2010			
	India		Assam	
	Total	Urban	Total	Urban
No. of saving account per '000 population	3.45%	1.91%	6.16%	2.54%
Per capita amount in saving account	82.20%	74.76%	105.85%	102.23%

From the above table we have seen that saving account indicators in urban areas are growing at a lesser rate than that of the total area. Further, it is observed that the number of accounts have grown marginally against a very high growth of amounts in the saving accounts. From this, it may be derived that the saving is growing but concentrated in less number of accounts making it less inclusive.

As a sizable portion of population is without any savings bank account even in the urban areas of the state, we tried to know how they do save, what are the saving alternatives available for them. A sample survey was conducted among 520 numbers of unbanked urban adults of Assam with an objective to find answers to these questions. Study attempted to capture the reasons of using various saving modes by the unbanked urban adult respondents. The analysis below brings insight of the saving behavior as well as it attempts to identify the factors determining every saving instrument selection. These factors can be broadly classified as socio-economic factors, individual characteristics, awareness levels and financial factors like availability of loan, expected returns, convenience of transaction etc. The methodology used here are cross frequencies and regression analysis. The analysis attempts to bring out the relative contribution of each factor affecting the choice of a particular saving instrument.

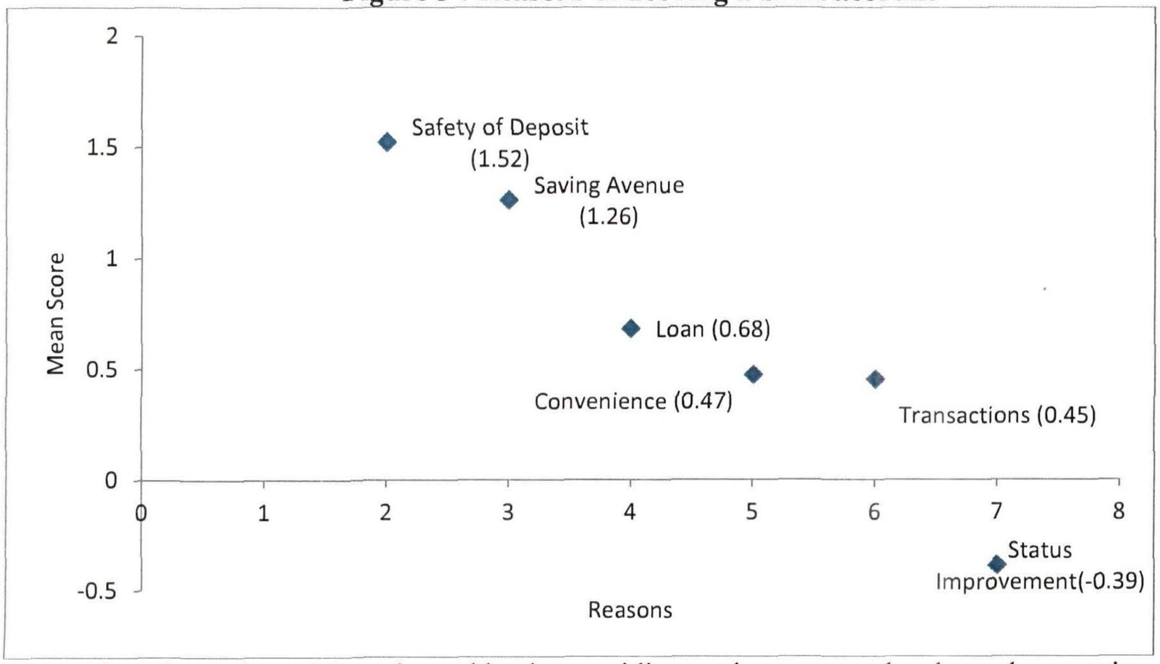
Table 6 : Respondents' profile

Characteristics	*Categories*	*% of respondents*
Gender	Male	55.8%
	Female	44.2%
Age in years	18-25	25.6%
	26-40	41.9%
	41-60	25.0%
	Above 60	7.5%
Education	Illiterate	14.8%
	Up to 4^{th} standard	11.3%
	Secondary level	17.7%
	Undergraduate	24%
	Graduate	19.4%
	Post graduate	7.9%
	Vocational/Technical	4.8%
Occupation	Student	13.7%
	Unemployed	14.4%

	Government service	1.9%
	Private service	19%
	Business	20.8%
	Self employed	13.1%
	Labour/ Domestic Help	16%
	Other	1%
Earning per month (in Rs.)	<1,000	14.62%
	1,000-<3,000	26.12%
	3,000-<6,000	27.10%
	6,000-<10,000	16.76%
	10,000 and above	15.40%
Position in the Household	Only earner	21.36%
	One of the earners	44.66%
	Dependent	33.98%
Household Size	<3	8.5%
	3-5	65.0%
	6-10	25.0%
	>10	1.2%

The respondents perceive that the banking infrastructure is adequate in their locations. It was also observed that 81.3% of respondents can reach the nearest banking unit within 15 minutes by their preferred mode of transport. Despite of having adequate infrastructure and feeling the need of a bank account, a sizable portion of urban adults are presently excluded from formal banking. It was found that 75.3% of respondents feel the need of a bank account. The need is felt due to various reasons starting from safety of deposits to improvement of social status. Various reasons were ranked by the respondents in a five-point scale from 'Strongly Disagree (-2)' to 'Strongly Agree (+2)'. The mean score is graphically represented in *Figure 3* below –

Figure 3 : Reasons of needing a bank account



It is evident that safety of deposits and banks providing saving avenues has been the prominent reasons for the respondents to feel the need of a bank account. These reasons score much higher than loans or convenience. It shows that demand for saving product is very high among the unabnked population too who tend to use informal providers for such services. As per RBI's report, there are 116 NBFCs operating in the North Eastern states, many of them collecting public deposits though they are not

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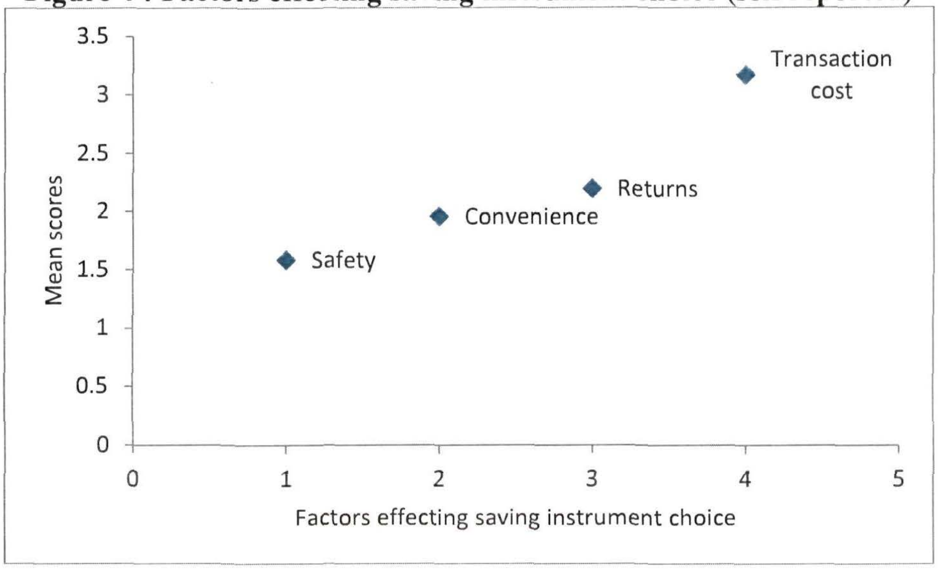
registered with any financial regulator. The Reserve Bank of India (RBI) has asked the north eastern states of the country to make a robust economic offence wing to enforce legislation like the Chit Fund Act. The central bank's advice came after the state reported various incidents of non-banking finance companies (NBFCs) hoodwinking the public. Majority of such activities are centered in Assam. It again proves that there is huge demand for saving activities in the state untapped by banks.

In absence of bank accounts, the respondents make use of various alternatives for saving. These alternatives are ranked below as per usage.

Rank	***Saving mode***
1	At home in cash
2	Chit fund
3	Village Committee
4	Religious organizations
5	SHGs
6	MFIs
7	In kinds (in jewellery, livestock, land etc)
8	Post Offices
9	NBFCs
10	Insurance
11	Mutual Fund
12	Others' account
13	No surplus
14	Any other mode than above

Further, the respondents have ranked factors according to their relative importance while deciding the mode of saving. The ranks were specified from 1-4, 1 being the most important and 4 being the least important factor. Mean score of these ranks are graphically presented in *Figure- 4* below. A lesser mean score means high importance.

Figure 4 : Factors effecting saving instrument choice (self reported)



From *Figure 4* it is observed that Safety is the most influential factor for the respondents on deciding a particular instrument for saving. It is followed by Convenience, Returns and Transaction Costs.

Although some factors have been shown in the *Figure 4* which influence the choice of saving instrument as reported by the respondents, it was felt that a multiple number of socio-economic factors, individual characteristics, awareness levels and financial factors like availability of loan, expected returns, convenience of transaction etc influence choice of various saving instruments. So,

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the authors attempted to identify the factors influencing the saving instrument choice and to assess the extent to which these factors operate. Binary logistic regression with categorical variables was conducted for this purpose.

A note on regression analysis

Logistic regression analyzes the relationship between multiple independent variables and a dependent variable and estimates the probability of occurrence of an event by fitting data to a logistic curve. Logistic regression allows the researcher to test models to predict categorical outcomes with two or more categories.

There can only be a single dependent variable with logistic regression. The dependent variable is usually dichotomous, that is, the dependent variable can take the value 1 with a probability of success 0, or the value 0 with probability of failure 1. This type of variable is called a binary variable. The independent variables can be either categorical or continuous, or a mix of both in one model. Since logistic regression calculates the probability or success over the probability of failure, the impact of predictor variables is usually explained in terms of odds ratios. In this way, logistic regression estimates the odds of a certain event occurring compared to a reference category. Binomial logistic regression by default predicts the higher of the two categories of the dependent (usually 1), using the lower (usually 0) as the reference category.

The regression analysis here examines the extent to which a factor relates to opting for a particular saving mode after holding constant the influence of all other factors. The factors that are deemed to have an independent relationship with the outcome measure are those with a p-value smaller than 0.05. These are called significant predictors and are indicated with * in the tables. Whilst identifying which factors are significant, the analysis also identifies which categories of factors significantly increases or decreases the odds of saving in a particular mode compared to a reference category. Categories that differ significantly from the reference category are again those that carry a p-value of less than 0.05. By definition, the reference category has an odds ratio of 1.0. An odds ratio of greater than 1.0 indicates that the odds of choosing a particular saving mode are increased relative to the reference category. Where odds ratio is less than 1.0, it indicates that the odds are decreased. It should also be noted here that the report only comments on results that are statistically significant.

The analysis also takes due care of multicollinearity. During the analysis process, there are ways to detect collinearity. Multicollinearity in logistic regression models is a result of strong correlations between independent variables. The existence of multicollinearity inflates the variances of the parameter estimates. That may result, particularly for small and moderate sample sizes, in lack of statistical significance of individual independent variables while the overall model may be strongly significant. Multicollinearity may also result in wrong signs and magnitudes of regression coefficient estimates, and consequently in incorrect conclusions about relationships between independent and dependent variable. Collinearity statistics viz. Tolerance and Variance Inflation Factor (VIF) are estimated for each dependent factor and placed in the tables following the regression tables in each case. Collinearity exists if Tolerance is less than 0.10 and VIF is 10 and above.

At the bottom of each table, a figure known as R^2 is given which indicates how well collectively the factors predict the outcome measure. An R^2 of between 0.15 and 0.50 is fairly typical in social research.

A series of regression analysis have been conducted with variables which are found to be independent on a multicolinearity test, to identify the influential factors behind every saving instrument choice. Relevant tables of these tests are presented at the end of this paper. Summary of this analysis is presented in the table below. It is found that Safety, Awareness and Location (place where the respondents live or earn livelihood) are the most influential factors to predict the choice of a saving instrument. It is followed by Age and Perception about the attitude of bank staff. Other factors like Position in the household, Income, Time required to reach the nearest banking unit, Gender, Education, Dwelling type etc are also found to be influential in predicting the choice of particular saving instrument. The odds of increasing/ decreasing the choice for a particular saving instrument is

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also shown for each category of the dependent variable in the Annexures 1 to 9. For example, Earning (Income) has been classified in six categories as per *Table 6* above and here odd of each category of income in prediction of a choice for saving instrument has been calculated so that we can measure the extent of influence of each category.

Table -7: Summary Table on analysis of factors effecting the saving instrument choice

Saving instrument	**Variables having significant effect on prediction of choice of saving instrument ***	**Remarks**
At home in cash	✓ Position in the Household ✓ Income Level (Mixed) ✓ Safety of Deposit (-ve) ✓ Awareness level about RD (-ve) ✓ Perception that change of attitude of bank staff in necessary (+ve)	Only earner in the Households are more likely to save in cash at home
Chit Fund	✓ Position in the Household ✓ Income Level (+ve) ✓ Location ✓ Education (+ve)	Only earner in the Households are more likely to save in cash at home.
ROSCAs	✓ Safety of Deposit (+ve)	
SHGs	✓ Place ✓ Awareness about RD (+ve) ✓ Safety of Deposit (-ve) ✓ Time required to reach the nearest bank branch (+ve)	
In kinds (namely jewellery, land, livestock, food grains etc.)	✓ Place ✓ Gender ✓ Age (+ve)	Odds are more with female respondents than male
NBFCs	✓ Age (+ve) ✓ Education Level (Mixed) ✓ Place ✓ Awareness about RD and CA ✓ Safety of Deposit (+ve) ✓ Perception that change of attitude of bank staff in necessary (+ve) ✓ Time required to reach the nearest bank branch from work place (+ve)	Nagaon possess the highest odds
Post Offices	✓ Age (+ve) ✓ Dwelling Type ✓ Place ✓ Awareness about FD and No-frill accounts (+ve) ✓ Perception that change of attitude of bank staff in necessary (+ve) ✓ Time required to reach the nearest bank branch from work place (+ve)	Dibrugarh possesses the highest odd
Insurance Instruments	✓ Place	'One of the earners' in the

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	✓ Awareness level about FD (+ve) ✓ Income Level (+ve) ✓ Safety of Deposit (+ve) ✓ Position in the household ✓ Perception that change of attitude of bank staff in necessary (+ve) ✓ Age (+ve)	household possesses more odds than 'the only earner'

*

'+ve' implies odds increases with the increase in the level of response towards the independent variable

'-ve' implies odds decreases with the increase in the level of response towards the independent variable

'Mixed' implies there is a mixed reaction of odds with the level of response towards the independent variable

Conclusion:

Although number of savings bank accounts and per capita amount in these accounts have grown annually at a higher rate in the state than that of the country for last two decades, the state lags behind the national average in number of accounts per 1000 population and per capita saving in these accounts. Savings accounts show a less inclusive growth as numbers are growing at a meager rate compared to the amounts indicating concentration of saving among a less number of account holders. From a field survey among unbanked urban adults in the state, it was found that though the unbanked feel the need of a bank account and infrastructure is not a limiting issue, they are still unbanked and depends upon various informal saving alternatives. It was also found that need of a bank account is felt more due to safety of deposits and as a saving avenue than as a source of loan facility. The thriving informal mechanisms that have evolved to meet the local needs for saving also reflect the demand for such services. The authors also identified the factors that influence the choice of a saving instrument and measured the extent to which it influences, so that appropriate measure can be taken to bring more people to the safety nets of banks. The need of the hour for this economically lagging state is to tap the saving potentials of the excluded people by the formal institutions by providing safe returns on savings and making effective use of collective savings for asset creation in the state.

Annexure – 1

Savings at home in cash

Logistic Regression predicting unbanked urban adults saving at home in cash

Factor	Category	Significance (p-value)	Odds Ratio (Exp B)
Awareness Level about Recurring Deposit	Adequately aware (Reference)	0.019	-
	Not aware	0.027	0.077
	Somewhat aware	0.293	0.316
Earnings per month in Rs.	>10000 (Reference)	0.399	-
	<1000	0.382	2.016
	1000 - <3000	0.342	1.997
	3000 - <6000	0.576	1.448
	6000 - <10000	0.053	6.021
Safety of deposit	Very Safe (Reference)	0.142	-

	Not Safe	0.999	6.143
	Somewhat Safe	0.909	1.111
	Safety not considered	0.035	0.210
	Safe	0.418	0.583
Position in the household	Dependent (Reference)	0.058	-
	Only earner	0.017	6.786
	One of the earners	0.221	1.912
Change of attitude of branch staff is required to bring more people to banking fold	Strongly Agree (Reference)	0.106	-
	Strongly Disagree	0.008	0.011
	Disagree	0.163	0.107
	Do not know	0.106	0.108
	Agree	0.227	0.199

Nagelkerke R Square = 0.319
Variables found to be not significant in the model are Age, Gender, Place, Education level, , Dwelling Type, Awareness level(about Savings Bank account, Current Account, Fixed Deposit, No frill account), Perception about banks (Service Standard is uniform for all customers).

Collinearity Coefficients[a]

	Collinearity Statistics	
	Tolerance	VIF
Dwelling type	.913	1.096
Place	.793	1.262
Awareness - SB A/c	.532	1.881
Awareness – CA	.365	2.736
Awareness – FD	.445	2.245
Awareness – RD	.491	2.036
Earnings per month	.781	1.281
Safety of deposit	.858	1.166
Household Size	.938	1.066
Position in the household	.725	1.380
No Frill a/c Awareness	.813	1.231
Opinion on Service Standard	.806	1.241
Attitude Change	.841	1.189
Gender	.846	1.181
Age	.749	1.335
Education	.555	1.802

@Dependent Variable – Saving at home in cash

Annexure -2

Savings at Chit Fund

Logistic Regression predicting unbanked urban adults saving in chit fund

Factor	Category	Significance (p-value)	Odds Ratio (Exp B)
Place	Tinsukia (Reference)	0.025	-
	Guwahati	0.036	4.374
	Nagaon	0.504	0.445
	Silchar	0.015	7.359
	Dibrugarh	0.462	0.439
Earnings per month in Rs.	>10000 (Reference)	0.003	-
	<1000	0.204	0.446
	1000 - <3000	0.334	1.629
	3000 - <6000	0.167	2.184
	6000 - <10000	0.119	2.311
Education	Vocational/ Technical	0.002	-
	Illiterate	0.400	0.458
	Up to 4^{th} standard	0.531	0.593
	Secondary level	0.828	0.831
	Undergraduate	0.591	1.532
	Graduate	0.488	1.885
	Post Graduate	0.035	5.692

Nagelkerke R Square = 0.528

Variables found to be not significant in the model are Age, Gender, Dwelling Type, Position of the respondent in the household, Household Size, Safety of deposit, Awareness level(about Savings Bank account, Current Account, Fixed Deposit, Recurring Deposit, No frill account), Perception about banks (Change of attitude of branch staff is necessary, Service Standard is uniform for all customers), Time required to reach the nearest bank branch (from residence and workplace.).

Collinearity Coefficients[a]

	Collinearity Statistics	
	Tolerance	VIF
Residence	0.909	1.100
Place	0.755	1.325
Awareness - SB A/c	0.491	2.037
Awareness – CA	0.365	2.737
Awareness – FD	0.444	2.250
Awareness – RD	0.487	2.053
Earnings per month	0.773	1.294
Safety of deposit	0.853	1.173
Household Size	0.933	1.072
Position in the household	0.717	1.395
No Frill a/c Awareness	0.804	1.243
Opinion on Service Standard	0.795	1.258
Attitude Change	0.826	1.211
Gender	0.843	1.186
Education	0.554	1.805
Age	0.732	1.367
Time required to reach the nearest bank branch from residence	0.747	1.339
Time required to reach the nearest bank branch from workplace	0.855	1.169

@Dependent Variable – Saving in Chit Fund

Annexure -3

Saving in ROSCA

Logistic Regression predicting unbanked urban adults saving in ROSCAs

Factor	Category	Significance (p-value)	Odds Ratio (Exp B)
Safety of deposit	Very safe (Reference)	0.223	-
	Not safe	0.999	0.001
	Somewhat safe	0.026	0.120
	Not considered the safety aspect	0.174	0.324
	Safe	0.527	0.708

Nagelkerke R Square = 0.539

Variables found to be not significant in the model are Age, Gender, Place, Education level, Income level, Dwelling Type, Position of the respondent in the household, Household Size, Awareness level(about Savings Bank account, Current Account, Fixed Deposit, Recurring Deposit, No frill account), Perception about banks (Change of attitude of branch staff is necessary, Service Standard is uniform for all customers), Time required to reach the nearest bank branch (from residence and workplace).

Collinearity Coefficients[a]

	Collinearity Statistics	
	Tolerance	VIF
Residence	0.910	1.099
Place	0.755	1.325
Awareness - SB A/c	0.490	2.041
Awareness – CA	0.366	2.730
Awareness – FD	0.446	2.241
Awareness – RD	0.488	2.049
Earnings per month	0.775	1.291
Safety of deposit	0.853	1.173
Household Size	0.932	1.072
Position in the household	0.717	1.395
No Frill a/c Awareness	0.797	1.255
Opinion on Service Standard	0.792	1.262
Attitude Change	0.826	1.211
Gender	0.843	1.187
Education	0.556	1.798
Age	0.737	1.357
Time required to reach the nearest bank branch from residence	0.746	1.340
Time required to reach the nearest bank branch from workplace	0.853	1.172

@Dependent Variable – Saving in ROSCA

Annexure -4

Saving in Religious Institutions, Mutual Funds and Bank Account of others

To identify the factors influencing each of these saving modes, three separate regression analysis were run with factors viz., Age, Gender, Place, Education level, Income level, Dwelling Type, Position of the respondent in the household, Household Size, Safety of deposit, Awareness level(about Savings Bank account, Current Account, Fixed Deposit, Recurring Deposit, No frill account), Perception about banks (Change of attitude of branch staff is necessary, Service Standard is uniform for all customers), Time required to reach the nearest bank branch (from residence and workplace). The regression analysis shows that none of the above factors is having significant influence in predicting respondents' choice of saving in Religious Institutions or Mutual Funds or saving in account of others.

Nagelkerke R Square of the models are as below

Saving Mode	*Nagelkerke R Square*
Religious Institutions	0.569
Mutual Funds	1.000
Bank Account of Others	0.470

The analysis shows that all the factors tested in the regression analysis are independently related to the dependent variable.

Collinearity Coefficients[a]

	Religious Institutions		Mutual Funds		Bank account of others	
	Tolerance	VIF	Tolerance	VIF	Tolerance	VIF
Residence	0.913	1.096	0.912	1.096	0.912	1.096
Place	0.785	1.274	0.786	1.272	0.786	1.272
Awareness - SB A/c	0.533	1.876	0.533	1.877	0.533	1.877
Awareness – CA	0.369	2.710	0.368	2.716	0.368	2.716
Awareness – FD	0.448	2.230	0.447	2.238	0.447	2.238
Awareness – RD	0.496	2.018	0.494	2.023	0.494	2.023
Earnings per month	0.778	1.285	0.769	1.300	0.769	1.300
Safety of deposit	0.858	1.166	0.858	1.166	0.858	1.166
Household Size	0.937	1.067	0.938	1.066	0.938	1.066
Position in the household	0.717	1.395	0.715	1.400	0.715	1.400
No Frill a/c Awareness	0.821	1.219	0.821	1.218	0.821	1.218
Opinion on Service Standard	0.807	1.240	0.802	1.247	0.802	1.247
Attitude Change	0.840	1.190	0.838	1.193	0.838	1.193
Gender	0.839	1.192	0.831	1.203	0.831	1.203
Education	0.557	1.795	0.552	1.811	0.552	1.811
Age	0.748	1.337	0.745	1.343	0.745	1.343
Time required to reach the nearest bank branch from residence	0.761	1.314	0.760	1.316	0.760	1.316
Time required to reach the nearest bank branch from workplace	0.868	1.152	0.867	1.154	0.867	1.154

@Dependent Variable – Saving in Religious Institutions, Mutual Funds, Bank account of others

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Annexure 5

Saving at SHG

Logistic Regression predicting unbanked urban adults saving in SHGs

Factor	*Category*	*Significance (p-value)*	*Odds Ratio (Exp B)*
Place	Tinsukia (Reference)	0.014	-
	Guwahati	0.633	1.657
	Nagaon	0.223	6.118
	Silchar	0.997	0.000
	Dibrugarh	0.002	67.364
Awareness –RD	Adequately aware (Reference)	0.015	-
	Not aware	0.008	0.063
	Somewhat aware	0.219	0.276
Safety of deposit	Very safe (Reference)	0.033	-
	Not safe	0.009	127.419
	Somewhat safe	0.594	1.590
	Not considered the safety aspect	0.547	1.775
	Safe	0.604	0.661
Time required to reach the nearest bank branch from residence	>30 mnts (Reference)	0.227	-
	<5 mnts	0.998	0.000
	5-15 mnts	0.272	2.704
	16-30 mnts	0.039	8.796

Nagelkerke R Square = 0.665

Variables found to be not significant in the model are Age, Gender, Education, Dwelling Type, Position of the respondent in the household, Household Size, Income, Awareness level(about Savings Bank account, Current Account, Fixed Deposit, No frill account), Perception about banks (Change of attitude of branch staff is necessary, Service Standard is uniform for all customers), Time required to reach the nearest bank branch from workplace.

Collinearity Coefficients[a]

	Collinearity Statistics	
	Tolerance	VIF
Residence	0.907	1.103
Place	0.719	1.391
Awareness - SB A/c	0.522	1.915
Awareness – CA	0.360	2.779
Awareness – FD	0.436	2.294
Awareness – RD	0.492	2.034
Earnings per month	0.748	1.336
Safety of deposit	0.851	1.176
Household Size	0.933	1.071
Position in the household	0.694	1.267
No Frill a/c Awareness	0.789	1.240
Opinion on Service Standard	0.807	1.224
Attitude Change	0.817	1.204
Gender	0.831	1.868
Education	0.535	1.373
Age	0.729	1.364
Time required to reach the nearest bank branch from residence	0.733	1.183

Time required to reach the nearest bank branch from workplace	0.845	1.063

@Dependent Variable – Saving in SHGs

Annexure 6
Saving in kinds
Logistic Regression predicting unbanked urban adults saving in SHGs

Factor	*Category*	*Significance (p-value)*	*Odds Ratio (Exp B)*
Place	Tinsukia (Reference)	0.001	-
	Guwahati	0.084	0.335
	Nagaon	0.758	0.748
	Silchar	0.000	0.009
	Dibrugarh	0.405	2.00
Age	>60 years (Reference)	0.001	-
	18-25 years	0.000	0.061
	26-40 years	0.014	0.203
	41-60 years	0.138	0.398

Nagelkerke R Square = 0.469

Variables found to be not significant in the model are Education level, Income level, Dwelling Type, Position of the respondent in the household, Household Size, Safety of deposit, Awareness level(about Savings Bank account, Current Account, Fixed Deposit, Recurring Deposit, No frill account), Perception about banks (Change of attitude of branch staff is necessary, Service Standard is uniform for all customers), Time required to reach the nearest bank branch (from residence and workplace).

Collinearity Coefficients[a]

	Collinearity Statistics	
	Tolerance	VIF
Residence	0.907	1.103
Place	0.719	1.391
Awareness - SB A/c	0.522	1.915
Awareness – CA	0.360	2.779
Awareness – FD	0.436	2.294
Awareness – RD	0.492	2.034
Earnings per month	0.748	1.336
Safety of deposit	0.851	1.176
Household Size	0.933	1.071
Position in the household	0.694	1.440
No Frill a/c Awareness	0.789	1.267
Opinion on Service Standard	0.807	1.240
Attitude Change	0.817	1.224
Gender	0.831	1.204
Education	0.535	1.868
Age	0.729	1.373
Time required to reach the nearest bank branch from residence	0.733	1.364
Time required to reach the nearest bank branch from workplace	0.845	1.183

@Dependent Variable – Saving in kinds

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Annexure -7
Saving in NBFCs

Logistic Regression predicting unbanked urban adults saving in NBFCs

Factor	*Category*	*Significance (p-value)*	*Odds Ratio (Exp B)*
Place	Tinsukia (Reference)	0.000	-
	Guwahati	0.004	0.109
	Nagaon	0.018	33.548
	Silchar	0.482	1.900
	Dibrugarh	0.899	0.882
Awareness –CA	Adequately aware (Reference)	0.001	-
	Not aware	0.152	0.303
	Somewhat aware	0.258	2.086
Awareness –RD	Adequately aware (Reference)	0.011	-
	Not aware	0.230	0.441
	Somewhat aware	0.323	1.819
Safety of deposit	Very safe (Reference)	0.183	-
	Not safe	0.999	0.000
	Somewhat safe	0.267	2.509
	Not considered the safety aspect	0.528	1.716
	Safe	0.044	4.548
Change of attitude of branch staff is required to bring more people to banking fold	Strongly Agree (Reference)	0.025	-
	Strongly Disagree	0.888	0.914
	Disagree	0.691	2.149
	Do not know	0.030	4.701
	Agree	0.025	7.024
Education	Vocational/ Technical	0.095	-
	Illiterate	0.214	3.824
	Up to 4th standard	0.007	11.620
	Secondary level	0.133	3.733
	Undergraduate	0.517	1.736
	Graduate	0.150	3.491
	Post Graduate	0.120	4.845
Age	>60 years (Reference)	0.001	-
	18-25 years	0.617	0.623
	26-40 years	0.100	4.037
	41-60 years	0.014	7.970
Time required to reach the nearest bank branch from workplace	>30 mnts (Reference)	0.025	-
	NA	0.181	9.369
	<5 mnts	0.266	6.645
	5-15 mnts	0.206	9.125
	16-30 mnts	0.006	244.947

Nagelkerke R Square = 0.686

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Variables found to be not significant in the model are Gender, Income level, Dwelling Type, Position of the respondent in the household, Household Size, Awareness level(about Savings Bank account, Fixed Deposit, No frill account), Perception about banks (Service Standard is uniform for all customers), Time required to reach the nearest bank branch from residence.

Collinearity Coefficients[a]

	Collinearity Statistics	
	Tolerance	VIF
Dwelling type	.910	1.099
Place	.772	1.295
Awareness - SB A/c	.531	1.884
Awareness – CA	.364	2.746
Awareness – FD	.444	2.252
Awareness – RD	.497	2.013
Earnings per month	.763	1.310
Safety of deposit	.853	1.173
Household Size	.937	1.068
Position in the household	.714	1.401
No Frill a/c Awareness	.809	1.236
Opinion on Service Standard	.807	1.238
Attitude Change	.830	1.204
Gender	.839	1.192
Age	.547	1.829
Education	.737	1.357

@Dependent Variable – Saving in NBFCs

Annexure - 8
Saving in Post Offices
Logistic Regression predicting unbanked urban adults saving in Post Officess

Factor	*Category*	*Significance (p-value)*	*Odds Ratio (Exp B)*
Place	Tinsukia (Reference)	0.000	-
	Guwahati	0.005	0.159
	Nagaon	0.633	0.639
	Silchar	0.973	0.974
	Dibrugarh	0.020	9.094
Awareness –FD	Adequately aware (Reference)	0.033	-
	Not aware	0.009	0.158
	Somewhat aware	0.174	0.502
Awareness –No frill accounts	Adequately aware (Reference)	0.016	-
	Not aware	0.019	0.010
	Somewhat aware	0.006	0.005
Dwelling Type	Other (Reference)	0.045	-
	Owned	0.353	3.757

	Rented	0.488	2.691
	Illegal	0.999	0.000
	Common	0.895	1.261
	Official	0.085	0.039
Change of attitude of branch staff is required to bring more people to banking fold	Strongly Agree (Reference)	0.069	-
	Strongly Disagree	0.091	0.204
	Disagree	0.072	0.248
	Do not know	0.029	0.256
	Agree	0.019	0.298
Age	>60 years (Reference)	0.012	-
	18-25 years	0.660	0.698
	26-40 years	0.445	1.758
	41-60 years	0.072	3.708
Time required to reach the nearest bank branch from workplace	>30 mnts (Reference)	0.100	-
	NA	0.014	0.059
	<5 mnts	0.019	0.061
	5-15 mnts	0.031	0.067
	16-30 mnts	0.222	0.229

Nagelkerke R Square = 0.561

Variables found to be not significant in the model are Gender, Education level, Income level, Position of the respondent in the household, Household Size, Safety of deposit, Awareness level(about Savings Bank account, Current Account, Recurring Deposit, No frill account), Perception about banks (Service Standard is uniform for all customers), Time required to reach the nearest bank branch from residence.

Collinearity Coefficients[a]

	Collinearity Statistics	
	Tolerance	VIF
Dwelling type	.910	1.099
Place	.794	1.259
Awareness - SB A/c	.524	1.907
Awareness – CA	.364	2.747
Awareness – FD	.445	2.250
Awareness – RD	.496	2.015
Earnings per month	.778	1.285
Safety of deposit	.852	1.173
Household Size	.935	1.069
Position in the household	.716	1.397
No Frill a/c Awareness	.815	1.227
Opinion on Service Standard	.808	1.238
Attitude Change	.845	1.184
Gender	.836	1.197
Age	.549	1.820
Education	.745	1.342

@Dependent Variable – Saving in Post Offices

Annexure -9
Saving in Insurance Instruments

Logistic Regression predicting unbanked urban adults saving in Insurance Instruments

Factor	*Category*	*Significance (p-value)*	*Odds Ratio (Exp B)*
Place	Tinsukia (Reference)	0.005	-
	Guwahati	0.001	0.085
	Nagaon	0.388	0.392
	Silchar	0.001	0.022
	Dibrugarh	0.492	0.522
Awareness –FD	Adequately aware (Reference)	0.080	-
	Not aware	0.028	0.185
	Somewhat aware	0.106	0.387
Earnings per month in Rs.	>10000 (Reference)	0.261	-
	<1000	0.078	3.226
	1000 - <3000	0.043	4.418
	3000 - <6000	0.033	4.533
	6000 - <10000	0.072	5.000
Safety of deposit	Very safe (Reference)	0.122	-
	Not safe	0.015	0.124
	Somewhat safe	0.053	0.256
	Not considered the safety aspect	0.159	0.407
	Safe	0.676	1.906
Position in the household	Dependent (Reference)	0.120	-
	Only earner	0.089	0.317
	One of the earners	0.050	0.382
Change of attitude of branch staff is required to bring more people to banking fold	Strongly Agree (Reference)	0.140	-
	Strongly Disagree	0.520	1.761
	Disagree	0.499	0.571
	Do not know	0.828	0.866
	Agree	0.037	0.324
Age	>60 years (Reference)	0.035	-
	18-25 years	0.170	0.204
	26-40 years	0.740	0.707
	41-60 years	0.994	0.992

Nagelkerke R Square = 0.585

Variables found to be not significant in the model are Gender, Education level, Dwelling Type, Household Size, Safety of deposit, Awareness level (about Savings Bank account, Current Account, Recurring Deposit, No frill account), Perception about banks (Service Standard is uniform for all customers), Time required to reach the nearest bank branch (from residence and workplace).

Collinearity Coefficients[a]

	Collinearity Statistics	
	Tolerance	VIF
Dwelling type	.912	1.096
Place	.792	1.262
Awareness - SB A/c	.531	1.882
Awareness – CA	.365	2.737
Awareness – FD	.445	2.245
Awareness – RD	.491	2.037
Earnings per month	.770	1.298
Safety of deposit	.858	1.166
Household Size	.938	1.066
Position in the household	.722	1.385
No Frill a/c Awareness	.812	1.231
Opinion on Service Standard	.804	1.243
Attitude Change	.840	1.191
Gender	.840	1.191
Age	.551	1.813
Education	.746	1.341

@Dependent Variable – Saving in Insurance Instruments

[i] As per Census conducted in the year 2011

[ii] Directorate of Economics and Statistics - Govt. of Assam. *Economic Survey Assam 2009-10*. Guwahati. 2010. Print

[iii] Basic Statistical Return of Scheduled Commercial Banks in India. Vol 39. 2010. Reserve Bank of India

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Appendix VII

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Financial Inclusion in Urban India: A Study in the State of Assam

Subhrangshu Sekhar Sarkar
Ajanta Phatowali

The paper emphasizes the importance of empirical research on issues of urban financial inclusion due to the increased pace of urbanization in India. Authors use the available supply side data to analyse the trend and measure the extent of financial inclusion in the country as well as in the State of Assam during 1996-2010. Indices of Financial Inclusion have been calculated and analysed. It is observed that there is mixed contribution of individual indicators towards the overall financial inclusion over the years without any particular trend or pattern for India as well as for Assam. Therefore, it necessitates importance to be given to each attribute to develop inclusion further.

Keywords: Inclusion, Urban, Index, AAGR, Availability, Penetration, Usage

JEL Classification: G2, G21, G28, C43

Section I
Introduction

Financial inclusion is gaining importance globally in recent times among national policymakers, multilateral institutions and others in the development field. As 'Inclusive Growth' has been the thrust globally as a sustainable growth strategy, financial inclusion is a topic of contemporary significance and relevance. Access to a well-functioning financial system can economically and socially empower individuals to better integrate to the national economy.[1] Although the financial sector has made commendable progress in recent years, there are concerns that

Prof Subhrangshu Sekhar Sarkar (subh@tezu.ernet.in) is Head, Department of Business Administration, Tezpur University, Assam.

Shri Ajanta Phatowali (ajanta.phatowali@idbi.co.in) is Deputy General Manager, IDBI Bank Ltd., Guwahati, Assam.

The authors are greatly thankful to Dr Rupayan Pal, Associate Professor, Indira Gandhi Institute of Development Research, Mumbai, India for his help and advice during preparation of this paper.

1. "Report on Currency and Finance 2006-08", Reserve Bank of India, Mumbai.

banks have not been able to include vast segment of population especially from underprivileged sections of the society, into the fold of basic banking services. This excluded segment, as a consequence, has to depend either on their own or informal sources of finance which is available generally at a very high cost. Inclusive finance, which includes safe saving, appropriately designed loans for the marginal sections, appropriate insurance and payment services, can help people to enhance incomes, acquire capital, manage risk and come out of poverty.[2]

Section II
International Experience

As mentioned earlier, Financial Inclusion has been the emphasis of many countries at present. An emerging feature which emerges from the international practice is that the more developed the society is, the greater the thrust on empowerment of the common person and low income groups.[3] Countries like UK, USA, Canada and France have enforced Acts to prohibit discrimination in providing financial services to less privileged sections of the society. Studies have shown that the No-frills accounts or Basic Banking Accounts have been a win-win proposition to the banks and the society at large. Bangladesh has been the pioneer in group lending to overcome the drawbacks of adverse selection in extending credit to marginal sections. The success story of such lending has encouraged many other countries to adopt such practices. In South Africa, there is an emergence of system like smart cards and pre-paid cellular telephony which allows transactions without the need of banking infrastructure. Government has promoted this channel as a means of democratization, using them to deposit public transfers such as pensions, tax rebates and conditional transfers to low-income population groups as corresponding transaction costs are very low. The 'Voluntary Code 1996' adopted by Germany is aimed at making basic banking services available to all in Germany.

Section III
National Scenario

In India, bank nationalization (1969), introduction of Regional Rural Banks (1976) and Service Area Approach (1989) were the major steps for making banks serve the mass. Although considerable progress has been made in regard of branch expansion, however, many regions still continues to be underbanked. In an important parameter for financial inclusion, i.e., number of accounts held as a ratio to the adult population is only 74.73 per cent as on March 31, 2010 which is considered to be very low compared to any developed country. For instance, the same ratio is 202.19 per cent in USA.[4] As per Reserve Bank of India (RBI) – the

2. United Nations, "Building Inclusive Financial Sectors for Development", New York, 2006.
3. V Leeladhar, "Taking Banking Services to the Common Man – Financial Inclusion", *RBI Bulletin*, January, 2006.
4. "Financial Access 2010", CGAP.

Central Bank of the country – 62.4 per cent of the population in India has bank accounts as on March 31, 2010. As on July, 2010, there were 296 underbanked districts in India. A comparison of basic inclusion parameters of India with some of developed countries is presented in Table 1 (all the Tables are presented at the end of the paper).

It is observed that in USA, Japan, UK and Brazil there are more number of deposit accounts than the number of adults whereas in India 25.27 per cent of adults are without any deposit accounts. Credit delivery in India is marginal as only 13.75 out of per 100 adults are having credit accounts. However, Brazil and Italy have 3.8 times and 5 times of credit account per 1000 adults compared to India respectively. A large population and a small number of bank network has contributed to a large average number of adult population served by bank branches. In comparison to developed country like USA, bank branches in India serves almost four times more adult customers on an average; this is more acute in urban areas which amounts to be seven times of that of USA. Except Russia and Japan all other countries compared in Table 1 have a favourable statistics compared to India (data for China is not available for this indicator) in this regard.

Various indicators of Financial Inclusion considered in this paper are: *(a)* Number of bank branches per lakh[5] population, *(b)* Number of deposit accounts per 1000 population, *(c)* Number of credit accounts per 1000 population, *(d)* Per capita deposit, *(e)* Per capita credit, and *(f)* Credit to Deposit Ratio (CDR). Data for 16 years period from 1996-2011 has been analysed. These indicators are calculated for India as a whole as well as for urban areas for the period under study. They are presented in Tables 2 and 3 for India as a whole and urban India respectively. Throughout the years, value of these indicators for urban areas were better-off than that of all areas taking together. Only exceptions were noticed in the number of credit accounts per 1000 population between 1996-1999. The Average Annual Growth Rate (AAGR) of the indicators are calculated and presented in Table 4.

Section IV
Necessity to Study Urban Phenomenon of Financial Inclusion

It is observed that studies on Financial Inclusion are mostly general and in Indian context, it is mostly rural based. There is also a tendency of treating urban exclusion as an extension of rural exclusion. In reality, the factors affecting financial exclusion in urban areas might be very different from those in rural areas. In India, population in urban areas is growing faster than in rural areas and at a much faster growth than the overall population growth. For the first time since independence, the absolute increase in population is more in urban areas than in rural areas as per the census conducted in the country in 2011. The level of

5. One Lakh = 1,00,000

urbanization has also increased from 27.81 per cent in 2001 census to 31.16 per cent in 2011 Census. The "State of the World Population 2007 Report" by the United Nations predicts that the urban percentage of the world's population is expected to reach 60 per cent by 2030. India's urban population is expected to reach 433 million by 2021, while total population may reach 1340 million. Thus, the urbanization level in the country in the year 2021 is expected to be about 32 per cent.[6]

This rapid growth of urbanization and urban population is necessitating a separate approach to address the problems with the urban poor as well as urban financial exclusion. The urban areas which have adequate infrastructure and presence of commercial banks, also have a large section of needy population which is deprived of the benefits from formal banking sector. The very existence of flourishing informal financial markets offering urban poor convenient access to money at high prices reveal a huge demand unmet by banks or other formal financial services.

Although detailed data on urban financial inclusion is not available, an estimated 40 per cent of the adult urban population has no access to bank accounts in India.[7] The existing research work in urban financial inclusion is quite limited. There is a general feeling that no special thrust is necessary for financial inclusion in urban areas. The report of the Committee on Financial Inclusion in India submitted in January 2008 under the Chairmanship of Mr C Rangarajan also noted that there is no clear estimate of the number of people in urban areas without access to organized financial services.

However, very limited studies made on access to finance in urban areas of India have revealed eye-opening findings which calls for an urgent identification of reasons of exclusion and design appropriate policies/ product to tap this every increasing potential of urban financial inclusion. One study[8] conducted in Bangalore, a leading urban hub of the country, by the Paradigm Group in 2003 finds that 93.5 per cent credit in urban areas are from informal financial sector with very high interest rate. Another study conducted by Rupambara[7] in the national capital city of Delhi's slum during 2007 has shown that nearly 58 per cent of the families of the sample population do not have an account either in bank or post office despite being surrounded by thirteen bank branches.

In this backdrop, it is of immense importance to study the status, problems and prospects of Financial Inclusion of the State of Assam. There is a gap of such empirical study in the State.

6. "Report of the Steering Committee on Urban Development for 11th Five Year Plan".
7. Rupambara, "Financial Inclusion of the Urban Poor: Issues and Options", *CAB Calling*, July-September 2007.
8. Ramanathan, R; M S Barnhardt and Supriti (2002), "Urban Poverty Alleviation Initiatives in India: A General Assessment and a Particular Perspective", Bangalore, Ramanathan Foundation.

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Section V
State Scenario

Assam is one of the 28 states of India located at the North-Eastern part of the country. The state has a population of 3,11,69,272[9] spread over an area of 78,438 sq km. It consists of 2.57 per cent of India's population in 2.38 per cent of its total geographical area. Per capita income in the state is INR 21500[10] (INR 35,917 for all India). 1 USD is equivalent to INR 55.41 (as on June 09, 2012). As on March 31, 2010, there are 1477 number of bank branches in the state out of which 322 branches are located in urban areas. There are six urban banking areas of the state. 1.69 per cent of the total bank branches in the country are located in the state. These branches altogether account for 1.06 per cent of the country's bank deposits and a mere 0.54 per cent of the bank credit.[11]

Same indicators of Financial Inclusion as considered for India above, have been analysed for the State of Assam. These indicators are calculated for Assam as a whole as well as for urban areas for the period under study (1996-2011). They are presented in Tables 5 and 6, Assam as a whole and for urban Assam respectively. The AAGR of these indicators are calculated and presented in Table 7.

Analysis of available secondary data for the six parameters of financial inclusion mentioned above, shows that Assam lags behind the national average of the corresponding indicators in all years during 1996-2011, barring the number of credit accounts per thousand population in urban areas during 1996-1998. The gap between the state and national average is widening with time in absolute terms.

Section VI
Measuring Financial Inclusion

There is no universally accepted measure of financial inclusion. However, many indicators are commonly used to measure various dimensions of inclusion/ exclusion such as number of bank accounts per 100 adult population, average population per branch office, per capita deposit/ credit, CDR, per capita credit to Net State Domestic Product (NSDP), etc. However, each such parameter provides partial information about inclusion. Thus, using individual indicators may lead to misleading understanding of the extent of financial inclusion.

9. As per Census conducted in the year 2011.
10. Directorate of Economics and Statistics, Government of Assam, "Economic Survey Assam 2009-10", Guwahati, 2010.
11. "Basic Statistical Return of Scheduled Commercial Banks in India", Vol 39, 2010, Reserve Bank of India.

Researchers have developed various methods of measuring financial inclusion. The methods which incorporate several dimensions of financial inclusion in one single number are getting widely recognized. Mandira Sarma (2008) has developed an index of financial inclusion with some modifications in approach which is used by UNDP for computation of some well-known indexes such as Human Development Index, the Human Poverty Index (HPI), the Gender-related Development Index (GDI), and so on. Sarma's index has been subsequently used in many studies specially in India.

Chakravarty and Pal (2010) have developed another index for measuring financial inclusion. This index overcomes the limitations of Sarma's index by way of incorporating an axiomatic structure and calculation of contribution of each dimension in the index. In this paper, we will use Chakravarty and Pal's index for measuring financial inclusion.

1. Conceptual Framework of the Index

Chakravarty and Pal assumed that the banking system has $k \geq 1$ dimensional activities. Each dimension represents a functioning. Let x_i be the attainment level or the value of functioning i. The lower and upper bounds of x_i are denoted by m_i and M_i respectively. We assume that $m_i < M_i$. For empirical applications, sample minimum and maximum can be chosen as values of m_i and M_i respectively. An indicator for functioning i is a real valued function A that associates a value $A(x_i, m_i, M_i)$ to each $x_i \varepsilon [m_i, M_i]$. It is assumed that A is continuous in its arguments. Continuity ensures that minor observational errors on x_i, m_i and M_i will generate minor changes in the value of A. A is specified as:

$$A_r(x_i, m_i, M_1) = \left(\frac{x \ - m_i}{M_i - m_i} \right)_r \tag{1}$$

Where $0<r<1$ is a constant. Chakravarty and Pal (2010) has interpreted r as an inclusion sensitivity parameter in the sense that given x_i, m_i and M_i as the value of r decreases $A(x_i, m_i, M_i)$ increases.

This is an axiomatic approach which satisfies the following four basic axioms for an arbitrary indicator A of an individual functioning and analyse the index given by (1) in terms of these axioms.

Normalization

$$A(x, m_i, M_i) = \left\{ \frac{1, \ if \ and \ only \ if \ x_i = M_i}{0, \ if \ and \ only \ if \ x_i = M_i} \right\}$$

Normalization ensures that the indicator levels for functioning i are one and zero in the extreme cases when the functioning assumes its maximum and minimum values, M_i and m_i, respectively.

Monotonicity

Given m_i and M_i, for any $\delta > 0$ such that:

$$x_1 + \delta \in [m_i, M_i], A(x_i, +\delta, \quad m_i, M_i) = A(x_i, m_i, M_i) > 0$$

Monotonicity says that an increase in the attainment level of functioning i increases the value of the indicator. For instance, financial inclusion should increase if there is an increase in the number of credit accounts per 1,00,000 adults.

Homogeneity

For any $c > 0$, $A(x_i, m_i, M_i) = A(cx_i, cm_i, cM_i)$

The homogeneity condition makes sure that the indicator becomes independent of any unit of measurement. This in turn becomes helpful for aggregating the indicators across functionings. For instance, we cannot add the number of bank accounts per 1000 adults with number of bank branches per 1,00,000 adults. However, if these figures are converted into unit free real numbers, then we can add them up. Homogeneity takes care of this.

Lower difference in gain at higher levels of attainment difference:

Let $x_i \in [m_i, M_i]$ be any attainment level for functioning i. Then for any $\delta > 0$ such that $x_i + \delta \in [m_i, M_i]$, the magnitude of gain in the indicator of functioning i, $A(x_i + \delta, m_i, M_i) - A(x_i, m_i, M_i)$ is a decreasing function of x_i.

This axiom conforms to the law of diminishing marginal utility. According to this axiom, the value of the increase in the indicator resulting from an increase in the level of functioning is greater at lower levels than an equivalent increase in the functioning level at higher levels. For instance, an increase in the number of bank accounts per 100 adults from 10 to 20 indicates a greater gain in the functioning indicator than when the number increases from 60 to 70.

Thus, Chakravarty and Pal proves that the index fulfills the four basic axioms for all values of $0 < r < 1$. However, if $r = 1$, A_r satisfies the first three axioms but not the fourth. This particular case of A_r was suggested as an indicator of functioning i by Sarma (2008).

The desired financial inclusion index is derived by averaging the individual indicators in (1) across functionings as below:

$$Ir(A_r(x_1,m_1,M_1),\ldots\ldots,A_r(x_k,m_k,M_k))=1/k\sum_{i=1}^{k}\left(\frac{x_i-m_i}{M_i-m_i}\right)^r$$

Like the individual index, the global index also satisfies all the above four axioms.

We calculate I_r for r=0.75, 0.5 and 1 and analyse the individual contributions as well as percentage contributions of each of the attributes to overall achievement.

Although there are various dimensions of Financial Inclusion, the present index comprises of three very basic dimensions, *viz.*, availability of banking services, banking penetration and usage of the banking system. We have calculated general as well as urban specific index for the country as well as for Assam for the period 1996-2010.

(a) Availability of Banking Services

Availability of banking services to the users is the basic of financial inclusion, unless services are not available, we cannot expect an inclusive system. There are various parameters of measuring this dimension such as number of bank branches per lakh population, average population served by per branch office (APPBO), number of branches per 100 kilometer area, number of ATMs per 1000 population, number of bank staff per 1000 population, etc. However, due to non-availability of data, we are using only one parameter to measure this dimension, i.e., number of bank branches per lakh population.

(b) Banking Penetration

An inclusive system should penetrate widely amongst its users. The number of people with bank account is a measure of banking penetration. However, as there is no published data on number of people with bank accounts, we are using number of accounts per 1000 population as a measure. As both saving and credit are important parameters to know banking penetration, number of deposit and credit accounts are used separately in the index.

(c) Usage of Banking System

Mere measure of availability and penetration cannot give a complete picture of financial inclusion. There is a possibility that a majority of people availing banking services are actually underbanked or marginally banked. It is also imperative that the banking services are adequately utilized. To incorporate the usage dimension in the index, we are considering two basic services of banking system, i.e., per capita deposit and per capita credit. Further, CDR is also considered separately as a measure of usage dimension to nullify the effect of higher per capita deposit in comparison to per capita credit.

Tables 8, 9 and 10 at the end of the paper presents the Index of Financial Inclusion in India calculated with r=1, 0.75 and 0.50 respectively. Likewise, Tables 11, 12 and 13 presents index for urban India calculated with r=1, 0.75 and 0.50 respectively. Tables 14, 15 and 16 presents index calculated for Assam with r=1, 0.75 and 0.50 respectively. Tables 17, 18 and 19 presents index calculated for urban Assam with r=1, 0.75 and 0.50 respectively. Further, attribute-wise breakdown of index and percentage contribution of each attribute to the overall index has been shown in these tables.

We have categorized the years into three categories depending on the value of the index. These categories are:

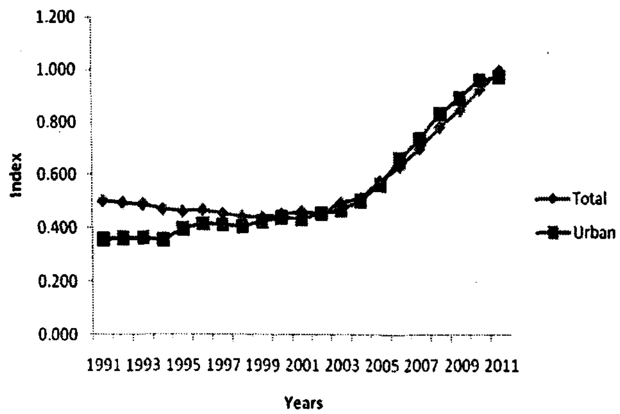
$0.6 < \text{Index} \geq 1$ – high financial inclusion (H)

$0.3 \leq \text{Index} < 0.6$ – medium financial inclusion (M)

$0 \leq \text{Index} < 0.3$ – low financial inclusion (L)

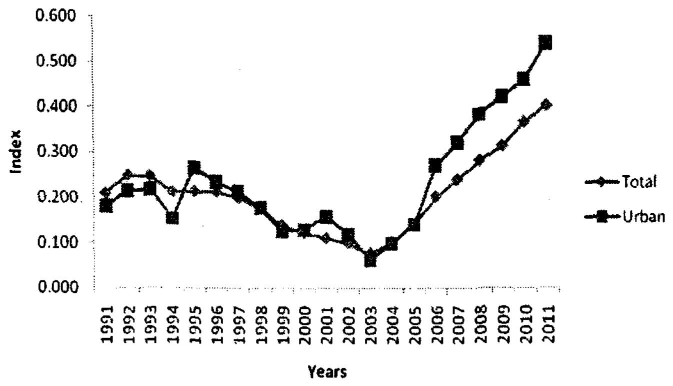
A summary of these categories and the value of index are given in Table 20.

Figure 1
Index of Financial Inclusion for India



In Figure 1, index for India as a whole and specific to urban India are shown for r=0.75. For India as a whole, index is minimum in the year 2002 and maximum in 2011, whereas in urban India, the index is minimum in the year 1999 due to low per capita credit. Against the myth, financial inclusion in urban areas was lower than that of all areas as a whole during 1991-2005 barring the year 2002. The urban areas were better-off during 2006-2010, however, again fell marginally in 2011.

Figure 2
Index of Financial Inclusion for Assam

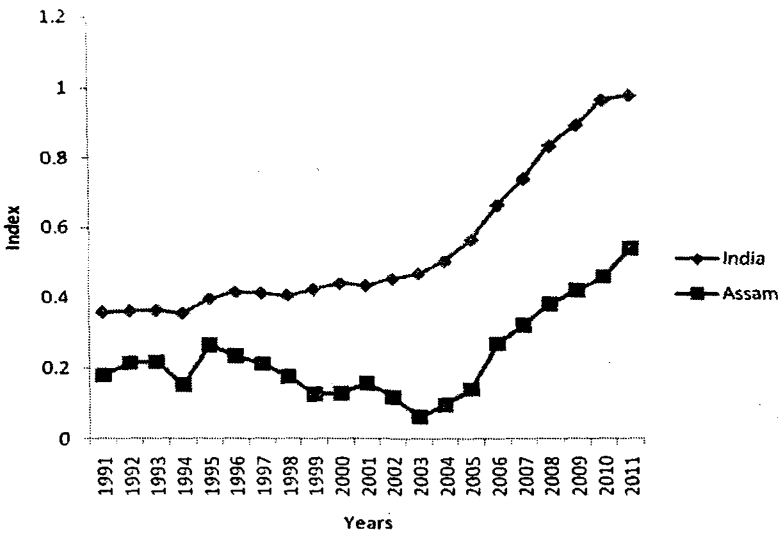


In Figure 2, index for Assam as a whole and specific to urban Assam are shown for r=0.75. The index is minimum in 2003 and maximum in 2011 for Assam in general as well as for urban areas. It shows many fluctuations for urban areas till 2003, registering the minimum inclusion over the period of study. However, since 2004 onwards, it is showing an upward trend. Since 2006, it is better than the general inclusion in the state.

Figure 3
Index of Financial Inclusion in India *vis-à-vis* Assam

Financial Inclusion in Assam has been lower than that of India consistently during the period of study. Further, the difference between the statuses of inclusion between the state and the nation is widening over period. It may be contributed to the fact that state lags behind in all indicators of financial inclusion. The gap is widening fast in respect of per capita deposit and per capita credit figures of the state in comparison to the country.

Figure 4
Index of Financial Inclusion in Urban India *vis-à-vis* Urban Assam



Financial Inclusion in urban Assam has been worse than national level throughout the period of study.

Section VII
Conclusion

The paper emphasizes the importance of empirical research on issues of urban financial inclusion due to the increased pace of urbanization of the country. As most of the policy initiatives and study is either general in approach or rural based, there is a gap of such empirical study on urban financial inclusion. The paper uses the available supply side data to analyse the trend and measure the extent of financial inclusion in the country as well as in the state of Assam. The paper presents AAGR of the select indicators of financial inclusion for the period 1991-2011. For measuring financial inclusion the paper uses the Index of Financial Inclusion developed by Chakravarty and Pal (2010) which is an axiomatic approach to the measurement. This index may be used as an effective tool to measure the relative contribution of each indicator/attribute to the overall Financial Inclusion so that appropriate policy initiatives may be taken to improve upon the low contributing attributes.

Using the index developed by Chakravarty and Pal, the authors calculate the index for India as well as Assam for the period 1991-2011 and the trend is analysed. This index is calculated for both general and urban specific.

There is mixed contribution of individual attributes observed over the years without any particular trend or pattern for both India as well as Assam. In the national scene, contribution of all the indicators in the best inclusive year is almost equal. Therefore, it necessitates importance to be given to each attribute to develop the index further in future. For improving inclusion in urban Assam, trust is required to be given in improving the branch network as well as the CDR as contributions of these two indicators are found to be low. For improving inclusion in urban areas in Assam, thrust is to be given on improvement of per capita credit availability and CDR.

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Table 1

Financial Access through Commercial Banks in Selected Countries

	Deposits			*Credits/ Loans*			*Average Adult Populations Served by a Bank Branch*		
Country	*Account Per 100 Adults*	*Value (as % of GDP)*	*Average Account Value (as % of Per Capita Income)*	*Account Per 100 Adults*	*Value (as % of GDP)*	*Average Account Value (as % of Per Capita Income)*	*Total*	*Urban*	*Rural*
USA	202.19	43.91	27.30	-	44.81	-	2,752	3,754	10,320
China	-	206.90	-	-	143.88	-	-	-	-
Japan	717.24	146.24	23.56	17.76	85.08	553.33	8,026	-	-
India	74.73	55.03	110.0	13.75	40.93	436.09	9,891	26,571	15,898
Germany	-	25.61	-	-	28.13	-	6,285	-	-
Russia	-	25.34	-	-	38.85	-	38,168	-	-
UK	292.32	61.32	25.44	-	80.64	-	4,822	-	-
Brazil	106.53	35.55	45.32	53.35	30.88	78.61	7,868	-	-
France	77.20	25.75	40.88	-	35.83	-	2,314	-	-
Italy	77.50	47.78	71.84	70.11	66.83	111.07	1,922	-	-

Source: "Financial Access 2010", CGAP.

Table 2
Indicators of Financial Inclusion in India

Year	No. of Deposit a/c per 1000 Population	No. of Credit a/c per 1000 Population	No. of Bank Branches Per Lakh Population	Per Capita Deposit in Rs.	Per Capita Credit in Rs.	CDR
1991	420	73	7.29	2369.66	1467.43	0.62
1992	428	76	7.18	2742.40	1581.15	0.58
1993	430	70	7.11	3123.35	1839.56	0.59
1994	440	66	7.02	3591.06	1949.64	0.54
1995	423	63	6.92	4114.43	2288.91	0.56
1996	416	60	6.85	4526.51	2705.50	0.60
1997	412	58	6.77	5205.32	2957.22	0.57
1998	407	55	6.70	6072.16	3358.90	0.55
1999	405	52	6.64	6957.90	3811.22	0.55
2000	403	53	6.60	8013.90	4488.62	0.56
2001	416	51	6.56	9230.35	5234.63	0.57
2002	421	54	6.49	10744.55	5393.19	0.50
2003	420	56	6.41	12012.52	7115.75	0.59
2004	424	62	6.36	14004.72	8157.71	0.58
2005	426	70	6.39	15942.13	10517.89	0.66
2006	436	77	6.36	18802.38	13611.41	0.72
2007	460	84	6.49	23012.82	17253.55	0.75
2008	508	93	6.79	28390.40	21114.13	0.74
2009	571	95	7.05	33786.50	24532.06	0.73
2010	624	101	7.39	38759.81	28427.38	0.73
2011	669	100	7.61	44534.63	33677.65	0.76

Source: Authors' calculation using RBI's data for Banking and Office of the Registrar General and Census Commissioner's data for population.

Table 3
Indicators of Financial Inclusion in Urban India

Year	No. of Deposit a/c per 1000 Population	No. of Credit a/c per 1000 Population	No. of Bank Branches Per Lakh Population	Per Capita Deposit in Rs.	Per Capita Credit in Rs.	CDR
1991	681	55.38	6.90	5883.01	3524.63	0.60
1992	681	65.51	6.79	6890.89	3844.41	0.56
1993	688	53.83	6.85	7883.05	4651.54	0.59
1994	713	47.90	6.79	9029.40	5058.19	0.56
1995	718	48.85	7.23	10689.03	6573.69	0.61
1996	694	49.73	7.26	11516.17	7867.80	0.68
1997	680	50.46	7.31	13160.19	8585.45	0.65
1998	663	46.52	7.37	15445.27	9796.83	0.63
1999	656	51.47	7.48	17625.46	11195.62	0.64
2000	649	54.36	7.44	20239.85	13340.29	0.66
2001	629	55.45	7.06	21804.05	14759.36	0.68
2002	647	55.44	7.01	25558.86	17591.29	0.69
2003	639	61.70	6.92	28593.79	19777.30	0.69
2004	644	81.08	6.93	34123.65	22634.33	0.66
2005	635	95.09	7.12	39398.17	29018.22	0.74
2006	697	110.69	7.68	48627.89	38466.66	0.79
2007	720	127.91	8.05	60454.62	48809.85	0.81
2008	790	150.14	8.67	74912.50	59688.09	0.80
2009	853	152.12	9.10	88234.19	69194.98	0.78
2010	916	158.54	9.71	100597.72	79183.26	0.79
2011	922	140.33	9.55	110829.77	90114.23	0.81

Source: Authors' calculation using RBI's data for Banking and Office of the Registrar General and Census Commissioner's data for population.

Table 4
AAGR of Selected Indicators of Financial Inclusion in India

	Average Annual Growth Rate Between 1991-2011*	
Parameter	Total	Urban
Number of deposit accounts per 1000 population	2.83	1.69
Number of credit accounts per 1000 population	1.73	7.30
Per capita deposit	84.73	84.95
Per capita credit	104.52	116.99
Number of bank branches per lakh population	2.34	1.83

Note: * Figures are given in percentage.

Table 5
Indicators of Financial Inclusion in Assam

Year	No. of Deposit a/c per 1000 Population	No. of Credit a/c per 1000 Population	No. of Bank Branches Per Lakh Population	Per Capita Deposit in Rs.	Per Capita Credit in Rs.	CDR
1991	249	36.92	5.52	982.03	487.87	0.50
1992	268	46.12	5.45	1085.34	546.30	0.50
1993	278	45.93	5.38	1157.63	570.52	0.49
1994	286	41.66	5.30	1331.31	549.76	0.41
1995	308	42.00	5.22	1638.58	633.85	0.39
1996	301	41.16	5.15	1779.06	716.45	0.40
1997	315	40.58	5.07	2034.86	739.08	0.36
1998	315	37.67	4.97	2393.07	804.01	0.34
1999	306	29.19	4.87	2718.05	871.11	0.32
2000	292	27.46	4.76	3185.11	1018.87	0.32
2001	292	23.94	4.76	3698.16	1185.45	0.32
2002	278	24.14	4.65	4253.70	1350.49	0.32
2003	275	24.81	4.54	4672.87	1368.29	0.29
2004	268	26.74	4.51	5203.84	1654.22	0.32
2005	272	30.45	4.50	6289.27	2217.93	0.35
2006	293	35.96	4.44	7237.28	3082.30	0.43
2007	308	39.63	4.50	8804.87	3764.20	0.43
2008	332	42.88	4.65	10548.91	4467.59	0.42
2009	385	43.63	4.77	13170.34	5072.37	0.39
2010	432	49.42	4.89	16095.44	6083.47	0.38
2011	473	52.73	4.96	18767.32	6858.35	0.37

Source: Authors' calculation using RBI's data for Banking and Office of the Registrar General and Census Commissioner's data for population.

Table 6
Indicators of Financial Inclusion in Urban Assam

Year	*No. of Deposit a/c per 1000 Population*	*No. of Credit a/c per 1000 Population*	*No. of Bank Branches Per Lakh Population*	*Per Capita Deposit in Rs.*	*Per Capita Credit in Rs.*	*CDR*
1991	463	50	5.37	3626.89	1814.29	0.50
1992	469	107	5.35	3883.50	2047.45	0.53
1993	492	104	5.32	3948.59	2028.30	0.51
1994	502	66	5.14	4375.80	1757.65	0.40
1995	641	69	5.95	5912.90	2239.74	0.38
1996	600	57	5.74	6044.21	2221.70	0.37
1997	623	60	5.61	6853.19	2211.66	0.32
1998	590	69	5.38	7893.18	2478.98	0.31
1999	558	34	5.19	8593.48	2683.74	0.31
2000	499	38	5.18	9987.23	3617.54	0.36
2001	472	45	5.44	11950.20	5024.95	0.42
2002	438	32	5.30	13268.10	5003.86	0.38
2003	420	33	5.20	14813.03	4466.90	0.30
2004	420	37	5.18	16289.05	5497.31	0.34
2005	415	43	5.37	19218.47	6808.63	0.35
2006	532	54	5.52	23904.92	10261.71	0.43
2007	568	60	5.96	30841.57	11934.61	0.39
2008	575	63	6.65	38065.08	14301.47	0.38
2009	610	66	7.02	47270.83	16493.93	0.35
2010	594	72	7.24	56813.91	19714.52	0.35
2011	656	74	7.95	68904.17	23532.61	0.34

Source: Authors' calculation using RBI's data for Banking and Office of the Registrar General and Census Commissioner's data for population.

Table 7
AAGR of Selected Indicators of Financial Inclusion in Assam

	*Average Annual Growth Rate Between 1991-2011**	
Parameter	*Total*	*Urban*
Number of deposit accounts per 1000 population	4.29	1.98
Number of credit accounts per 1000 population	2.04	2.25
Per capita deposit	86.25	85.71
Per capita credit	62.18	57.00
Number of bank branches per lakh population	(0.48)	2.29

Note: * Figures are given in percentage.

Table 8

All India Index (r=1) along with Contribution of Individual Attributes

Year	Individual Contribution						Index	Rank	Percentage Contribution					
	Deposit a/c per 1000 Population	Credit a/c per 1000 Population	No. of Bank Branches Per Lakh Population	Per Capita Deposit	Per Capita Credit	CDR			Deposit a/c per 1000 Population	Credit a/c per 1000 Population	No. of Bank Branches Per Lakh Population	Per Capita Deposit	Per Capita Credit	CDR
1991	0.011	0.074	0.124	0.000	0.000	0.077	0.286	8	3.69	26.01	43.40	0.00	0.00	26.89
1992	0.016	0.084	0.110	0.001	0.001	0.049	0.261	9	5.97	32.36	42.11	0.57	0.23	18.76
1993	0.017	0.065	0.099	0.003	0.002	0.057	0.243	10	6.98	26.66	40.89	1.22	0.79	23.45
1994	0.023	0.051	0.088	0.005	0.002	0.027	0.196	11	11.83	25.86	44.90	2.46	1.27	13.68
1995	0.013	0.041	0.075	0.007	0.004	0.036	0.175	14	7.31	23.12	42.87	3.94	2.43	20.34
1996	0.009	0.031	0.065	0.009	0.006	0.063	0.182	12	4.69	17.05	35.57	4.68	3.52	34.49
1997	0.006	0.023	0.055	0.011	0.008	0.043	0.146	16	4.13	15.84	37.38	7.67	5.28	29.69
1998	0.003	0.012	0.045	0.015	0.010	0.034	0.118	18	2.37	10.28	38.33	12.37	8.27	28.38
1999	0.001	0.004	0.038	0.018	0.012	0.030	0.103	20	1.07	3.94	36.61	17.56	11.74	29.07
2000	0.000	0.007	0.031	0.022	0.016	0.038	0.114	19	0.00	6.24	27.27	19.50	13.67	33.33
2001	0.008	0.000	0.027	0.027	0.019	0.043	0.125	17	6.70	0.00	21.73	21.73	15.62	34.22
2002	0.011	0.010	0.018	0.033	0.020	0.000	0.092	21	12.21	10.91	19.12	35.79	21.96	0.00
2003	0.011	0.017	0.006	0.038	0.029	0.059	0.161	15	6.67	10.58	3.88	23.74	18.20	36.91
2004	0.013	0.035	0.000	0.046	0.035	0.053	0.182	13	7.18	19.48	0.00	25.28	19.03	29.03
2005	0.015	0.065	0.003	0.054	0.047	0.103	0.287	7	5.07	22.70	1.14	18.70	16.33	36.06
2006	0.021	0.087	0.000	0.065	0.063	0.145	0.381	6	5.48	22.70	0.09	17.05	16.49	38.19
2007	0.036	0.109	0.017	0.082	0.082	0.162	0.488	5	7.35	22.44	3.42	16.73	16.75	33.31
2008	0.066	0.142	0.057	0.103	0.102	0.158	0.628	4	10.49	22.63	9.05	16.38	16.19	25.24
2009	0.105	0.147	0.091	0.124	0.119	0.147	0.733	3	14.30	19.99	12.46	16.93	16.28	20.04
2010	0.139	0.167	0.137	0.144	0.139	0.152	0.877	2	15.79	19.00	15.63	16.39	15.90	17.29
2011	0.167	0.163	0.167	0.167	0.167	0.167	0.996	1	16.73	16.37	16.73	16.73	16.73	16.73

Table 9

All India Index (r=0.75) along with Contribution of Individual Attributes

Year	Individual Contribution						Index	Rank	Percentage Contribution					
	Deposit a/c per 1000 Population	Credit a/c per 1000 Population	No. of Bank Branches Per Lakh Population	Per Capita Deposit	Per Capita Credit	CDR			Deposit a/c per 1000 Population	Credit a/c per 1000 Population	No. of Bank Branches Per Lakh Population	Per Capita Deposit	Per Capita Credit	CDR
1991	0.021	0.091	0.134	0.000	0.000	0.093	0.339	8	6.21	26.85	39.42	0.00	0.00	27.52
1992	0.028	0.100	0.122	0.005	0.001	0.066	0.322	9	8.75	31.07	37.86	1.49	0.18	20.64
1993	0.030	0.082	0.113	0.008	0.002	0.075	0.310	10	9.70	26.49	36.51	2.63	0.62	24.06
1994	0.038	0.068	0.103	0.012	0.002	0.042	0.266	11	14.27	25.66	38.82	4.39	0.94	15.91
1995	0.024	0.058	0.092	0.015	0.004	0.052	0.246	13	9.90	23.49	37.32	6.23	1.73	21.34
1996	0.018	0.047	0.082	0.018	0.006	0.080	0.252	12	7.13	18.77	32.59	7.12	2.55	31.84
1997	0.014	0.038	0.072	0.022	0.008	0.061	0.214	16	6.45	17.68	33.67	10.27	3.60	28.33
1998	0.008	0.023	0.063	0.027	0.010	0.050	0.181	18	4.31	12.94	34.73	14.87	5.41	27.72
1999	0.004	0.010	0.055	0.032	0.012	0.046	0.159	20	2.45	6.48	34.51	19.89	7.64	29.03
2000	0.000	0.016	0.047	0.037	0.016	0.055	0.171	19	0.00	9.18	27.77	21.60	9.16	32.28
2001	0.018	0.000	0.043	0.043	0.019	0.060	0.183	17	9.68	0.00	23.39	23.38	10.68	32.88
2002	0.022	0.020	0.031	0.050	0.020	0.000	0.143	21	15.44	14.19	21.61	34.59	14.17	0.00
2003	0.021	0.030	0.014	0.055	0.029	0.077	0.227	15	9.39	13.27	6.26	24.32	12.90	33.87
2004	0.025	0.052	0.000	0.063	0.035	0.070	0.245	14	10.06	21.27	0.00	25.87	14.11	28.69
2005	0.027	0.082	0.009	0.071	0.047	0.117	0.352	7	7.59	23.37	2.47	20.21	13.29	33.07
2006	0.035	0.102	0.002	0.082	0.063	0.151	0.434	6	8.09	23.47	0.36	18.94	14.47	34.67
2007	0.053	0.122	0.030	0.098	0.082	0.163	0.547	5	9.63	22.24	5.42	17.85	14.95	29.91
2008	0.083	0.148	0.074	0.116	0.102	0.160	0.683	4	12.15	21.63	10.88	16.98	14.87	23.48

Table 10

All India Index (r=0.50) along with Contribution of Individual Attributes

Year	Individual Contribution						Index	Rank	Percentage Contribution					
	Deposit a/c per 1000 Population	Credit a/c per 1000 Population	No. of Bank Branches Per Lakh Population	Per Capita Deposit	Per Capita Credit	CDR			Deposit a/c per 1000 Population	Credit a/c per 1000 Population	No. of Bank Branches Per Lakh Population	Per Capita Deposit	Per Capita Credit	CDR
1991	0.042	0.111	0.144	0.000	0.000	0.113	0.410	10	10.23	27.14	35.05	0.00	0.00	27.59
1992	0.051	0.119	0.135	0.016	0.010	0.090	0.421	9	12.11	28.19	32.16	3.73	2.35	21.46
1993	0.053	0.104	0.129	0.022	0.018	0.098	0.424	8	12.56	24.54	30.40	5.26	4.23	23.02
1994	0.062	0.092	0.121	0.028	0.020	0.067	0.391	11	15.91	23.52	31.00	7.25	5.21	17.11
1995	0.046	0.082	0.112	0.034	0.027	0.077	0.378	14	12.22	21.75	29.61	8.97	7.04	20.40
1996	0.038	0.072	0.104	0.038	0.033	0.102	0.386	12	9.77	18.62	26.90	9.76	8.46	26.49
1997	0.032	0.062	0.095	0.043	0.036	0.085	0.353	16	8.98	17.58	27.00	12.23	10.15	24.07
1998	0.022	0.045	0.087	0.049	0.040	0.075	0.318	17	6.80	14.15	27.32	15.52	12.69	23.51
1999	0.014	0.026	0.079	0.055	0.045	0.071	0.290	20	4.69	8.99	27.40	18.98	15.52	24.42
2000	0.000	0.034	0.072	0.061	0.051	0.080	0.298	19	0.00	11.56	24.17	20.44	17.11	26.72
2001	0.037	0.000	0.067	0.067	0.057	0.084	0.313	18	11.92	0.00	21.47	21.47	18.20	26.94
2002	0.043	0.041	0.054	0.074	0.058	0.000	0.271	21	16.00	15.13	20.02	27.39	21.46	0.00
2003	0.042	0.053	0.032	0.080	0.070	0.099	0.377	15	11.22	14.13	8.56	21.16	18.53	26.39
2004	0.047	0.077	0.000	0.088	0.076	0.094	0.381	13	12.25	20.18	0.00	22.99	19.95	24.63
2005	0.049	0.104	0.023	0.095	0.088	0.131	0.491	7	10.03	21.22	4.75	19.26	18.00	26.75
2006	0.059	0.120	0.007	0.104	0.102	0.156	0.549	6	10.75	21.89	1.35	18.97	18.65	28.39
2007	0.077	0.135	0.053	0.117	0.117	0.165	0.663	5	11.66	20.37	7.95	17.59	17.60	24.82
2008	0.105	0.154	0.097	0.131	0.130	0.163	0.780	4	13.44	19.74	12.48	16.79	16.70	20.85
2009	0.132	0.156	0.123	0.144	0.141	0.156	0.853	3	15.49	18.32	14.46	16.86	16.53	18.34
2010	0.152	0.167	0.151	0.155	0.152	0.159	0.936	2	16.23	17.80	16.15	16.54	16.29	16.99
2011	0.167	0.165	0.167	0.167	0.167	0.167	0.998	1	16.70	16.52	16.70	16.70	16.70	16.70

Table 11

Urban India Index (r=1) along with Contribution of Individual Attributes

Year	*Individual Contribution* Deposit a/c per 1000 Population	Credit a/c per 1000 Population	No. of Bank Branches Per Lakh Population	Per Capita Deposit	Per Capita Credit	CDR	Index	Rank	*Percentage Contribution* Deposit a/c per 1000 Population	Credit a/c per 1000 Population	No. of Bank Branches Per Lakh Population	Per Capita Deposit	Per Capita Credit	CDR
1991	0.029	0.013	0.006	0.000	0.000	0.027	0.076	18	38.95	17.45	7.96	0.00	0.00	35.64
1992	0.030	0.028	0.000	0.002	0.001	0.000	0.060	20	49.35	46.84	0.13	2.65	1.02	0.00
1993	0.034	0.011	0.003	0.003	0.002	0.021	0.074	19	45.32	14.64	4.56	4.28	2.92	28.28
1994	0.048	0.002	0.000	0.005	0.003	0.001	0.059	21	80.59	3.47	0.00	8.43	4.98	2.53
1995	0.051	0.003	0.025	0.008	0.006	0.037	0.130	16	39.16	2.67	19.04	5.88	4.52	28.74
1996	0.037	0.005	0.026	0.009	0.008	0.082	0.167	12	22.09	2.86	15.80	5.35	5.00	48.91
1997	0.029	0.006	0.030	0.012	0.010	0.062	0.147	14	19.54	3.98	20.19	7.84	6.61	41.85
1998	0.020	0.000	0.033	0.015	0.012	0.050	0.130	17	15.13	0.00	25.32	11.72	9.32	38.51
1999	0.015	0.007	0.039	0.019	0.015	0.050	0.145	15	10.43	5.06	26.84	12.82	10.15	34.70
2000	0.012	0.012	0.037	0.023	0.019	0.066	0.168	11	6.89	6.94	21.98	13.58	11.25	39.36
2001	0.000	0.013	0.015	0.025	0.022	0.078	0.153	13	0.00	8.69	9.78	16.54	14.14	50.84
2002	0.010	0.013	0.012	0.031	0.027	0.085	0.179	10	5.75	7.40	6.91	17.41	15.09	47.44
2003	0.006	0.023	0.007	0.036	0.031	0.087	0.190	9	3.12	11.87	3.70	18.96	16.44	45.92
2004	0.009	0.051	0.008	0.045	0.037	0.069	0.218	8	3.92	23.55	3.60	20.54	16.85	31.53
2005	0.004	0.072	0.019	0.053	0.049	0.117	0.314	7	1.20	23.02	6.00	16.96	15.64	37.18
2006	0.038	0.095	0.051	0.068	0.067	0.152	0.472	6	8.14	20.22	10.77	14.38	14.24	32.25
2007	0.052	0.121	0.072	0.087	0.087	0.163	0.582	5	8.94	20.82	12.35	14.90	14.99	28.01
2008	0.091	0.154	0.107	0.110	0.108	0.156	0.726	4	12.58	21.23	14.73	15.10	14.89	21.48
2009	0.127	0.157	0.132	0.131	0.126	0.148	0.821	3	15.52	19.13	16.05	15.92	15.39	18.00
2010	0.163	0.167	0.167	0.150	0.146	0.150	0.942	2	17.33	17.69	17.69	15.96	15.45	15.89
2011	0.167	0.140	0.158	0.167	0.167	0.167	0.964	1	17.29	14.48	16.36	17.29	17.29	17.29

Table 12

Urban India Index (r=0.75) along with Contribution of Individual Attributes

Year	Individual Contribution						Index	Rank	Percentage Contribution					
	Deposit a/c per 1000 Population	Credit a/c per 1000 Population	No. of Bank Branches Per Lakh Population	Per Capita Deposit	Per Capita Credit	CDR			Deposit a/c per 1000 Population	Credit a/c per 1000 Population	No. of Bank Branches Per Lakh Population	Per Capita Deposit	Per Capita Credit	CDR
1991	0.045	0.025	0.014	0.000	0.000	0.042	0.127	19	35.88	19.65	10.91	0.00	0.00	33.56
1992	0.046	0.044	0.001	0.005	0.002	0.000	0.098	20	46.74	44.94	0.55	5.22	2.55	0.00
1993	0.050	0.022	0.009	0.009	0.006	0.035	0.131	18	38.35	16.43	6.86	6.53	4.90	26.93
1994	0.065	0.006	0.000	0.012	0.008	0.005	0.096	21	67.70	6.40	0.00	12.46	8.39	5.05
1995	0.068	0.009	0.040	0.016	0.014	0.054	0.202	16	33.92	4.52	19.75	8.18	6.72	26.90
1996	0.054	0.012	0.042	0.019	0.018	0.098	0.241	12	22.31	4.81	17.35	7.70	7.32	40.50
1997	0.045	0.014	0.046	0.023	0.020	0.079	0.225	14	19.82	6.01	20.31	9.99	8.79	35.09
1998	0.033	0.000	0.049	0.028	0.023	0.067	0.201	17	16.65	0.00	24.50	13.74	11.57	33.54
1999	0.028	0.016	0.056	0.032	0.027	0.068	0.227	13	12.16	7.07	24.71	14.19	11.91	29.95
2000	0.023	0.023	0.054	0.037	0.033	0.083	0.252	11	8.93	8.99	21.32	14.86	12.90	33.01
2001	0.000	0.025	0.027	0.041	0.036	0.094	0.223	15	0.00	11.21	12.26	18.17	16.16	42.19
2002	0.021	0.025	0.024	0.047	0.043	0.101	0.260	10	7.95	9.60	9.13	18.24	16.39	38.69
2003	0.014	0.037	0.016	0.053	0.048	0.103	0.269	9	5.07	13.81	5.76	19.62	17.64	38.10
2004	0.018	0.069	0.017	0.062	0.054	0.086	0.306	8	5.88	22.57	5.52	20.37	17.56	28.09
2005	0.010	0.089	0.032	0.071	0.067	0.128	0.396	7	2.46	22.47	8.20	17.87	16.81	32.19
2006	0.055	0.110	0.068	0.085	0.084	0.156	0.559	6	9.93	19.64	12.25	15.21	15.10	27.87
2007	0.070	0.131	0.089	0.102	0.102	0.164	0.658	5	10.57	19.94	13.48	15.52	15.58	24.91
2008	0.106	0.157	0.120	0.122	0.120	0.159	0.784	4	13.55	20.06	15.25	15.53	15.37	20.24
2009	0.136	0.159	0.140	0.139	0.135	0.152	0.862	3	15.81	18.49	16.21	16.12	15.71	17.66
2010	0.164	0.167	0.167	0.154	0.151	0.154	0.956	2	17.16	17.43	17.43	16.14	15.75	16.08
2011	0.167	0.146	0.160	0.167	0.167	0.167	0.972	1	17.14	15.00	16.44	17.14	17.14	17.14

Table 13
Urban India Index (r=0.50) along with Contribution of Individual Attributes

Year	Individual Contribution						Index	Rank	Percentage Contribution					
	Deposit a/c per 1000 Population	Credit a/c per 1000 Population	No. of Bank Branches Per Lakh Population	Per Capita Deposit	Per Capita Credit	CDR			Deposit a/c per 1000 Population	Credit a/c per 1000 Population	No. of Bank Branches Per Lakh Population	Per Capita Deposit	Per Capita Credit	CDR
1991	0.070	0.047	0.032	0.000	0.000	0.067	0.216	19	32.49	21.75	14.69	0.00	0.00	31.08
1992	0.070	0.069	0.004	0.016	0.010	0.000	0.169	21	41.63	40.56	2.16	9.66	5.99	0.00
1993	0.075	0.043	0.024	0.023	0.019	0.059	0.242	18	30.90	17.56	9.80	9.49	7.84	24.41
1994	0.089	0.019	0.000	0.029	0.022	0.016	0.175	20	51.11	10.60	0.00	16.53	12.71	9.05
1995	0.092	0.024	0.064	0.036	0.031	0.079	0.326	16	28.23	7.37	19.68	10.94	9.59	24.18
1996	0.078	0.028	0.066	0.039	0.037	0.117	0.366	12	21.45	7.72	18.15	10.56	10.20	31.93
1997	0.069	0.031	0.070	0.044	0.040	0.101	0.357	14	19.43	8.77	19.75	12.31	11.30	28.44
1998	0.057	0.000	0.074	0.050	0.045	0.091	0.317	17	18.00	0.00	23.29	15.85	14.13	28.72
1999	0.050	0.035	0.081	0.056	0.050	0.092	0.363	13	13.85	9.65	22.22	15.35	13.66	25.26
2000	0.044	0.044	0.078	0.062	0.056	0.105	0.389	11	11.28	11.33	20.16	15.84	14.42	26.97
2001	0.000	0.047	0.050	0.065	0.060	0.114	0.336	15	0.00	14.01	14.87	19.33	17.88	33.90
2002	0.041	0.047	0.045	0.072	0.067	0.119	0.392	10	10.57	11.98	11.59	18.39	17.12	30.35
2003	0.031	0.061	0.034	0.078	0.072	0.121	0.397	9	7.91	15.44	8.62	19.51	18.17	30.36
2004	0.038	0.093	0.036	0.086	0.078	0.107	0.438	8	8.61	21.12	8.26	19.72	17.86	24.43
2005	0.025	0.110	0.056	0.094	0.090	0.139	0.515	7	4.87	21.31	10.88	18.29	17.56	27.08
2006	0.080	0.126	0.092	0.106	0.106	0.159	0.670	6	11.95	18.83	13.75	15.88	15.81	23.78
2007	0.093	0.142	0.109	0.120	0.121	0.165	0.750	5	12.41	18.94	14.59	16.02	16.07	21.97
2008	0.123	0.160	0.134	0.135	0.134	0.161	0.848	4	14.55	18.91	15.75	15.94	15.83	19.02
2009	0.146	0.162	0.148	0.148	0.145	0.157	0.906	3	16.10	17.87	16.37	16.30	16.03	17.33
2010	0.165	0.167	0.167	0.158	0.156	0.158	0.970	2	17.00	17.18	17.18	16.32	16.05	16.28
2011	0.167	0.153	0.162	0.167	0.167	0.167	0.981	1	16.98	15.54	16.52	16.98	16.98	16.98

Table 14
Index for Assam (r=1) along with Contribution of Individual Attributes

Year	Individual Contribution						Index	Rank	Percentage Contribution					
	Deposit a/c per 1000 Population	Credit a/c per 1000 Population	No. of Bank Branches Per Lakh Population	Per Capita Deposit	Per Capita Credit	CDR			Deposit a/c per 1000 Population	Credit a/c per 1000 Population	No. of Bank Branches Per Lakh Population	Per Capita Deposit	Per Capita Credit	CDR
1991	0.000	0.028	0.057	0.000	0.000	0.073	0.158	21	0.00	17.80	35.80	0.00	0.00	46.40
1992	0.008	0.048	0.053	0.000	0.000	0.076	0.186	13	4.20	25.91	28.72	0.21	0.16	40.80
1993	0.012	0.048	0.049	0.001	0.000	0.072	0.182	12	6.34	26.26	27.18	0.37	0.23	39.63
1994	0.015	0.038	0.045	0.001	0.000	0.043	0.143	10	10.45	26.82	31.41	0.93	0.22	30.17
1995	0.023	0.039	0.041	0.003	0.001	0.034	0.140	5	16.62	27.88	29.12	1.79	0.52	24.07
1996	0.021	0.037	0.037	0.003	0.001	0.040	0.139	9	14.99	26.86	26.69	2.19	0.83	28.44
1997	0.026	0.036	0.033	0.004	0.001	0.025	0.126	6	20.75	28.64	26.30	3.20	1.00	20.10
1998	0.026	0.030	0.028	0.005	0.002	0.016	0.106	7	24.66	28.02	26.14	5.08	1.49	14.61
1999	0.023	0.011	0.023	0.007	0.002	0.010	0.076	11	30.32	15.08	30.08	8.79	2.55	13.18
2000	0.017	0.008	0.017	0.008	0.003	0.010	0.063	15	27.56	12.16	27.07	13.44	4.25	15.52
2001	0.017	0.000	0.017	0.010	0.004	0.010	0.057	17	29.57	0.00	28.90	18.08	6.09	17.35
2002	0.012	0.000	0.011	0.013	0.004	0.009	0.049	20	23.77	0.89	22.32	25.80	8.93	18.28
2003	0.010	0.002	0.005	0.014	0.004	0.000	0.036	18	29.07	5.25	14.19	39.22	12.28	0.00
2004	0.008	0.006	0.003	0.016	0.006	0.009	0.048	19	15.71	12.66	7.04	33.62	12.19	18.76
2005	0.009	0.014	0.003	0.020	0.009	0.022	0.077	16	11.83	18.40	3.97	26.45	11.32	28.03
2006	0.018	0.026	0.000	0.024	0.013	0.048	0.129	14	13.79	20.27	0.00	18.61	10.13	37.21
2007	0.024	0.034	0.003	0.030	0.016	0.048	0.156	8	15.20	21.87	1.95	19.25	10.58	31.15
2008	0.033	0.041	0.011	0.037	0.020	0.047	0.189	4	17.52	21.77	5.76	19.42	10.60	24.93
2009	0.054	0.043	0.017	0.047	0.023	0.033	0.217	3	24.98	19.69	7.89	21.51	10.62	15.31
2010	0.073	0.055	0.024	0.058	0.028	0.031	0.268	2	27.13	20.58	8.84	21.56	10.47	11.41
2011	0.089	0.062	0.027	0.068	0.032	0.026	0.305	1	29.12	20.49	8.96	22.35	10.50	8.58

Table 15

Index for Assam (r=0.75) along with Contribution of Individual Attributes

Year	Individual Contribution						Index	Rank	Percentage Contribution					
	No. of Deposit a/c per 1000 Population	No. of Credit a/c per 1000 Population	No. of Bank Branches Per Lakh Population	Per Capita Deposit in Rs.	Per Capita Credit in Rs.	CDR			No. of Deposit a/c per 1000 Population	No. of Credit a/c per 1000 Population	No. of Bank Branches Per Lakh Population	Per Capita Deposit in Rs.	Per Capita Credit in Rs.	CDR
1991	0.000	0.044	0.074	0.000	0.000	0.090	0.208	21	0.00	21.10	35.63	0.00	0.00	43.28
1992	0.017	0.066	0.071	0.002	0.001	0.092	0.249	17	6.74	26.38	28.50	0.72	0.58	37.09
1993	0.022	0.065	0.067	0.003	0.002	0.089	0.248	15	9.06	26.31	26.99	1.08	0.75	35.82
1994	0.027	0.055	0.062	0.004	0.001	0.061	0.212	10	12.91	26.19	29.48	2.11	0.71	28.60
1995	0.038	0.056	0.058	0.007	0.003	0.050	0.213	8	17.92	26.41	27.29	3.37	1.34	23.66
1996	0.035	0.054	0.054	0.008	0.004	0.057	0.212	9	16.51	25.57	25.45	3.91	1.88	26.69
1997	0.042	0.053	0.050	0.010	0.004	0.041	0.199	6	20.86	26.56	24.92	5.13	2.15	20.37
1998	0.042	0.046	0.043	0.013	0.005	0.028	0.177	7	23.54	25.90	24.59	7.20	2.87	15.90
1999	0.038	0.022	0.037	0.015	0.006	0.020	0.138	11	27.23	16.12	27.07	10.76	4.25	14.57
2000	0.030	0.016	0.030	0.018	0.007	0.020	0.122	14	24.95	13.51	24.62	14.56	6.14	16.22
2001	0.030	0.000	0.030	0.021	0.009	0.020	0.110	16	27.39	0.00	26.92	18.94	8.38	18.37
2002	0.022	0.002	0.021	0.024	0.011	0.018	0.099	20	22.71	1.94	21.66	24.15	10.89	18.65
2003	0.021	0.006	0.012	0.026	0.011	0.000	0.076	19	27.50	7.61	16.06	34.42	14.41	0.00
2004	0.016	0.014	0.009	0.029	0.014	0.019	0.100	18	16.30	13.86	8.93	28.83	13.47	18.61
2005	0.019	0.026	0.008	0.034	0.018	0.036	0.142	13	13.27	18.47	5.85	24.25	12.83	25.33
2006	0.031	0.041	0.000	0.039	0.025	0.065	0.201	12	15.42	20.58	0.00	19.31	12.23	32.46
2007	0.039	0.051	0.008	0.046	0.029	0.066	0.239	5	16.14	21.20	3.46	19.26	12.30	27.64
2008	0.050	0.058	0.021	0.053	0.034	0.065	0.281	4	17.61	20.72	7.64	19.02	12.08	22.94
2009	0.072	0.060	0.030	0.064	0.038	0.050	0.314	3	22.88	19.14	9.64	20.45	12.04	15.85
2010	0.090	0.073	0.039	0.075	0.044	0.047	0.367	2	24.40	19.84	10.52	20.54	11.95	12.75
2011	0.104	0.080	0.043	0.085	0.048	0.042	0.402	1	25.86	19.87	10.68	21.21	12.04	10.34

Table 16

Index for Assam (r=0.50) along with Contribution of Individual Attributes

Year	Individual Contribution						Index	Rank	Percentage Contribution					
	Deposit a/c per 1000 Population	Credit a/c per 1000 Population	No. of Bank Branches Per Lakh Population	Per Capita Deposit	Per Capita Credit	CDR			Deposit a/c per 1000 Population	Credit a/c per 1000 Population	No. of Bank Branches Per Lakh Population	Per Capita Deposit	Per Capita Credit	CDR
1991	0.000	0.068	0.097	0.000	0.000	0.111	0.276	21	0.00	24.80	35.17	0.00	0.00	40.04
1992	0.036	0.090	0.094	0.008	0.007	0.112	0.347	20	10.38	25.78	27.14	2.34	2.01	32.35
1993	0.044	0.089	0.091	0.011	0.008	0.109	0.352	19	12.44	25.32	25.76	3.01	2.36	31.11
1994	0.050	0.080	0.087	0.015	0.007	0.085	0.324	11	15.44	24.73	26.76	4.61	2.22	26.23
1995	0.062	0.081	0.083	0.020	0.011	0.075	0.332	8	18.77	24.31	24.85	6.16	3.33	22.59
1996	0.059	0.079	0.079	0.023	0.014	0.081	0.334	9	17.64	23.62	23.54	6.75	4.14	24.30
1997	0.066	0.078	0.074	0.026	0.014	0.065	0.323	7	20.42	23.99	22.99	8.02	4.49	20.10
1998	0.066	0.070	0.068	0.030	0.016	0.051	0.302	6	21.90	23.35	22.55	9.94	5.39	16.86
1999	0.062	0.044	0.062	0.033	0.018	0.041	0.259	10	23.87	16.83	23.78	12.86	6.92	15.74
2000	0.054	0.036	0.053	0.037	0.021	0.040	0.241	14	22.24	14.77	22.04	15.53	8.73	16.69
2001	0.053	0.000	0.053	0.042	0.024	0.041	0.212	17	25.06	0.00	24.77	19.60	11.38	19.20
2002	0.044	0.009	0.042	0.046	0.027	0.038	0.206	18	21.30	4.13	20.64	22.19	13.05	18.68
2003	0.042	0.018	0.029	0.049	0.027	0.000	0.164	16	25.41	10.80	17.76	29.52	16.52	0.00
2004	0.035	0.032	0.024	0.052	0.031	0.039	0.213	15	16.66	14.95	11.15	24.37	14.67	18.20
2005	0.039	0.049	0.023	0.058	0.038	0.060	0.266	12	14.62	18.23	8.47	21.86	14.30	22.51
2006	0.054	0.066	0.000	0.063	0.047	0.089	0.319	13	17.02	20.64	0.00	19.78	14.59	27.97
2007	0.063	0.075	0.022	0.071	0.052	0.090	0.373	5	16.81	20.16	6.02	18.92	14.02	24.06
2008	0.074	0.083	0.043	0.078	0.058	0.089	0.424	4	17.51	19.52	10.04	18.43	13.62	20.89
2009	0.095	0.084	0.053	0.088	0.062	0.074	0.457	3	20.78	18.45	11.67	19.28	13.55	16.27
2010	0.110	0.096	0.063	0.098	0.068	0.071	0.507	2	21.72	18.92	12.40	19.36	13.50	14.09
2011	0.122	0.102	0.067	0.107	0.073	0.066	0.537	1	22.66	19.01	12.57	19.85	13.61	12.30

Table 17
Index for Urban Assam (r=1) along with Contribution of Individual Attributes

Year	Individual Contribution						Index	Rank	Percentage Contribution					
	Deposit a/c per 1000 Population	Credit a/c per 1000 Population	No. of Bank Branches Per Lakh Population	Per Capita Deposit	Per Capita Credit	CDR			Deposit a/c per 1000 Population	Credit a/c per 1000 Population	No. of Bank Branches Per Lakh Population	Per Capita Deposit	Per Capita Credit	CDR
1991	0.033	0.041	0.013	0.000	0.000	0.147	0.234	13	14.29	17.32	5.71	0.00	0.00	62.68
1992	0.037	0.167	0.012	0.001	0.001	0.167	0.384	6	9.74	43.37	3.18	0.17	0.16	43.37
1993	0.053	0.159	0.011	0.001	0.002	0.157	0.383	7	13.93	41.59	2.78	0.21	0.57	40.93
1994	0.060	0.076	0.000	0.002	0.003	0.074	0.215	15	27.85	35.49	0.00	0.89	1.37	34.40
1995	0.156	0.082	0.048	0.006	0.006	0.057	0.355	9	44.05	23.07	13.49	1.65	1.65	16.09
1996	0.128	0.056	0.036	0.006	0.008	0.049	0.283	10	45.20	19.86	12.56	2.18	2.96	17.24
1997	0.144	0.062	0.027	0.008	0.010	0.016	0.267	11	53.80	23.36	10.27	3.08	3.64	5.85
1998	0.121	0.083	0.014	0.011	0.012	0.009	0.250	12	48.36	33.17	5.59	4.35	4.83	3.69
1999	0.099	0.004	0.003	0.013	0.015	0.008	0.141	18	69.93	3.00	1.99	8.99	10.46	5.63
2000	0.058	0.013	0.002	0.016	0.019	0.045	0.153	17	37.77	8.60	1.40	10.61	12.34	29.28
2001	0.040	0.030	0.017	0.021	0.022	0.088	0.218	14	18.26	13.65	8.02	9.77	9.94	40.37
2002	0.016	0.000	0.009	0.025	0.027	0.056	0.133	19	11.70	0.00	7.16	18.58	20.43	42.13
2003	0.004	0.003	0.003	0.029	0.031	0.000	0.070	21	5.04	3.98	4.94	41.06	44.97	0.00
2004	0.004	0.012	0.002	0.032	0.037	0.027	0.114	20	3.19	10.41	2.17	28.47	32.39	23.37
2005	0.000	0.024	0.014	0.040	0.049	0.039	0.166	16	0.00	14.67	8.23	24.01	29.60	23.49
2006	0.081	0.049	0.023	0.052	0.067	0.094	0.366	8	22.10	13.47	6.16	14.14	18.37	25.76
2007	0.106	0.063	0.048	0.069	0.087	0.063	0.437	5	24.19	14.48	11.03	15.91	19.95	14.44
2008	0.111	0.070	0.089	0.088	0.108	0.055	0.521	4	21.30	13.44	17.12	16.88	20.75	10.51
2009	0.135	0.076	0.111	0.111	0.126	0.035	0.595	3	22.67	12.76	18.72	18.73	21.24	5.88
2010	0.124	0.090	0.124	0.136	0.146	0.034	0.653	2	18.98	13.76	19.03	20.79	22.30	5.14
2011	0.167	0.093	0.167	0.167	0.167	0.030	0.789	1	21.13	11.74	21.13	21.13	21.13	3.74

Table 18

Index for Urban Assam (r=0.75) along with Contribution of Individual Attributes

Year	Individual Contribution						Index	Rank	Percentage Contribution					
	Deposit a/c per 1000 Population	Credit a/c per 1000 Population	No. of Bank Branches Per Lakh Population	Per Capita Deposit	Per Capita Credit	CDR			Deposit a/c per 1000 Population	Credit a/c per 1000 Population	No. of Bank Branches Per Lakh Population	Per Capita Deposit	Per Capita Credit	CDR
1991	0.050	0.044	0.025	0.000	0.000	0.151	0.271	12	18.48	16.23	9.29	0.00	0.00	56.00
1992	0.054	0.066	0.023	0.003	0.002	0.167	0.315	10	17.25	20.81	7.45	0.83	0.79	52.87
1993	0.071	0.065	0.021	0.003	0.006	0.159	0.326	9	21.75	20.00	6.49	0.95	1.97	48.83
1994	0.077	0.055	0.000	0.006	0.008	0.091	0.237	14	32.59	23.36	0.00	2.46	3.41	38.18
1995	0.159	0.056	0.065	0.013	0.014	0.075	0.382	7	41.56	14.72	17.11	3.53	3.55	19.52
1996	0.137	0.054	0.052	0.014	0.018	0.066	0.341	8	40.04	15.90	15.33	4.12	5.18	19.43
1997	0.149	0.053	0.043	0.017	0.020	0.028	0.311	11	48.02	17.02	13.87	5.62	6.38	9.09
1998	0.131	0.046	0.026	0.022	0.023	0.019	0.267	13	49.15	17.17	9.74	8.08	8.73	7.14
1999	0.112	0.022	0.008	0.024	0.027	0.017	0.211	18	53.38	10.57	3.70	11.46	12.84	8.06
2000	0.075	0.016	0.006	0.029	0.033	0.062	0.222	17	33.92	7.43	2.87	13.09	14.66	28.02
2001	0.057	0.000	0.031	0.036	0.036	0.103	0.262	15	21.68	0.00	11.70	13.56	13.74	39.32
2002	0.028	0.002	0.019	0.040	0.043	0.073	0.205	19	13.68	0.94	9.47	19.36	20.79	35.77
2003	0.009	0.006	0.009	0.044	0.048	0.000	0.116	21	7.94	4.99	7.82	38.27	40.98	0.00
2004	0.009	0.014	0.007	0.049	0.054	0.042	0.175	20	5.40	7.96	4.04	27.87	30.70	24.03
2005	0.000	0.026	0.026	0.057	0.067	0.056	0.231	16	0.00	11.32	11.03	24.62	28.81	24.22
2006	0.097	0.041	0.037	0.069	0.084	0.109	0.438	6	22.13	9.46	8.49	15.83	19.26	24.82
2007	0.118	0.051	0.066	0.086	0.102	0.080	0.504	5	23.49	10.04	13.04	17.15	20.33	15.95
2008	0.123	0.058	0.104	0.103	0.120	0.072	0.581	4	21.13	10.02	17.93	17.75	20.72	12.44
2009	0.142	0.060	0.123	0.123	0.135	0.052	0.636	3	22.37	9.44	19.38	19.38	21.30	8.13
2010	0.133	0.073	0.134	0.143	0.151	0.050	0.684	2	19.52	10.65	19.56	20.91	22.03	7.33
2011	0.167	0.080	0.167	0.167	0.167	0.046	0.792	1	21.04	10.07	21.04	21.04	21.04	5.75

Table 19

Index for Urban Assam (r=0.50) along with Contribution of Individual Attributes

Year	Individual Contribution						Index	Rank	Percentage Contribution					
	Deposit a/c per 1000 Population	Credit a/c per 1000 Population	No. of Bank Branches Per Lakh Population	Per Capita Deposit	Per Capita Credit	CDR			Deposit a/c per 1000 Population	Credit a/c per 1000 Population	No. of Bank Branches Per Lakh Population	Per Capita Deposit	Per Capita Credit	CDR
1991	0.075	0.082	0.047	0.000	0.000	0.156	0.360	16	20.71	22.80	13.10	0.00	0.00	43.38
1992	0.079	0.167	0.045	0.010	0.010	0.167	0.478	10	16.52	34.87	9.44	2.19	2.12	34.87
1993	0.094	0.163	0.042	0.012	0.019	0.162	0.492	8	19.18	33.14	8.57	2.38	3.87	32.87
1994	0.100	0.113	0.000	0.018	0.022	0.111	0.364	15	27.46	31.01	0.00	4.91	6.10	30.52
1995	0.161	0.117	0.089	0.031	0.031	0.098	0.527	7	30.59	22.14	16.93	5.91	5.93	18.49
1996	0.146	0.097	0.077	0.032	0.037	0.090	0.479	9	30.46	20.19	16.06	6.69	7.79	18.81
1997	0.155	0.102	0.068	0.037	0.040	0.051	0.453	11	34.19	22.53	14.94	8.18	8.90	11.27
1998	0.142	0.118	0.048	0.043	0.045	0.039	0.435	13	32.68	27.06	11.11	9.80	10.32	9.03
1999	0.128	0.027	0.022	0.046	0.050	0.036	0.308	19	41.58	8.62	7.01	14.91	16.08	11.79
2000	0.098	0.047	0.019	0.052	0.056	0.086	0.358	17	27.38	13.07	5.27	14.51	15.66	24.11
2001	0.081	0.070	0.054	0.060	0.060	0.121	0.446	12	18.24	15.77	12.08	13.34	13.46	27.12
2002	0.051	0.000	0.040	0.064	0.067	0.096	0.318	18	15.97	0.00	12.50	20.12	21.11	30.30
2003	0.024	0.021	0.024	0.069	0.072	0.000	0.211	21	11.47	10.19	11.35	32.73	34.25	0.00
2004	0.025	0.044	0.020	0.073	0.078	0.067	0.307	20	7.99	14.44	6.59	23.88	25.47	21.63
2005	0.000	0.064	0.048	0.081	0.090	0.081	0.364	14	0.00	17.50	13.11	22.39	24.86	22.14
2006	0.116	0.091	0.061	0.093	0.106	0.125	0.592	6	19.61	15.31	10.35	15.68	17.87	21.17
2007	0.133	0.103	0.090	0.108	0.121	0.103	0.656	5	20.24	15.66	13.67	16.41	18.38	15.64
2008	0.136	0.108	0.122	0.121	0.134	0.096	0.717	4	18.97	15.07	17.01	16.89	18.73	13.33
2009	0.150	0.113	0.136	0.136	0.145	0.076	0.757	3	19.82	14.87	18.01	18.01	19.19	10.09
2010	0.144	0.122	0.144	0.150	0.156	0.075	0.791	2	18.17	15.47	18.19	19.02	19.69	9.46
2011	0.167	0.124	0.167	0.167	0.167	0.070	0.861	1	19.36	14.43	19.36	19.36	19.36	8.15

Table 20
Index of Financial Inclusion for India and Assam

Year	India				Assam			
	Total		Urban		Total		Urban	
	Index	Status of Financial Inclusion	Index	Status of Financial Inclusion	Index	Status of Financial Inclusion	Index	Status of Financial Inclusion
1991	0.502	M	0.359	M	0.208	L	0.180	L
1992	0.496	M	0.362	M	0.249	L	0.214	L
1993	0.490	M	0.364	M	0.248	L	0.217	L
1994	0.471	M	0.356	M	0.212	L	0.153	L
1995	0.463	M	0.398	M	0.213	L	0.265	L
1996	0.469	M	0.417	M	0.212	L	0.233	L
1997	0.455	M	0.413	M	0.199	L	0.212	L
1998	0.445	M	0.407	M	0.177	L	0.176	L
1999	0.441	M	0.424	M	0.138	L	0.126	L
2000	0.452	M	0.442	M	0.122	L	0.129	L
2001	0.462	M	0.436	M	0.110	L	0.158	L
2002	0.453	M	0.456	M	0.099	L	0.118	L
2003	0.495	M	0.470	M	0.076	L	0.063	L
2004	0.515	M	0.505	M	0.100	L	0.098	L
2005	0.576	M	0.566	M	0.142	L	0.141	L
2006	0.634	H	0.665	H	0.201	L	0.270	L
2007	0.701	H	0.740	H	0.239	L	0.320	M
2008	0.784	H	0.834	H	0.281	L	0.382	M
2009	0.848	H	0.894	H	0.314	M	0.421	M
2010	0.927	H	0.964	H	0.367	M	0.459	M
2011	0.998	H	0.977	H	0.402	M	0.540	M