IMPACT OF INFORMAL BORROWING ON FINANCIAL INCLUSION- A STUDY OF FINANCIAL INCLUSION WITH SPECIAL REFERENCE TO MEERUT RURAL AREA

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ABSTRACT

BACKGROUND
According to economic theory, there is a direct relationship between investment and economic growth to saving rate. It is identified that financial exclusion of a vast majority shows a missed opportunity of a huge potential for economic growth. Finance and poverty are interrelated with each other. Poverty can be reduced by financial inclusion of the poor, stimulating inclusive growth. The meaning of inclusive growth is the growth with equal opportunities which focuses on both creating opportunities as well as making opportunities accessible to all. Growth is called inclusive only when all members of a society are allowed to participate in and also contribute to the growth process on an equal basis irrespective of their individual circumstances.

KEYWORDS
Financial Inclusion, Financial Exclusion, Informal Borrowing, Rural Area.

BACKGROUND
In most of the developing economies, formal financial services serve only a minority that is not more than 20-30 percent of the population. Financial inclusion means distribution of financial services to vast sections of disadvantaged and low income groups, at an affordable cost (GOI, 2008). An inclusive financial sector makes availability of effective and ongoing access to all sections of the population and all scales of enterprise. It enables poor households for contributing to the growth of economy. Bank accounts facility is useful for better savings and money management in addition to protection from inflation, access transaction/transmission facilities like remittances, loans. Savings are useful in managing liquidity and risks, and enhancing capacity to invest in evolving opportunities. If the majority of population are having effective access to formal resources, then it can also influence the informal sector due to competition, which benefiting those who were otherwise excluded from it. However, in India institutional financing is risk averse; concentrating on investment returns leaving out low profile clients whose creditworthiness is unknown. Diligence of the financing institutions increases financial exclusion for the poor people, with limited physical and financial assets to fall back upon. Though supply side of institutional finance in the country bears a very sound financial assets position, its coverage among low income clients is grim due to abovementioned apprehensions. The distribution of commercial bank branches in rural and urban centres and between regions is not significant. Due to the financial illiteracy and lack of knowledge of financial products, the poor do not even dare to approach any financial institution. In providing credit for rural poor, there is still domination by informal agencies who charge exorbitant rates of interest. This points to the fact that in spite

of significant achievements through distribution of bank branches all over the country, services provided to the poor and marginalised segments of the community are less. Banks remain unapproachable and credit terms are often not according to the requirement of poor borrowers even for those who gained access, due to recent developments in financial services for the low income people are underserved.

Working Definitions/ Terminology
There are some working definitions used in this study which is derived from various published research papers and research reports came across at the time of research work. All the terms which are used in this study are mentioned below.

a) Financial Inclusion/ exclusion- Definition and Dimensions
Financial inclusion may be understood as poor households' access, availability and usage of all the basic financial services from those service providers who are formal. It means the availability of savings, loans and insurance in a convenient and flexible manner in terms of access and design and reliable.

This definition is modified from the definitions given by World Bank 2005, M or and Ananth, 2007, Sharma, 2008, Kamath, 2007, European Commission, 2008 and GOI, 2008.

b) Rural Area
In general, a rural area or countryside is a geographic area that is located outside towns and cities. The Health Resources and Services Administration of the U.S. Department of Health and Human Services define the word "rural" as encompassing "All population, housing, and territory not included within an urban area. Whatever is not urban is considered rural."

Typical rural areas have a low population density and small settlements. Agricultural areas are commonly rural, so are others such as forests. Different countries have varying definitions of "rural" for statistical and administrative purposes. Rural areas are also known as the 'countryside' or a 'village' in India. It has a very low population density.

In rural areas, agriculture is the chief source of livelihood along with cottage industries, pottery, etc.

The quest to discover the real rural India still continues in great earnest. Almost every economic agency today has a definition of rural India. Here are a few definitions.

According to the Planning Commission, a town with a maximum population of 15,000 is considered rural in nature. In these areas the panchayath makes all the decisions. There are five persons in the panchayath. The National Sample Survey Organisation (NSSO) defines 'rural' as follows-

"An area with a population density of up to 400 per square kilometre, Villages with clear surveyed boundaries but no municipal board, a minimum of 75% of male working population involved in agriculture and allied activities."

RBI defines rural areas as those areas with a population of less than 49,000 (tier -3 to tier-6 cities). It is generally said that the rural areas house up to 70% of India's population. Rural India contributes a large chunk to India's GDP by way of agriculture, self-employment, services, construction, etc. As per a strict measure used by the National Sample Survey in its 63rd round, called monthly per capita expenditure, rural expenditure accounts for 55% of total national monthly expenditure. The rural population currently accounts for one-third of the total Indian FMCG sales.

REVIEW OF LITERATURE

The relevant literature has been reviewed for exploring the theoretical foundation behind financial inclusion and various other aspects pertaining to it.

Joseph Massey (2010) said that role of financial institutions in a developing country is vital in promoting financial inclusion. The efforts of the government to promote financial inclusion and deepening can be further enhanced by the pro-activeness on the part of capital market players including financial institutions. Financial institutions have a very crucial and a wider role to play in fostering financial inclusion. National and international forums have recognised this and efforts are seen on domestic and global levels to encourage the financial institutions to take up larger responsibilities in including the financially excluded lot.

Sethy Susanta Kumar (2016) in his study has proposed a Financial Inclusion Index to measure the extent of financial inclusion across economies. Both supply side dimensions like access to savings, insurance, bank risk and demand side dimensions like banking penetration, availability of banking services and usage of banking system were used for development of index. It was recommended that GOI and RBI adopt adequate policy measures to improve supply side dimension of financial inclusion. Pradnya P. Meshram and Abhijeet Randad (2015) carried out a survey on 100 respondents and analysed the percentage of population for awareness of financial inclusion from customer's perceptive. The findings suggest that over three-fourths of the households had at least one family member who could read and write and in terms of livelihood, a majority of the households were involved in agricultural activities but still the awareness level of financial inclusion was very low. The study further suggests that it is not sufficient by merely opening a bank account as it will not meet the objective of financial inclusion. The common man should get the confidence to use the financial services which should be made available at their doorstep.

Joseph J. and Varghese T. (2014) in their study have made an attempt to assess the current status of financial inclusion on the development of Indian economy by analysing five state banks (group) and five private sector banks. The variables considered for the study were bank growth rate in terms of number of bank branches, offsite and onsite ATMs, usage of credit cards and debit cards. The findings of the study suggest that the usage of debit card has increased tremendously throughout the study period and banks focused more on semi-urban areas and rural areas. The study also found that the number of people with access to the products and services offered by the banking system is very limited despite inclusive banking initiatives in the country. The technological reforms pertained to banking sector such as e-commerce, mobile phones, email, ATMs and plastic money were available only in towns and cities, which leads to limited access to financial products and services in rural and semi-urban regions. An awareness index was constructed from the primary data collected from urban poor in Nagpur. It was observed that financial products like current account, demand loan, direct debit facility, credit card and mobile banking is low. Aggregate awareness of banking services offered was found to be below 41%. Lack of cooperation, improper guidance, and lack of transparency are the main reasons for this level of awareness. Shabna Mol (2014) in her study investigated the level of awareness about financial inclusion forces and examined the extent of financial inclusion among below poverty line in Kerala households in terms of continuous usage of bank account and access. For this purpose, a survey was conducted on 200 respondents from Malappuram District, Kerala. The findings suggest that the literacy level and occupation of respondents are highly influenced to access and continuous usage of bank account. Further BPL households access bank account only for enjoying the government benefits and schemes and are to a certain extent aware about financial inclusion drives and a majority of respondents are fully aware of no-frill accounts. Rao N.N.D.S.V (2010) carried out a study to understand financial inclusion from the banker's perspective. He also emphasised that banking for the poor cannot be called as poor banking and there is a vast potential to tap the unexplored aspects of this banking. But he also strongly recommends that regular campaigns have to be conducted to create awareness about financial inclusion to the bank staff.

RESEARCH METHODOLOGY

Objective of the study

The broad objective of the study is to analyse the impact of informal financing on the status of financial inclusion.

Hypothesis

H0: There is no significant association between informal financing and financial inclusion.
H1: There is a significant association between informal financing and financial inclusion.

Source of Data

The study is mainly based on primary information and also being supported by secondary information as well. Secondary information was collected from published sources including government publications at the national, state and district level, publications of NABARD, RBI, CSO, NSSO and related journals and books. The primary information was collected

from rural families through pre-structured tested schedules and through conducting group discussions and interviews.

Data were collected from the selected sample households by using pre-structured schedule. The data analysis was done by using various statistical tools like averages, percentages and modelling was done using binary logistic regression and multiple regression analysis.

Sampling Design
Multistage sampling was used to select the samples. Sampling has been done in two stages and each stage is defined in detail. The study area covers thirty villages from all over the Meerut Rural area.

Stage 1: Selection of rural area
The first stage of sampling was the selection of the rural area for the study. Demographic indicators of villages in Meerut is given below-

Tehsil	No. of Villages
Meerut	211
Mawana	305
Sardhana	137
Total Villages	**653**
Table 3.1	

Source- Census data 2011.

At this stage, Meerut district has been divided into 3 tehsils. Through proportionate sampling based on the number of Villages in the Meerut district, Three Tehsils are there in Meerut District, Namely Meerut, Mawana and Sardhana.

Total no. of villages in Meerut District are 653 in which 211 are in Meerut tehsil, 305 and 137 are in Mawana and Sardhana tehsil respectively. Tehsil was used for stratification because religion-wise data is available in the 2011 census only up to the tehsil level.

Step-2 Sample Villages
From three tehsils of the district thirty villages have been selected. Number of villages, for sample from each tehsil is selected on the basis of district's rural population in each tehsil. According to the Census of India 2011, total rural population of the district is 16,84,507 out of which highest percentage i.e. 38.11 percent is represented by tehsil Meerut, second highest is by tehsil Mawana (34.73) and third is Sardhana (27.15) (See Table 1.1). According to that twelve, ten and eight villages have been selected from tehsil Meerut, Mawana and Sardhana respectively.

Required number of villages from each tehsil were identified with the probability proportional to size (PPS) with replacement, size being total population of the village as per Census 2011. Distribution of sample villages across tehsils and blocks is shown in Table 1.2.

Tehsil	Population	Percentage	No. of Villages	No. of Villages Selected	No. of Households	No. of Households Selected
Meerut	642009	38.11	211	12	102311	240
Mawana	585122	34.73	305	10	95541	200
Sardhana	457376	27.15	137	08	73827	160
Total			**653**		**1684507**	**600**

Step 3 - Sample Households
The study is confined to villages belonging to three tehsils namely, Meerut, Mawana and Sardhana of Meerut district. Out of total 653 villages, 30 were selected for the study, primary data are collected from 600 beneficiaries (20 households from each village) on the basis of judgment sampling, criteria adopted is availability and willingness to respond.

Statistical Techniques Used
Chi-square statistics ($\chi2$)

The Chi-square value is the traditional measure for evaluating overall model fit and assesses the magnitude of discrepancy between the sample and fitted covariance matrices (Hu & Bentler, 1999). A good model fit would provide an insignificant result at a 0.05 threshold (Barrett, 2007), thus the Chi-square statistic is often referred to as either a 'badness of fit' (Kline, 2005) or a 'lack of fit' (Mulaik et al., 1989) measure. Chi-square statistics is the fundamental.

Measure used in SEM to quantify the differences between the observed and the estimated covariance matrices. A large value of Chi-square relative to the degree of freedom signifies that the observed and estimated matrices differ considerably. Statistical significance level indicates the probability that these differences are solely due to sampling variations. Thus, the p-value of Chi square test should be large, indicating no statistical difference between the matrices. While the Chi-square statistics retain its popularity as a fit statistic, there

exist a number of severe limitations in its use. Firstly, this test assumes multivariate normality and severe deviations from normality may result in model rejections even when the model is properly specified (McIntosh, 2006). Secondly, because the Chi-square statistic is in essence a statistical significance test it is sensitive to sample size which means that the Chi-square statistic nearly always rejects the model when large samples are used (Bentler & Bonnet, 1980 and Joreskog & Sorbom, 1993). On the other hand, where small samples are used, the Chi-square statistic lacks power and because of this may not discriminate between good fitting models and poor fitting models (Kenny & McCoach, 2003). Nowadays, researchers are using Chi-square and degree of freedom ratio, a value less than 5 is deemed appropriate for model to be fit.

Limitations of the Study
It was argued that "no research is free from limitations" (Katega and Mdendeni, 2004). The main constraints to this research are as follows:

- Inadequate research materials and facilities since there is inadequate secondary information of the problem under study.
- Also the researcher found the respondents very busy and they could not answer the questionnaire, hence, was forced to do interview while they are at work.
- Financial constraints whereby the researcher fell short of funds in conducting the Research.

DATA ANALYSIS

Financial Inclusion Index

For constructing an index, it was decided to go for a single composite (Consisting of a conglomerate index) than attempting for the complementary composite (includes a conglomerate as well as deprivation index). The conglomerate index was used to measure the overall wellbeing of society which has also been adopted by the UNDP for the calculation of the Human Development Index (HDI). Construction of FI Index (Financial Inclusion Index) also can be categorised as a conglomerate index as this is used to determine the wellbeing of the population in respect of access to financial services.

Variables Selection and Assigning Weights

The dimension of financial service usage has been occupied to build Financial Inclusion Index. The various kinds of financial services that the responded used for a recall period of past one year (Calendar year of 2016) with an exception to availed credit (assessed for the past 3 years) have been collected by means of survey (survey was conducted during the months of January 2016 to May 2016 in the selected locations). Access to following services provided by formal financial service providers has been analysed in the study.

Transaction banking: Financial inclusion basically promotes well-organised payment mechanism which help to strengthen the resource base of the economy. The study probes into households' usage of money transmission mechanism with the formal financial service providers. Usage of various kinds of transactions like demand draft or cheque or Money Transfer or obtaining social security payments through accounts or Telegraphic Transfer or usage of ATM/Debit card for money withdrawal has been looked into. The Financial Access Survey, 2016 has also probed the usage of other banking services in addition to deposit or credit.

Credit

In the concept of Financial Inclusion credit has been accorded prime importance. The Committee on Financial Inclusion, observes in the working definition that financial inclusion promote access for timely and sufficient credit at a reasonable cost for the weaker sections and also for the low income groups in particular. So that credit accessed by household to any formal sources of finances including SHG bank linkage in three previous years have been accounted in the study through recall method.

Deposit

Deposit with the formal financial service provider is a basic access to financial services. Financial Inclusion promotes thrift and develops the culture of savings among the poor that also has been a thrust area in the programme of Financial Inclusion of RBI since 2005, with an initiative to start 'No Frills Savings Bank account'. The study looks towards the household access in Savings Bank accounts of banks/post office savings as also of having fixed deposit as well as recurring deposit accounts. Further, savings with SHGs are also being measured for identifying the level of financial inclusion although it can be accounted as group savings in comparison to other individual based accounts.

Insurance

Insurance has been piercing as lower transect of the society in the recent competitive phase. In rural sector various type of scheme has been operating to cover risk necessitating premium payment. On the other hand, insurance is also a kind of investment option with covering the risk of loss of life due to which it is attractive.

These selected variables were put to reply in the survey. Index was calculated through aggregating responses for each variable. Principal Component Analysis (PCA) was used to gives the weights from the first eigenvector of the covariance matrix was found uncertain in social sciences context. So that calculation of index has been based on the mathematical concept of weighted average index numbers. The variables were selected based on literature available on the subject and by using judgement method appropriate weights were assigned. A panel of 30 judges evaluates the weightage distribution, who were experts in the field of banking, researchers and academicians. An acceptable weightage distribution was identified by incorporating different weighing schemes with the use of arithmetic average. Standardisation of the variables was not needed as they were rated on the same scale. Financial Inclusion Index-construction and weightage distribution of Usage Dimension.

Indicator		Sub components (Source of finance)	Weight	Sub total
Inclusion Indicators				
Transaction Banking	a	Usage of Cheque /DD	5	15
	b	Social security pension payments through banks/cooperatives	5	
	c	Usage of ATM	5	
Formal Credit	d	From institutional sources or through SHG bank/MFP linkage during 2015	30	50
	e	From institutional sources or through SHG bank/MFP linkage during 2014	10	
	f	From institutional sources or through SHG bank/MFP linkage during 2013	10	
Savings	g	Savings account with institutional sources (commercial bank, cooperative bank or post office or SHG bank linkage)	10	25
	h	Fixed Deposit or Recurring Deposit account with institutional agencies	10	
	i	Informal savings in an SHG	5	
Insurance	j	Any source/type of insurance	10	10
Total			**100**	**100**

The values given for each variable is either 1 or 0. Where value 'one' shows that respondent having association with the source of finance and value 'zero' shows that the respondent having no association with the particular source of finance. The index is calculated as follows

$$\sum_{1-n} X = \sum (a1*5)(b*5)(c*5)(d*30)(e*10)(f*10)(g*10)(h*10)(i*5)(j*10)$$

The index varies between '0 and 100'. Value '100' shows full Financial Inclusion where value '0' shows complete Financial Exclusion. Value of '1-29' shows low financial

inclusion, value of '30-60' shows medium financial inclusion and 61 and above shows high level of financial inclusion (Table 6.6).

Financial Inclusion and Informal Finances

One of the most important questions in the financial inclusion prospective is the influence regarding the informal borrowings by households. The definition says that when poor are having access for easy and cheaper credit, they tend to move away from any type of informal financing. This has been acknowledged by analysing levels of financial inclusion and regularity of informal financing. The table 4.19 defines the various classes of FI index and also the rate of borrowings from various kinds of informal agencies. Informal borrowings decreased from 72.3 percent among the excluded to 43.3 percent among those having the uppermost level of index (above 60). It can be analysed that there is a clear trend which shows decreasing share of informal borrowings with increase in index. This can be credited to various alternative agencies that give support to the poor in borrowing.

Financial Inclusion and Informal Finances

Status of Financial Inclusion	No Informal Borrowing	%	Borrowed from Informal Source	%	Total
Financially Excluded	8	30%	19	70%	27
1-29	34	29%	84	71%	118
30-60	154	48%	166	52%	320
61 & Above	77	57%	58	43%	135
Total	273	46%	327	55%	600

The hypothesis that there is no difference among various classes of FI index with respect to incidence of informal borrowings was tested through using chi square test of significance. The incidence related to informal borrowings was measured as a categorical variable by taking two values; '0' for no borrowings and '1' for the incidence of borrowings. Hence, chi square test, which can also be utilised as a nonparametric test was used to make inference (Table 4.20).

Ho: There is no association between various classes of FI index and informal borrowings.

H1: There is an association between various classes of FI index and informal borrowings.

Table 4.20: Results of Chi-Square Test of significance.

Chi stat	11.966
Df	2
Chi rit	5.991
Chi stat >Chi rit	Reject Ho

The chi square test was found significant at 1 percent level of significance. Hence, null hypothesis, H0, stating that there is no association between FII and informal finances does not hold good. Instead, alternative hypothesis can be accepted which observes decrease in informal borrowings associated with higher level of financial inclusion.

CONCLUSION

1) It has been identified that there is an association between financial literacy and financial inclusion.
2) People who have proper knowledge regarding the various facilities provided through government and aware regarding the use of new technology for transactions, saving, etc. are more interested to use formal financial services.
3) People who are financially illiterate do not want to use formal financial services.

RECOMMENDATIONS

Various awareness programmes should be conducted by the government on a regular basis for making the people financially literate.

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