Financial Inclusion and Bank Credit : Perspectives from Small Borrowers

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ABSTRACT

Financial inclusion has emerged as a major developmental goal across the world, especially for emerging economies like India. It has been identified as a key enabler of eight sustainable development goals. A close examination of the current financial inclusion situation in India reveals that supply side measures have expanded the banking outreach in semi urban as well as rural spaces. Considerable progress has been made in terms of "bank account ownership" and "financial access". However, there are persistent gaps in usage of financial services and many demand side barriers need greater attention of bankers and policy makers. Moreover, the journey towards full financial inclusion entails key dimensions like credit, insurance and technology adoption and it's time to address issues in these critical areas. Literature reveals that the level of financial inclusion in a country is shaped up by supply side as well as demand side parameters. At this stage, a microscopic view of the demand side barriers pertaining to financial inclusion can be useful to decode the challenges of banking for small and marginal clientele groups, particularly borrowers.

The present study has been conducted with the help of primary survey using structured schedules to collect data from rural and marginal households in the villages of Pune District in the State of Maharashtra in India. Since the district already has a good level of banking outreach, exploring the operational challenges and deriving insights from small borrowers has led to many meaningful findings in terms of financial inclusion challenges. The study was carried out with respect to one of the most critical dimension of financial inclusion that is "Credit". The data analysis has been done using multiple regression and tests of association to find out the biggest set of barriers under each of the above heads. These factors are relevant in shaping up the level of

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banking satisfaction and the borrowers' overall experience. The findings can be useful for banks in order to craft financial inclusion plans and strategies to address the challenges for the clientele at the bottom of the pyramid.

Key Words : Financial Inclusion, Financial Access, Usage, Demand Side Barriers, Technology Adoption, Credit, Insurance, Small Borrowers

1. Introduction

"The test of our progress is not whether we add more to the abundance of those who have enough; it is whether we provide enough for those who have too little." - Franklin Delano Roosevelt, former U.S. president.

Though several theories to poverty reduction have been put forth by economists all over the world, "Financial Inclusion" has been recognized as yet another approach that can address poverty related issues. For developing economies, "Financial Inclusion" has emerged as a powerful mechanism to strengthen the poverty eradication efforts, by countries across the world. This is evident from that fact that "Financial Inclusion" has been identified as a key enabler of eight Sustainable Development Goals. The very first in the list is SDG – 1 on eradicating poverty. Therefore, it has been established there is a strong interconnectedness between "poverty" and "financial inclusion".

Park, Cyn-Young & Mercado, Rogelio, 2015 in their study titled "Financial Inclusion, Poverty and Income Inequality in Developing Asia", have empirically established a strong correlation between "financial access and poverty rates". Michael Chibbaa (2009), has documented case studies from several countries to highlight how deepening of financial sector is a pre requisite for financial inclusion and poverty reduction. According to him there is a strong nexus between financial inclusion, poverty reduction and developmental goals. Sanusi (2015), through his research states that by including lower segments of the society in the financial sector, there is a boost in domestic output and economic activity of the country. Sharma, D (2016) in her study establishes causality between financial inclusion and economic growth by using data on various dimensions of financial inclusion and indicators of economic growth. Thus, it is well established that financial inclusion

[2] According to UNDP, "The Sustainable Development Goals (SDGs), otherwise known as the Global Goals, are a universal call to action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity. These 17 Goals build on the successes of the Millennium Development Goals, while including new areas such as climate change, economic inequality, innovation, sustainable consumption, peace and justice, among other priorities." Retrieved from https://www.undp.org/content/undp/en/home/sustainable-development-goals.html

has strong interlinkages with broader developmental agenda, particularly with the poverty alleviation objectives.

It has occupied a prominent place in the developmental agenda of emerging economies and they are heading towards the goal of full financial inclusion by promoting effective usage of financial services and better customer experience through formal delivery channels. In this regards, various models have been analysed. Yet another study by Hussaini, Umaru & Chibuzo, Imo. (2018) asserts that there is a great need for robust initiatives in rural areas and models like microfinance should be supported by the government to achieve poverty reduction. AE Ageme, CA Anisiuba et al. (2018) study the impact of financial accessibility parameters and delivery channels on poverty reduction. He stated that although "financial access" is the first leg of financial inclusion goal, "usage" factor of services is a great concern and is largely dependent on the delivery models.

Even the World Bank has been measuring the state of financial inclusion from the "access" as well as "usage" perspectives (FINDEX 2017). The latest 2017 report stresses on the effective use of technology for upscaling the level of financial inclusion in the countries. Danielle White (2012), in his study identifies that the gaps of formal banking sector have been bridged through technological innovations like M-Pesa. According to McKinsey Global Institute's Report in 2016, digital finance has the potential to lead to inclusive growth by adding $3.7 trillion to the GDP of developing economies, over the next decade. Thus, technology has become a key focus of financial inclusion delivery models in order to expand customer outreach and lead to effective usage of services.

In the Indian context, the history of Financial Inclusion initiatives particularly expansion of credit in rural areas is extremely old and well documented. As rightly put by RBI, "The history of financial inclusion in India is actually much older than the formal adoption of the objective" .

According to Reserve Bank of India, "Financial inclusion may be defined as the 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" (The Committee on Financial Inclusion, Chairman: Dr. C. Rangarajan). The definition highlighted three important aspects namely *access to financial services, credit and factors like timeliness and affordability.* It is worthy to note here that it

[3] Keynote Address by Dr. K. C. Chakrabarty, Deputy Governor, Reserve Bank of India at the BIS-BNM Workshop on Financial Inclusion Indicators at Kuala Lumpur on November 5, 2012, Retrieved from https://rbidocs.rbi.org.in/rdocs/Speeches/PDFs/SDGKCC091112.pdf

entails the fulfillment of financial needs as well as the delivery process (timeliness and adequacy). The scope of financial inclusion was subsequently broadened by "The Committee on Financial Sector Reforms, Chairman: Dr. Raghuram G. Rajan". According to Raghuram Rajan committee report "financial inclusion refers to universal access to a whole range of financial resources at a reasonable cost. These include not only banking product but also other financial services such as insurance and equity product". This included other dimensions of financial services apart from basic banking access. Such dimensions were insurance, savings and investments. It further added that products should be channelized based on the financial literacy and the risk appetite of the households.

Therefore, it can be well understood that full financial inclusion entails not just "access" but also "usage". It encompasses savings, payments, credit and insurance services. It is important to note that in this technology driven era, many delivery models in the banking and financial services segment will emerge from technology enabled solutions.

The present study is a microscopic investigation on small and marginal borrowers who have had a good degree of "financial access" through a formal financial institution, such as a bank. The study attempts to bring out their perspectives on critical dimensions like "Credit", "Technology Adoption", and "Insurance". Since "Financial Inclusion" essentially means delivery of financial services to the last mile, this study from the bottom of the economic pyramid gives meaningful insights into the barriers and drivers o financial inclusion for marginal communities.

2. Review of Literature

Credit has been considered a powerful tool to address poverty reduction. It has the potential to spur a virtuous cycle of financial prosperity provided it is utilized productively and efficiently. Time and again, academicians and researchers have highlighted the importance of credit delivery for agricultural as well as rural development. The Global Findex Database published by the World Bank in 2017 reveals that less than 10 % of the adults borrow through formal sources and the problem is greater amongst the rural sections of developing economies. Babych, Grigolia, and Keshelava (2018) have argued that even though supply side barriers have been addressed by developing nations, there are demand side issues like low-income levels, poor cash flows, indebtedness, poor planning, lack of financial literacy, lack of trust and few attitudinal barriers. Many a times, formal access to finance is blocked by a lack of relevant information and customer service infrastructure (Langat Weldon Kipngetich, 2013). Price related and

income related factors together are responsible for financial exclusion across the world (Vaughen R, 1999).

Adam Ikdal (2017) discussed that while few people in the low-income bracket don't use mobile and internet banking simply due to absence of familiarity, the fear of fraud including ATMs and mobile/internet banking was referred as the number one reason for preferring to transact in cash. Lack of technological advancements in remote locations is also a major factor that pushes up financial exclusion (Christabell and Raj, 2012). The formal financial sector is away from "mass banking" and there are several capability issues to be addressed beyond geographical reach. The technological platforms can be leveraged to foster large scale inclusion and to build consumer capabilities through education and literacy in financial decision making. Shafi and Medabesh (2012) have asserted that although a generation of reforms has been put in place for inclusive banking, still the unprivileged class is unable to access basic baking services. The issue is more intense in case of credit and micro insurance accessibility, although proper access to credit and insurance can augment livelihood opportunities (Goodwin et al., 2000). Private banks are reluctant to serve the bottom of the pyramid due to high operational costs and microinsurance is a very neglected area. In the Indian context, Mehrotra et al., (2009) have recognized demand side and supply-side barriers to be responsible for low stage of access to financial services/products. Microsave (2017) had stated the financial inclusion outstanding constraints in India and Bangladesh. There is still substantial unmet demand for traditional and micro- insurance products.

Technology, especially in the payments space such as Kenya's M-PESA can empower more money transfers & consumption smoothing (Jack, et.al 2013).

There are numerous other digital payments schemes across countries: more research is required on regulation, infrastructure, and design. In India, digital payments are conceptualized as one component of a 3-part strategy for financial inclusion utilizing digital technologies, specifically, JAM – Jan Dhan (banking), Aadhaar (identity), and Mobile (transactions). While there is proof that biometric identity cards can diminish corruption, there are concerns that the JAM framework might be too restrictive in thinking about financial inclusion by means of digital innovation. In the context of economies like India, it is established that technological advances as of now have shown real outcomes in improving access to financial services, prominently by lowering costs and broadening services into areas where bank branches may not exist (Mitsuhiro Furusawa 2016).

3. Research Objectives

The present study attempts to study the issues in financial inclusion with respect to critical dimension like “Credit Access”. It is a microscopic investigation has attempted to study the overall experience of small borrowers from banks with the primary objective of bringing out the major challenges of financial inclusion.

In this context, the following research objectives have been framed.

i. To ascertain the specific barriers which impact credit access;

ii. To analyze the relationship between banking satisfaction and credit access barriers; and

iii. To propose suggestive measures to enhance financial inclusion and usage of banking services.

4. Methodology and Data Collection

The study *uses exploratory as well as descriptive research design.* Considering the objectives of the study, a mixed approach was found more suitable. While a descriptive research design tries to describe the present state of affairs and observed phenomenon of the population, exploratory research is an in-depth study which leads to extensive enquiry and in-depth analysis of the problem in hand. Several researches have argued that mixed methods can give better inferences in an investigation and more scope to validate qualitative findings with quantitative data (Greene, Caracelli, and Graham 1989, Creswell & Plano Clark, 2007, Molina-Azorin, 2011).

The data has been collected using primary survey, based on the respondents’ opinion on the challenges faced by borrowers in availing the services by banks. It describes the present state of affairs in the form of persistent challenges across a spectrum of products like savings, credit and insurance. However standardized tools to measure demand side financial inclusion is not available. Therefore, structured schedule had to be developed based on expert opinion and literature survey. Here the researcher made an in-depth analysis of the severity of various challenges faced in terms of financial inclusion. Since there was more scope for interaction with the respondent, the survey gave an opportunity to collect qualitative information as well. This was later corroborated with quantitative data so collected with the help of schedules. The idea was to explore the factors behind non usage of banking services.

5.1 Sampling Design

As per the research objectives as well as the geographical spread of the study area, a multi stage sampling approach where Purposive Random Sampling technique has been used for collection of primary data.

The study has been carried out in Pune district within the State of Maharashtra. The sampling unit (respondent) was a single household. Therefore a multistage approach was needed to arrive at household level through a series of sequential selections to constitute the sample of study (District level, Block level, Village level and Household level). Pune District fares quite well as far as supply side indicators of financial inclusion are concerned. So, it was apt to study the demand side issues as the district was adequately covered with branch banking, with significant outreach in the rural areas. Hence "Pune" district was selected for the study.

The sample size for the current study is 389. To select an adequate sample size, Morgan's table for sample size determination was used. According to the Morgan's table the suggested sample size for a population of more than 5,00,000 but less than 7,50,000 was 381. The researcher captured data of 405 households. However, only 389 households completed the survey properly and were taken for further analysis. Hence the final sample size for the study was 389.

The sample was drawn using Purposive Random sampling through a multi stage sampling approach. Since the population was broad, a narrow down approach was required to arrive at a sample in a logical manner. "Multi-stage sampling is a process of moving from a broad to a narrow sample, using a step-by-step process (Ackoff, 1953)."

The selection of study area was done through a multi stage sampling approach. In the first stage, eight blocks were selected. In the second stage 79 villages from eight blocks were selected randomly . In the third stage 405 households from 79 villages were selected randomly and finally a study sample was constituted for the population of interest. Due care was taken to include households from low income and marginal communities.

5. Hypotheses Testing Results and Discussion

In the light of the stated objectives, following hypotheses have been formulated.

Hypothesis 1

$\mathbf{H_1}$ **:** There is no significant association between "Credit Experience" and "Credit Barriers"

$\mathbf{H_{A1}}$ **:** There is significant association between "Credit Experience" and "Credit Barriers"

The above hypothesis was tested using Chi Square test of association. The association of "Credit Experience" was tested with each of the "Credit Barriers".

The "Credit Barriers" variable was operationalized using nine indicators as follows:

i. Multiple Branch visits
ii. Informal Source Dependency
iii. Preference for Loan Waivers
iv. Fear Psychology
v. Lack of Counselling
vi. Procedural Complexities
vii. Limit adequacy
viii. Repayment Issues
ix. Effective Loan Utilization

Table No 1 presents the results of hypothesis testing for each of the above-mentioned barriers (Indicators of Credit Barriers).

Table No 1: Results for Testing of Hypothesis 1

Variables (Barriers)	p value	Null Hypoth-eses	Statistically significant at 5% level of significance
Multiple Branch visits	2.70198E-11	Reject	Significant
Informal Source Dependency	0.000107135	Reject	Significant
Preference for Loan Waivers	1.73535E-05	Reject	Significant
Fear Psychology	1.31834E-12	Reject	Significant
Lack of Counselling	3.59006E-07	Reject	Significant
Procedural Complexities	1.10957E-06	Reject	Significant
Limit adequacy	0.476110107	Accept	Significant
Repayment Issues	9.78784E-10	Reject	Significant
Effective Loan Utilization	1.68303E-09	Reject	Significant

Source : Authors' Compilation of Results from Primary Data

Interpretation :

The results of hypothesis testing reveal that the Null Hypothesis is rejected in case of 8 credit barriers as the p value is less than 0.05.

Thus, it is stated that there is a statistically significant relationship between "Credit Experience" and 8 Credit Barriers that is *"Multiple Branch visits, Informal Source Dependency, Preference for Loan Waivers, Fear Psychology, Lack of Counselling, Procedural Complexities, Repayment Issues, Effective Loan Utilization"*.

The null hypothesis is accepted in case of "Limit Adequacy" barrier that is there is no relationship between *"Credit Experience"* and *"Limit Adequacy"* as the p value of 0.476 is greater than 0.05

Hypothesis 2

H_2 : There is no significant relationship of *"Banking Satisfaction"* with *"Banking Procedures", "Financial Literacy", "Affordability"* and *"Terms of Credit".*

H_{A2} : There is a significant relationship of *"Banking Satisfaction"* with *"Banking Procedures", "Financial Literacy", "Affordability"* and *"Terms of Credit".*

Therefore, the study has one dependent variable that is *"Banking Satisfaction"* and four predictor variables that is *"Banking Procedures" (X1), "Affordability" (X2) "Financial Literacy" (X3),* and *"Terms of Credit" (X4).*

The constituent indicators of each of the 4 predictor variables is as given below in Table No 4

Table No 2: Predictor Variables Under Study

Predictor Variables	Indicators
Banking Procedures	Number of Branch Visits
	Cooperation by Bank Officials
	Simplicity of Procedures
Affordability	High rate of interest
	Seasonality of cash flows
	Low savings due to other liabilities
Financial Literacy	Awareness on credit schemes
	Understanding of interest and overdue calculation
	Understanding loan requirements and application formalities
Terms of Credit	Documentation
	Collateral
	Sanctioned Limit

Source : Authors' Illustration

Each of the above 12 indicators were measured on a rating scale from 1 to 5. (5 – excellent, 4 – Good, 3 – Average, 2 – Bad, 1 – Poor)

The score of each predictor variable was divided into three levels viz "Good", "Average", "Bad" based on the summation of individual ratings. For instance, rating of 4 and 5 were grouped under "Good", rating of 3 was considered as "Average" and rating of 2 and 1 were grouped under "Bad".

The results obtained through Multiple Regression and F test has been presented below.

Regression Statistics

Multiple R	0.8222
R Square	0.7922
Adjusted R Square	0.7513
Standard Error	0.2286
Observations	389

ANOVA	df	SS	MS	F	Significance F
Regression	4	118.7747	19.7654	85.2123	0.0000
Residual	381	14.0980	0.6575		
Total	390	112.8727			

Regression

Results :

	Coeffic-ients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	1.8821	0.3351	7.9778	0.0000	2.0092	3.3383	2.0092	3.3383
Total Banking Procedures Score	0.5621	0.0753	0.1306	0.0090	0.1591	0.1394	0.1591	0.1394
Total Affordability Score	0.4914	0.3788	1.0940	0.0028	1.1656	0.3367	1.1656	0.3367
Total Financial Literacy Score	0.2284	0.2843	1.4798	0.0014	0.9843	0.1430	0.9843	0.1430
Total Terms of Credit Score	0.3856	0.3715	1.9012	0.0006	0.0303	1.4430	0.0303	1.4430

Source : SPSS Output for Statistical Analysis

Interpretation

i. The fit obtained in the model is good as the Coefficient of Determination R^2 is 0.7922 which is greater than the accepted value of 0.70. This implies that all the predictor variables have fitted well in the model.

ii. The p values are much less than 0.05 for all the predictor variables. Thus, the null hypothesis is rejected. This explains that there is a strong relationship between "Banking Satisfaction" and four predictor variables that is "Banking Procedures" (X1), "Affordability" (X2) "Financial Literacy" (X3), and "Terms of Credit" (X4).

iii. The coefficients of all the predictor variables are positive which indicate positive association with the response variable that is *"Banking Satisfaction"*.

iv. The F statistic is significantly large and p value is less than 0.05 which further strengthens the association in the model. We reject the null hypothesis indicating that overall credit experience is closely associated with the crucial challenges related to operational convenience, affordability, financial awareness and lending terms.

v. The regression equation can be written as Banking Satisfaction = 1.88 + 0.56 (Banking Procedures) + 0.49 (Affordability Score) + 0.22 (Financial Literacy Score) + 0.38 (Lending Terms Score)

6. Conclusion

The study concludes that the various barriers explored in this survey impact the overall usage and experience of financial services. Financial "access" is the first milestone of financial inclusion. The full potential of financial inclusion in poverty reduction and economic development can be realized only when financial products and services bear some wellbeing to a person's life. This calls for a close examination of the demand side issues that will determine the uptake of products and services along with supply side availability. In doing so, not just the policy drivers, but technological drivers shall have a critical role to play. Since, traditional models have largely addressed supply and outreach of financial services, many demand side barriers are left to adjust on their own. Going forward, new models, product designs and delivery channels will have to evolve so as to converge with the supply side efforts to make full financial inclusion a reality in India. Operational convenience, banking procedures, increased financial awareness, affordability and terms of credit play important role in determining the perception of borrowers and can become potential barriers in availing banking services.

[4] Only villages with a population of more than 2000 were considered for the sample selection (According to the Central Bank of the Country that is RBI, banks are mandated to extend banking services in villages with population > 2000 branch banking or other stipulated delivery models.

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