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FINANCIAL INCLUSION: A STUDY OF THE DEMAND SIDE PERCEPTION: EVIDENCE FROM MAHARASHTRA: A PILOT STUDY

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Abstract: *Financial Inclusion is the process of ensuring that people from all strata are brought into the fold of banking. The initiatives for this onerous task in India have been taken up by the Government and the RBI. It is important to understand the perception of people with respect to ease of and access to banking. This paper makes an attempt to examine the factors that contribute to demand side perception for financial inclusion in Thane district of Maharashtra. The objectives of the study are to explore whether there are significant differences in Financial Inclusion across demographic variables such as gender, educational qualifications and household income. The results of the study indicate that level of education and income has a definite impact on perception towards financial inclusion.*

Keywords: *Financial Inclusion, Banking outreach, Technological factors*

1. INTRODUCTION

Access to safe, easy and affordable financial services by all sections of society is recognized as a pre-requisite for growth and development of the economy by reducing income disparities and poverty. It is estimated that globally over billion people are currently excluded from the access to financial service (United Nations, 2006a). In India, RBI has been taking measures to encourage the expansion of financial coverage since 2005. A review of literature indicates that there is no universally accepted definition of financial inclusion. As it is difficult to measure, financial inclusion is sometimes defined in terms of exclusion from the financial system. Financial exclusion is the inability to access organized financial services due to problems relating to access, conditions, pricing, marketing or simply self-exclusion. The financial inclusion index in India is measured by the all-India CRISIL Inclusix score which at 40.1 (on a scale of 100), is relatively low. The indicators of financial inclusion can broadly be stated as Deposits, loans, payment services, money transfer and insurance. The main supply side factors for financial exclusion are distance from the branch, branch timings, cumbersome documentation and

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procedures, unsuitable products, etc; from the demand side the factors are low income, illiteracy, lack of awareness, etc.

With this background, the major objective of the paper is to examine the perception of people with respect to factors such as banking outreach, bank characteristics, efforts taken by bank , technological factors and financial inclusion. For example, in the area of technological factors, the large and expanding network of ATMs is seen as a measure of accessibility and convenience. However this perception may vary depending on demographic variables such as gender, education, income or occupation of an individual.

The rest of the paper is structured as follows: Section 2 covers literature on financial inclusion, followed by the motivation for the study in Section 3.Section 4 and Section 5 give a description of objectives and research methodology, respectively. Section 6 presents the results and findings and finally we conclude in Section 7 and state the limitations and further scope of study in Section 8.

2. LITERATURE REVIEW

The term financial inclusion, though well documented in literature, has been construed in different ways. Early papers developed the construct between financial inclusion and economic development since access to and usage of finance is perceived as the path toeconomic prosperity. Some papers that discuss this approach are Rajan and Zingales (2003), Beck *et al.* (2007).

The term, financial inclusion, has primarily meant the availability of banking services to all sections of the society, particularly to the economically disadvantaged groups. This aspect is enumerated by many researchers. Leeladhar(2006) talks about the access to banking and payment services without any discrimination . Kempson *et al.* (2000) discuss the physical and geographic barriers that effect the extent of inclusion.

Measures of Financial Inclusion*:* There are various measures of access to financial services such as payments services, savings and credit, usage of debit and credit cards, life insurance and others(World Bank, 2008).

Barriers to financial inclusion are on account of both demand side and supply side factors.

Demand side factors include gender issues, age factor, legal identity, limited literacy, level of income, type of occupation and others (World Bank, 2008: Asian Development Bank, 2007; and Kempson *et al.*, 2004).

Sadhan K Chattopadhyay (2011) in his study found that supply side dimensions such as banking penetration, availability of banking services and usage can be utilized to indicate the degree of financial inclusion by constructing an index of measurement.

Studies in regional areas: There are various studies carried out in regional areas in India such as the north-east, Gujarat, Kerala, Karnataka, etc. In their study on financial inclusion in north-east India, Bhanot, Bapat and Bera(2012) found that access to banking in the region is abysmally low, with just 18.32 percent of the individuals being financially included and 5.94 percent households availing bank credit. They also found that the contribution of SHGs and financial literacy can be traced to financial inclusion. Ina study of Regional Rural Banks on financial inclusion in Gujarat, Tejani Rachana (2011) found thatthe default rates were high as far as loans are concerned, leading to concerns about sustainability of smaller banks. In his paper on financial inclusion in West Bengal, Sadhan Kumar (2011) observed that there was limited success in achieving financial inclusion. He attributed the reason for the problem as both supply side and demand side factors. Cnaanet all (2011) studied financial inclusion in rural South India and concluded that merely having bank accounts is not a sufficient measure of successful inclusion. The authors also suggest that financial literacy measures are the need of the hour to increase awareness about the plethora of financial services available in the banking system.

3. MOTIVATION FOR THE STUDY

Not much study has been carried out to understand the perception of people towards financial inclusion with respect to the factors of financial inclusion. A study of perception may aid, not only to understand the barriers to financial inclusion, but also help in the formulation of new strategies by banks and financial institutions. Further, though there are studies on financial inclusion in India, they pertain to other geographical regions and not much literature has been found pertaining to Maharashtra.

4. OBJECTIVES OF THE STUDY

a) Identifying whether there is a significant difference in various factors of Financial Inclusion as perceived by respondents based on gender

b) Identifying whether there is a significant difference in various factors of Financial Inclusion as perceived by respondents with different educational backgrounds

c) Identifying whether there is a significant difference in various factors of Financial Inclusion as perceived by respondents with varying household income

d) Identifying whether there is a significant difference in the perception of Financial Inclusion of respondents based on gender, education and income

5. RESEARCH METHODOLOGY

The actual survey data will be administered across several talukas of Thane district, targeting a varied demographic population. For the pilot study, three talukas were

selected, which resulted in150 usable responses.Questions were framed using Likert scale (5 points).

Analysis on pilot data was done using the following approaches: 2 Independent t-Test andOne way Anova for testing the differences in perception across the categories.

6. RESULTS AND FINDINGS

Data Analysis: 2 IndependentT-Test was run on gender and OnewayAnova on Education, Income and Financial Inclusion

1. Hypothesis:

   H0: $\mu_M = : \mu_F$

   H1: $\mu_M \neq : \mu_F$

   H0: There is no significant difference in various factors of Financial Inclusion as perceived by respondents based on gender

   H1: There is a significant difference in various factors of Financial Inclusion as perceived by respondents based on gender

Table 1
Levene's Test for Equality of Variances

Factors	*Hypothesis*	*P-value*	*Decision*
Banking outreach	H0: $\sigma^2_M = \sigma^2_F$ H1: $\sigma^2_M \neq \sigma^2_F$	.677	Accept H0
Bank characteristics	H0: $\sigma^2_M = ó^2_F$ H1: $\sigma^2_M \neq \sigma^2_F$	.070	Accept H0
Demographic factors	H0: $\sigma^2_M = ó^2_F$ H1: $\sigma^2_M \neq \sigma^2_F$	.001	Reject H0
Efforts taken by banks	H0: $\sigma^2_M = \sigma^2_F$ H1: $\sigma^2_M \neq \sigma^2_F$	.151	Accept H0
Technological factors	H0: $\sigma^2_M = \sigma^2_F$ H1: $\sigma^2_M \neq \sigma^2_F$	.486	Accept H0

At 95% Confidence Level, p values for all the parameters except for demographic factors are > $\alpha/2$, so we accept the Null Hypothesis for these parameters.Therefore , variance for both the groups is the same. However, for the parameter Demographic Factor, we reject Null. This means the variance for both males and females differ for this attribute.

Further, we now consider the 2 Independent Sample Test (t-test for Equality of Means)

Table 2
t-test for Equality of Means

Factors	*Hypothesis*	*P-value*	*Decision*
Banking outreach	H0: $\mu_M = : \mu_F$ H1: $\mu_M \neq : \mu_F$	.170	Accept H0
Bank characteristics	H0: $\mu_M = : \mu_F$ H1: $\mu_M \neq : \mu_F$	.943	Accept H0
Demographic factors	H0: $\mu_M = : \mu_F$ H1: $\mu_M \neq : \mu_F$	.047	Accept H0
Efforts taken by banks	H0: $\mu_M = : \mu_F$ H1: $\mu_M \neq : \mu_F$	.306	Accept H0
Technological factors	H0: $\mu_M = : \mu_F$ H1: $\mu_M \neq : \mu_F$	.258	Accept H0

At 95% Confidence Level, p values for all the attributes are > á/2, so we accept the Null Hypotheses. There is no significant difference in the average perception of male and female respondents with respect to the above factors.

2. Hypothesis

H0: There is no difference in various factors of Financial Inclusion across educational groups

H1: There is a difference in various factors of Financial Inclusion across educational groups

H0: $\mu_1 = \mu_2 = \mu_3 = \mu_4 = \mu_5 = \mu_6$

H1: $\mu_1 \neq \mu_2 \neq \mu_3 \neq \mu_4 \neq \mu_5 \neq \mu_6$

Table 3
ANOVA for Educational Groups

		Sum of Squares	*df*	*Mean Square*	*F*	*Sig.*
Banking Outreach	Between Groups	6.756	5	1.351	5.178	.000
	Within Groups	37.575	144	.261		
	Total	44.331	149			
Bank Characteristics	Between Groups	1.676	5	.335	3.864	.003
	Within Groups	12.495	144	.087		
	Total	14.172	149			
Demographic Factors	Between Groups	2.475	5	.495	2.712	.023
	Within Groups	26.288	144	.183		
	Total	28.764	149			
Efforts taken by Bank	Between Groups	2.556	5	.511	7.188	.000
	Within Groups	10.241	144	.071		
	Total	12.797	149			
Technological Factors	Between Groups	12.247	5	2.449	37.058	.000
	Within Groups	9.518	144	.066		
	Total	21.765	149			

At 95% level of significance, p significant value is less than 0.025, so we reject H0 and we accept H1. So the average perception for the factors of financial inclusion is different for people with different educational qualification.

Further, when we refer to descriptive statistics, it is found that people with higher educational qualification felt that the banking outreach is greater and that banks have taken more efforts. They also perceived that factors such as ATMs, internet banking use of credit card, etc are useful.

3. Hypothesis

H0: There is no significant difference in all the categories of household income with respect to the different factors of financial inclusion

H1: There is a significant difference in all the categories of household income with respect to the different factors of financial inclusion

H0: $\mu_{<50000}=\mu_{50000\text{-}100000}=\mu_{100000\text{-}200000}=\mu_{>200000}$

H1: $\mu_{<50000}\neq\mu_{50000\text{-}100000}\neq\mu_{100000\text{-}200000}\neq\mu_{>200000}$

Table 4
ANOVA for Household Income

		Sum of Squares	*df*	*Mean Square*	*F*	*Sig.*
Banking Outreach	Between Groups	9.620	2	4.810	20.370	.000
	Within Groups	34.711	147	.236		
	Total	44.331	149			
Bank Characteristics	Between Groups	1.331	2	.665	7.616	.001
	Within Groups	12.841	147	.087		
	Total	14.172	149			
Demographic Factors	Between Groups	2.104	2	1.052	5.800	.004
	Within Groups	26.660	147	.181		
	Total	28.764	149			
Efforts taken by Bank	Between Groups	2.468	2	1.234	17.566	.000
	Within Groups	10.329	147	.070		
	Total	12.797	149			
Technological Factors	Between Groups	1.654	2	.827	6.044	.003
	Within Groups	20.111	147	.137		
	Total	21.765	149			

At 95% level of significance, p significant value is less than 0.025, so we reject H0 and we accept H1. So the average perception for the factors of financial inclusion is different for people with different household income.

When we refer to the descriptive statistics, it is observed that people with higher household income felt that banks are safer, the timings of banks are convenient and technological efforts made by banks are satisfactory.

5. Hypothesis

H0: There is no significant difference in the perception of financial inclusion based on gender, education and income

H1: There is a significant difference in the perception of financial inclusion based on gender, education and income

H0: $\mu_M = : \mu_F$

H1: $\mu_M \neq : \mu_F$

Table 5
Independent Samples Test

	t-test for Equality of Means		
	t	*df*	*Sig. (2-tailed)*
Financial Inclusion	1.681	148	.095

H0: $\mu_1 = \mu_2 = \mu_3 = \mu_4 = \mu_5 = \mu_6$

H1: $\mu_1 \neq \mu_2 \neq \mu_3 \neq \mu_4 \neq \mu_5 \neq \mu_6$

Table 6
ANOVA for FI on education

	Sum of Squares	*df*	*Mean Square*	*F*	*Sig.*
Between Groups	2.063	5	.413	9.302	.000
Within Groups	6.386	144	.044		
Total	8.448	149			

H0: $\mu_{<50000} = \mu_{50000\text{-}100000} = \mu_{100000\text{-}200000} = \mu_{>200000}$

H1: $\mu_{<50000} \neq \mu_{50000\text{-}100000} \neq \mu_{100000\text{-}200000} \neq \mu_{>200000}$

Table 7
ANOVA for FI on household income

ANOVA

	Sum of Squares	*df*	*Mean Square*	*F*	*Sig.*
Between Groups	.790	2	.395	7.583	.001
Within Groups	7.658	147	.052		
Total	8.448	149			

In the case of educational qualification and household income, it is found that p significance value is less than .025 at 95% confidence level. So H0 is rejected and it is found that there is a difference in the perception of financial inclusion based

on education and income. However , in the case of gender , p significance value is greater than .025 at 95% confidence level and therefore H0 is accepted. It is found that there is that there is no significant difference in the perception of financial inclusion based on gender.

There is a mean difference in the financial inclusion on the basis of education. Overall, there is a perception that the higher the education, the greater the possibility of financial inclusion. Similarly, more the household income, greater the degree of financial inclusion.

7. CONCLUSION

The perception of respondents was found with the help of questionnaire in this study. The results of the study indicated the various efforts by banks (Business correspondents, financial literacy programs , number of branches etc) has resulted in increased awareness about banks. It was also found that technological factors (ATMs, online banking, credit cards, etc) are very convenient for making transactions. Demograhic factors such as the level of education and the monthly household income influence the perception about the ease of banking and access to banking.

8. SCOPE AND LIMITATIONS

The sample size is 150 which is small.

The study is restricted to Thane district of Maharashtra

Further research can be carried out by studying different states and regions of India.

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