Financial Literacy in Urban India: A Case Study of Bohra Community in Mumbai

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Abstract:

Financial literacy levels in urban areas, especially among mercantile community, are assumed to be significantly high. The present paper, by focusing on Bohra Community – a leading mercantile community in Mumbai Metropolitan Region, tries to empirically underscore the flipside of such a generalized assumption.

Key words: Financial Literacy, Bohra Community, Mumbai Metropolitan Region, Logistic Regression

I. INTRODUCTION

Financial literacy is a highly neglected area both at individual as well as at institutional levels. Of late the consequences of not being financially literate and the enormity of the problem have sunk in. The importance of educating general public in the area of financial matters is increasingly catching the imagination of policy makers.

Purpose of the proposed research project is to make a studied attempt in understanding the level of financial literacy in urban India, especially of the Bohra Community in the Mumbai Metropolitan Region, the financial hub of India.

II. Statement of the problem:

Hypothesis: Financial literacy levels of BohraCommunity in Mumbai Metropolitan Region is significantly high

III. Significance/justification of the problem:

Given the present policy emphasis on financial inclusion the importance of assessing the level of financial literacy and inculcating financial education is enormous. Again recent global crisis are increasingly centered on financial markets, given this scenario, the importance of financial literacy as a measure of safeguard becomes obvious. Major international institutions and RBI alike are emphasizing on financial literacy as an important variable of financial stability & empowerment.The present research project is a humble attempt to contribute towards this knowledge pool.

IV. REVIEW OF THE LITERATURE

RBI in its draft report[2], 'National Strategy for Financial Education' released on August 15, 2012recognisesthe importance of financial literacy and financialeducation that can play a vital role in financial inclusion and inclusive growth. The draft National Strategy envisages ways towards creating awareness and educating consumers on access to financial services, availability of various types of products and their features; changingattitudes to translate knowledge into responsible financial behaviour; and making consumers of financial services understand their rights and obligations.

Sameer Kochhar& K. C. Chakrabarty[3] (2009)emphasised on broadening the meaning and definition of financial inclusion, at policy making levels, from merely opening of bank accounts and creating channels for Electronic Benefit Transfer (EBT) to a more inclusive

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[2]National Strategy for Financial Education (2012)
[3] Speeding Financial Inclusion (2009), Sameer Kochhar &K. C. Chakrabarty

concept. It stresses on financial literacy, at all levels and spectrum, as a means towards attaining the goal of financial inclusion in true sense.

Hemantha Kumar Pamarthy[4],in his 'Financial inclusion project of UNDP in 7 UN Focused states (2012)' report,highlighted the importance of Literacy and Financial Literacy (FL) towards Financial Inclusion. The report re-emphasised the fact that without knowing the fundamentals, the disadvantaged people will continue to be innocent, gullible and in some cases unknowingly irresponsible too. One of the primary objectives of Financial Literacy would be to help the disadvantaged practice thrift and induce them to save, access credit, use the funds to find a better livelihood, earn income and thus join the mainstream from exclusion. The report, in its summary conclusion, further confirmed the perception that in the journey from illiteracy to empowerment and client protection "Financial Literacy plays an important and efficient tool towards Financial Inclusion and Client Protection"

In order to gauge the strength and weaknesses of financial education worldwide and to identify opportunities for improvement, Visa – a global payments technology company had conducted a survey[5]between February and April of 2012 with 25,500 participants in 28 countries. The said survey placed India at 23rd position in its overall country ranking for most financially literate countries.

V. METHODOLOGY

5.1 Design/Methodology/Approach:

The project mainly depends on primary data source for which a detailed questionnaire[6]was developed; the questionnaire included questions seeking information on socio – demographic data and other explanatory variables of the individuals. The questionnaire intended to examine the financial literacy of the individuals by asking basic questions about savings, investment, interest rates, indebtedness, insurance, nomination, maturity period of financial assets, Provision for post-retirement, etc.

Given the constraints, namely; cost, time and manpower, approximately 200 random samples from geographically stratified Bohra community individuals within the Mumbai metropolitan region were collected. The aforesaid explanatory information pertaining to literacy levels were then used to prepare a rank on the scale of zero to one. Individuals scoring 0.5 and above were categorised as being financially literate and those scoring less than 0.5 were categorised as being not so financially literate.

5.2 Data processing procedures[7]:

Since the majority of the data collected is either ordinal or nominal in nature, Non – Parametric statistical tool namely, Binomial Logistic Regression,were used for analysis.

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[4]Financial literacy as a tool for financial inclusion and client protection', a report based on the study undertaken under financial inclusion project of UNDP in 7 states and discussions on UNDP supported microfinance community of practice, Solution Exchange, November, 2012

[5]International Financial Literacy: BAROMETER 2012'

[6]OECD INFE (2011) Measuring Financial Literacy: Core Questionnaire in Measuring Financial Literacy: Questionnaire and Guidance Notes for conducting Internationally Comparable Survey of Financial literacy. Paris: OECD

[7]IBM SPSS Statistics version 20

VI Descriptive Statistic:Logistic Regression

Case Processing Summary		N	Percent
UnweightedCases[a]			
Selected Cases	Included in Analysis	184	100.0
	Missing Cases	0	.0
	Total	184	100.0
Unselected Cases		0	.0
Total		184	100.0
a. If weight is in effect, see classification table for the total number of cases.			

Dependent Variable Encoding	
Original Value	Internal Value
0	**0**
1	**1**

Block 0: Beginning Block

Classification Table[a,b]					
	Observed		Predicted		
			RANK		Percentage Correct
			0	1	
Step 0	RANK	0	**104**	**0**	**100.0**
		1	**80**	**0**	**.0**
	Overall Percentage				**56.5**
a. Constant is included in the model.			b. The cut value is .500		

Variables in the Equation		B	S.E.	Wald	Df	Sig.	Exp(B)
Step 0	Constant	**-.262**	**.149**	**3.113**	**1**	**.078**	**.769**

Block 1: Method = Enter

Omnibus Tests[8] of Model Coefficients		Chi-square	Df	Sig.
Step 1	Step	**108.820**	**8**	**.000**
	Block	**108.820**	**8**	**.000**
	Model	**108.820**	**8**	**.000**

Model Summary			
Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	**143.118**[a]	**.446**	**.599**
a. Estimation terminated at iteration number 6 because parameter estimates changed by less than .001.			

Hosmer and Lemeshow Test[9]			
Step	Chi-square	df	Sig.
1	**15.652**	**8**	**.048**

Classification Table[a]					
	Observed		Predicted		
			RANK		Percentage Correct
			0	1	
Step 1	RANK	0	**78**	**26**	**75.0**
		1	**8**	**72**	**90.0**
	Overall Percentage				**81.5**
a. The cut value is 0.500					

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[8] Omnibus tests test whether the explained variance in a set of data is significantly greater than the unexplained variance, overall.

[9] The Homer–Lemeshow test is a statistical test for goodness of fit for logistic regression models. It is usedfrequently in risk prediction models. The test assesses whether or not the observed event rates matchexpected event rates in subgroups of the model population

Variables in the Equation

		B	S.E.	Wald	Df	Sig.	Exp(B)	95% C.I.for EXP(B)	
								Lower	Upper
Step 1ᵃ	@1_Gender(1)	2.721	.585	21.651	1	.000	15.195	4.830	47.803
	@3_MaritalStatus			16.286	2	.000			
	@3_MaritalStatus(1)	-.294	1.375	.046	1	.830	.745	.050	11.025
	@3_MaritalStatus(2)	-4.150	1.666	6.209	1	.013	.016	.001	.412
	@24_Edu_Self			34.127	3	.000			
	@24_Edu_Self(1)	3.522	1.014	12.066	1	.001	33.845	4.640	246.897
	@24_Edu_Self(2)	2.986	1.003	8.869	1	.003	19.799	2.775	141.265
	@24_Edu_Self(3)	.136	.969	.020	1	.888	1.146	.172	7.652
	@28_SoleEarning(1)	-3.066	.584	27.590	1	.000	.047	.015	.146
	@14_Incomesufficient(1)	1.092	.466	5.493	1	.019	2.982	1.196	7.434
	Constant	-2.307	1.368	2.843	1	.092	.100		

a. Variable(s) entered on step 1: @1_Gender, @3_MaritalStatus, @24_Educationlevel_Self, @28_SoleEarning, @14_Incomesufficient.

Robustness of the statics:

The test statistic of logistic regression, as reported above, seems robust enough to merit consideration. This applies to all the criterion of analyzing logistic regression, namely; sample size requirement, overall test of relationship, classification accuracy and sample problems:

1. Logistic regression calls for a minimum of 10 valid cases per independent variable included in the model, though a preference is always for 20:1. Our analysis reports 184 valid cases and 5 independent variables that were actually included in the model. The ratio turns out to be 37.0 to 1, which is sufficiently above the minimum requirement.
2. Hosmer and Lemeshow Test reports Chi square static 15.652 at step 1, after the independent variables are added to the model, with the p-value of <0.05. Thus conclusively rejecting the null hypotheses of there being no relationship between dependent and independent variables.
3. None of the b coefficient of independent variable reported standard error greater than 2 indicating existing of no numerical error and that the data being fit for interpretation.
4. For independent variables to be classified as useful predictors the classification accuracy rate should be 25% or more then proportional by chance accuracy rate[10]. With the calculated classification accuracy rate of 81.5 being sufficiently higher than 63.5%, the calculated proportional by chance accuracy, the criteria of calculated accuracy rate be greater the or equal to 25% of calculated by chance accuracy is satisfied.

Model:

$$Logit(\pi) = -2.307 + 2.721[@Gender_1] - 4.150[@Maritialstatus_2] + 3.522[@Edu_1] + 2.986[@Edu_2] - 3.066[@Soleearner_1] + 1.092[@Incomesufficient_1]$$

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[10] The proportional by chance accuracy rate was computed by first calculating the proportion of cases for each group based on the number of cases in each group in the classification table at Step 0. The proportion in the "No" group is 104/184 = 0.565. The proportion in the "Yes" group is 80/184 =0.435. Then, we square and sum the proportion of cases in each group (0.5652 + 0.4352 = 0.508). 0.508 is the proportional by chance accuracy rate.

VII Findings:

Keeping all other variable constant the odds of male respondents being financially literate turns out to be 15.195times greater. A one point increase in marital status of being single reduces the chances of respondent being financially literate by approx., 2% points.

Post-Graduation or professional/technical qualification flare well on financial literacy counts. Chances of being financially literate increases by close to 34 times and 20 times for a one point increase in respondent reporting their educational qualification as post-graduation or any professional/technical qualification respectively. Were as, odds of being financially literate reduces to 1.146 time if a respondent is reporting HSC or less as his/her educational qualification.

Sole earner are likely to be financially literate by less than 5% points, were as odds of being financially literate increases by approx., 3 time for each point increase in respondent reporting that their income is sufficient to their standard of living.

VIII Conclusion:

With respect to the respondents classifying themselves as; female, single, less educated, sole earning member in the family and not possessing sufficient amount of income, the stated null hypothesis of,financial literacy levels of Bohra Community in Mumbai Metropolitan Region being significantly high, stands rejected.

References:

1. Andy, Field (2005),"*Discovering Statistics Using SPSS (Introducing Statistical Methods series)*", Sage Publications Ltd; Second edition, 4th May, 2005
2. Sameer Kochhar& K. C. Chakrabarty (2010),"*Speeding Financial Inclusion*", Academic Foundation, 2010
3. John Kozup and Jeanne M. Hogarth (2008), "*Financial Literacy, Public Policy, and Consumers' Self-Protection—More Questions, Fewer Answers*", The Journal of Consumer Affairs, Vol. 42, No. 2, pp. 127-136, 2008
4. Jeanne M. Hogarth (2007), "*Financial Education and Community Economic Development*", (pp. 72-94), Russell Sage Foundation, 2007
5. VISA Survey (2012), '*International Financial Literacy: BAROMETER 2012*'
6. OECD INFE (2011),"*Measuring Financial Literacy: Core Questionnaire in Measuring Financial Literacy: Questionnaire and Guidance Notes for conducting Internationally Comparable Survey of Financial literacy*", Paris: OECD.