



Shaping factors of financial inclusion in banking services

Sheetal

Faculty of Management Studies and Research, SVSU, Palwal, Haryana, India

Abstract

Financial inclusion is defined as the availability and use of banking services (bank account ownership, savings, insurance, credit, remittance, payments, and so on) at an affordable cost to a large segment of disadvantaged and low-income individuals. Banking and payment services are termed as the public services. Here bank ownership is a dependent factor, and the independent factors are income level, age, gender dimension, employment status, and education level. The current study is based on a field inquiry in Haryana, India, with data obtained from 110 respondents using a standardised questionnaire. Income and education were found to have a significant impact on financial inclusion as assessed by bank account ownership.

Keywords: Financial inclusion, banking services, public good, payment services, India

Introduction

Financial inclusion refers to the broad range, high standard, and accessibility of banking services (such as holding a bank account, savings, credit, remittance, and insurance services, etc.) at a price that is affordable to the vast majority of society's underprivileged and low-income groups (Rangarajan, 2008^[17]; Peer stein, 2010 and Leeladhar, 2005^[15]). It deals with how governments, financial institutions, and researchers in developing nations are becoming increasingly interested in the use and accessibility of formal financial services (Beck and Torre, 2006^[3]; Allen *et al.*, 2012^[1] and Camara and Tuesta, 2014)^[5]. Additionally, efforts are being done on a global scale to improve access to a variety of financial services. The World Bank already declared objective of achieving universal access by 2020 is another example of financial inclusion has been accepted as fundamental for process of economic growth. The Pradhan Mantri Jan Dhan Yojana (PMDJY), a nationwide financial inclusion programme with the goal of having every household have a bank account in a formal financial institution, was recently announced by the Government of India (GOI) in India. The current focus of financial inclusion in India is limited to implementing certain actions to guarantee minimal access to a no-frills savings bank account. However, merely owning a bank account is not seen as a precise sign of financial inclusion; other variables must also be taken into account to achieve financial inclusion. There could be other multiple levels of financial inclusion indicators are also shown to build financial inclusion completely. Use of various banking services like deposits, credit, payments, remittance and insurance services are the multiple levels in financial inclusion.

On the other hand there is a quite opposite of financial inclusion is financial exclusion. The nature of certain causes must be addressed which create financial exclusion imperative. (Kempson & Whyley, 1998^[13], Bhanot *et al.*, 2012)^[4] examined the extreme where people face barriers to Accessibility and usage of banking services.

Likewise, lack of awareness, low income, poverty and illiteracy are the factors that lead to low demand for banking services and consequently main reasons to financial exclusion (Chattopadhyay, 2011^[6], and Crisil Inclusix, 2014).

However, much financial exclusion consists of a complicated set of adjacent obstacles; therefore, the policy makers and financial institutions must take successful financial inclusion initiatives to cut down those barriers and universalise financial services.

Review of literature

Efobi *et al.* (2014)^[11] investigated the variables affecting Nigeria's bank service usage and access. The findings show that the use of bank services in Nigeria is significantly influenced by personal characteristics, income, and ICT propensity.

Fungacova and Weill (2015) conducted research on China's understating of financial inclusion. It was noted that China's degree of financial inclusion is strongly impacted by growing use of formal accounts and formal savings. Other determining criteria, such as higher wealth, better education, being a man, and age, have been strongly associated with the usage of formal credit and bank account ownership in China.

Allen *et al.* (2012)^[1] examined that greater account ownership and use of accounts is associated with affordable cost and greater proximity to financial intermediaries. Lower-fee accounts, exempting some depositors from documentation requirements, allowing corresponding banking and using bank accounts to receive government financial benefits are the special effective initiatives to promote financial inclusion among those likely to be excluded.

According to Demircuc-Kunt and Klapper (2013)^[10], financial inclusion may be measured by looking at how different countries use financial services. It was noted that opening an account at a financial institution acts as a gateway into the regulated financial industry. It is possible to save a significant amount of money and yet have access to credit from financial organisations. Accounts, savings, and credit have been found to distinguish between different countries' levels of financial inclusion. Additionally, it was discovered that account ownership was influenced by individual income levels and that the use of formal and informal credit and saving mechanisms by the rich and the poor varied across national boundaries.

Financial inclusion was investigated by Kumar (2013) who also gives evidence of its factors. Branch net penetration has

been seen as a crucial factor affecting financial inclusion. The percentage of factories and the employment base are the main predictors of the financial inclusion index's penetration. The importance of a region's socioeconomic and environmental associations in influencing the general public's banking practises in India was discovered. Additionally, it has been found that the growing branch network significantly impacts financial inclusion.

Kohli (2013) outlined the elements that have a major influence on improving financial inclusion in India. The author found that there is a close correlation between India's levels of human development and financial inclusion. The degree of financial inclusion in India has been found to be influenced by socioeconomic characteristics and individual income levels. However, it was also shown that technology and banking service education had a big influence on India's financial inclusion.

Bhanot *et al.* (2012) ^[4] The researchers endeavoured to examine the myriad components that are essential in characterising financial inclusion in rural India. The survey found that in these rural areas of India, there was essentially little financial inclusion. It was discovered that the respondents' income, education, familiarity with self-help groups (SHGs), and understanding of financial products from different sources all had an impact on financial inclusion. It was also shown that financial inclusion is promoted by accessibility to financial institutions such as banks and post offices. It was discovered that financial inclusion was impacted by government help but not by other factors like terrain or government backing. *et al.* (2012) ^[12] found the important variables that are used to calculate India's financial inclusion index. The author used four essential parameters to determine the computation of financial inclusion in India were the outreach dimension (geographic branch penetration, geographic ATM penetration, number of accounts (deposits & loans per 1000 adults), the usage dimension (volume of deposits and loans), the ease of transaction dimension, and the cost of transaction dimension (such as annual fees charged to bank customers for ATM card usage or the cost include international transfer of money). It was discovered that increasing ATM penetration and regional branch expansion were crucial to improving financial inclusion in India.

Objective of the Study

The study explores the determinants of financial inclusion measured by the account ownership in Haryana region.

Sample

This paper used primary data from Haryana region, India. Being time constraint the sample size restricted to 110 respondents. After clearing the data for missing entries, the new sample size is 98. The data has been collected by adopting convenience sampling technique.

Determinants of financial inclusion

By using the bank account as a one of the main indicators of financial inclusion to examine how these associate with the individual demographic characteristics and socio-economic characteristics with financial inclusion in Pondicherry region. We use binary logistic regression model to explore the determinants of financial inclusion and estimate the following equation.

$$bank_account = \alpha + \beta_1age + \beta_2gender + \beta_3income_level + \beta_4education + \beta_5employment_status + \epsilon$$

Whereas bank account as a one of the main indicators of the financial inclusion, hence it has been considered as dependent variable and other independent variable related to individuals socio-demographic characteristics provided in the survey i.e, age, gender, income level, education and employment status. The study finds that income level and education significantly impact financial inclusion determinants in Haryana.

Demographic profile

In Table II we provide the demographic details of the respondents. In the given sample size 98 respondents. In the field survey, the gender allocation of the respondents is 55.10 percent males and 44.90 percent females. More than 50 percent of the respondents are married. The results also point out that the respondents are relatively young, with 38.78 percent of the respondents between 26 and 35 years old. Majority of the respondents have college education level: 28.57 percent are 10+2 and diploma holders, 33.67 percent have Bachelors degree level and 21.43 percent have master's degree of education. A total 13.27 percent of the respondents have only high school qualification.

Table 1: Profile of respondents

Variable	Frequency	Percentage
Gender		
Male	54	55.10
Female	44	44.90
Total	98	100
Age		
18-25 years	31	31.63
26-35 years	38	38.78
36-45 years	18	18.37
46-55 years	8	8.16
above 55 years	3	3.06
Total	98	100.0
Income level		
Less than 10,000	37	37.76
10,001-30,000	39	39.80
30,001-50,000	15	15.30
50,001-1,00,000	7	7.14
Total	98	100.0
Marital Status		
Married	51	52.04
Unmarried	47	47.96
Total	98	100.0
Level of Education		
Below SSLC	13	13.27
10+2/Diploma	28	28.57
Bachelors degree	33	33.67
Masters degree	21	21.43
Others	3	3.06
Total	98	100.0
Employment Status		
Student	42	42.86
Self-employed	24	24.49
Employed	20	20.41
Unemployed	12	12.24
Total	98	100.0

Source: Survey results

Accessibility and Usage of banking services

The given Table II show Accessibility of banking services has been measured by the ownership of bank account. We find that 78 of the respondents are likely to report having a formal account. The study reveals that the most of the

respondent’s ownership of bank account in public sector bank and private sector is in second position.

Table 2: Accessibility of banking services

Variable	Frequency	Percentage (%)
Bank Account		
Yes	78	79.59
No	20	20.41
Total	98	100.0
Account in Which Bank		
Private sector bank	24	32.05
Public sector bank	50	64.10
Co-operative bank	3	3.85
Total	78	100.0
Type of Bank Account		
No-frills A/C	7	8.97
Savings A/C	67	85.90
Current A/C	3	3.85
Fixed Deposit A/C	1	1.28
Total	78	100.0

Source: Survey results

Usage of banking services

The following given table 3 show the usage of banking services. The ownership of bank account is not one of the factors to determine the level of financial inclusion. How properly the account has been use is a most important dominant factor in measuring the financial inclusion in place. The study reveals the in respect of savings point of view 65 respondents are savings money in banks since last 1 year. But very few respondents are availing credit from the very low bank i.e 37.18 per cent. The more respondents are having ATM/Debit card, it indicates ICT pays significant role in usage of banking services. The purpose of visit of bank branch deposit money in the banks and number of money withdrawals are more. In a typical month 49 respondents are mentioned 3-5 times frequently withdrawal money from the banks.

Table 3: Usage of banking services

Variable	Frequency	Percentage (%)
Savings Behaviour (In last 12 months)		
Yes	65	83.33
No	13	16.67
Total	78	100
Availing of Bank Credit (In last 12 Months)		
Yes	29	37.18
No	49	62.82
Total	78	100.0
Ownership of ATM/Debit card		
Yes	60	76.92
No	18	23.08
Total	78	100.0
Purpose of Visit Bank Branch		
Deposits	37	47.44
Withdrawals	28	35.90
Loans	5	6.41
Repayment	8	10.25
Total	78	100.0
Frequency of Withdrawals (In a Month)		
1-2 times	13	16.67
3-5 times	49	62.82
6-8 times	11	14.10
More than 8 times	5	6.41
Total	78	100.0

Source: Survey Results

Results of Binary logistic regression

Binary logistic regression model was used by using SPSS 20. 98 respondents were included in the analysis of this study. Ownership of bank account was considered as dependent variable.

In table IV, the three different statistical tests (likelihood ratio, score, Wald) have been used to test whether all independent variables combined significantly impact the dependent variable. These statistical tests follow chi-square distribution (Hosmer and Lemenshow, 1988). The p-value for likelihood ratio test is less than 0.001, which shows the significance of the model.

Table IV indicates that income level and education of respondents show significant impact on ownership of bank account this results follows by (Bhanot *et al*, 2012^[4]; nandru *et al*, 2015)^[16]. The other remaining variables do not show a significant impact on financial inclusion measured by bank account ownership.

Table 4: the Binary logistic regression model and significance of independent variables

Variables	B	S. E	Wald	df	Significance
Age	.347	.419	.684	1	.408
Gender	-.462	.569	.662	1	.416
Income level	-1.282	.517	6.147	1	.013**
Education	-1.084	.330	10.795	1	.001***
Employment status	.607	.318	3.655	1	.056

Source: Authors’ compilation based on primary data by using SPSS
Note: *** Denotes significance at 1 percent level, ** denotes significance at 5 percent level.

Checking of Model adequacy

The measure the accuracy of binary data classification, the Hosmer and Lemenshow goodness of fit the acceptance of model the p-value should be >5 percent is suggested model. The value chi-square of the goodness fit statistic for this model is 5.784, and the corresponding p-value is 0.565. Which is greater than 5 percent level is the satisfactory of the model fit.

Hosmer and Lemenshow Test			
Step	Chi-square	df	Sig.
1	5.784	7	.565

Source: based on primary data by using SPSS

Therefore, it is clear that the variables which have been considered in this study the independent variables model fit the data.

Conclusion

In this study, financial inclusion in Haryana as measured by bank account ownership factor. In India, the goal of financial inclusion is restricted to establishing certain criteria for agreeing to provide no-frills access to a savings bank account. However, simply having a bank account is not a reliable indicator of financial inclusion; other factors must be examined as well. To fully establish financial inclusion, more levels of financial inclusion indicators may be displayed. The use of other banking services such as deposits, credit, payments, remittance, and insurance services is included in the various levels of financial inclusion.

As a result, other determinants of financial inclusion, such as savings behaviour and withdrawal frequency, were examined in this study. As per findings of this study, 78 percent of

respondents are likely to have a formal account. As per the report, the majority of respondents have public sector bank accounts, with the private sector coming in second. According to the report, 65 percent of respondents had saved money in a bank in the previous year. However, only a tiny proportion of respondents (37.18%) acquire credit from a bank. The bigger the proportion of respondents who own an ATM/debit card, indicates the importance of ICT in banking.

References

1. Allen F, Demirguc-Kunt A, Klapper L, Peria Martinez, SM. The Foundations of Financial Inclusion Understanding Ownership and Use of Formal Accounts". Policy Research Working Paper 6290, World Bank, Washington, DC, 2012.
2. Arora R. Measuring Financial Access". Griffith University, *Discussion Paper Economics*, 2010, 7. ISSN1837-7750.
3. Beck T, Torre De la A. The basic analytics of access to financial services". Latin America Regional Study on Access to Finance, World Bank, 2006.
4. Bhanot D, Bapat V, Bera S. Studying financial inclusion in north-east India". *International Journal of Bank Marketing*,2012;30(6):465-484.
5. Camara N, Tuesta D. Measuring financial inclusion: A multidimensional index". BBVA Research Working, 2014, 14/26.
6. Chattopadhyay SK. Financial Inclusion in India: A case –study of West Bengal". RBI working paper series (WPS-DEPR), 2011, 8.
7. Chakravarty RS, Pal R. Financial Inclusion in India: An axiomatic approach". *The Journal of Policy Modeling*,2013;35:813-837.
8. CRISIL Inclusix. (2014). Volume-II (January).
9. Demirguc-Kunt A, Klapper L. Measuring Financial Inclusion: The Global Findex" World Bank Policy Research Working Paper, 2012, (6025).
10. Economic Relations (*ICRIER*) *Working Paper 215*.
11. Efobi U, Beecroft I, Osabuohien E. Access to and use of bank services in Nigeria: Micro-econometric evidence". *Review of development finance*,2014;4:104-114.
12. Gupte R, Venkataramani B, Gupata D. Computation of financial inclusion index for India". *International Journal of Procedia - Social and Behavioral Sciences*,2012;37:133 – 149.
13. Kempson E, Whyley C. Access to current accounts", British Bankers' Association, London, 1998.
14. Kholi N. Financial Inclusion & its Impact on Banking Sector in India". *Tecnia Journal of Management Studies*, 2013, 7(2).
15. Leeladhar V. Taking Banking Services to the Common Man – Financial Inclusion", *Commemorative Lecture at the Fedbank Hormis Memorial Foundation at Ernakulum*, 2005.
16. Nandru P, Anand B. Determinants of financial inclusion- Evidence from Andhra Pradesh". *Jamal academic research journal*, Special issue-0973-0303, 2015, 172-179.
17. Rangarajan C. Report of the Committee on Financial Inclusion", Government of India, New Delhi, 2008.
18. Sarma M. Index of Financial Inclusion", Indian Council for Research on *International*, 2008.