Impact of Demographic factors on Financial Inclusion in Pondicherry Union Territory

Abstract

Financially excluded people are those who do not have any access to the banking services. Financially exclusion can be a broad concept related to a lack of access to a range of financial services or a narrow concept reflecting particular circumstances such as geographical exclusion, exclusion on the grounds that charges and prices are prohibitively high, or exclusion from marketing efforts. The case firm (Indian Bank) wanted to increase the usage of financial facilities under financial inclusion by large number of socially disadvantage people. These customers were selected for the present study. The case firm is the lead bank,so the entire Pondicherry region is selected as area of study.53 per cent of the sample respondents were aware of banking services, followed by 15 per cent of respondents feel that there was improvement in savings and financial management ability. 60 per cent of sample respondents responded that their income level had increased to the extent of 500 rupees, followed by 38 per cent of respondents responded that their income level has increased to the range of Rs.500 and Rs.1000 rupees and merely two per cent said their income rose above rupees 1000.Even though all the respondents possessed the no-frill account it was found that majority were not utilizing it effectively. 60 per cent of sample respondents feel that lack of knowledge as a constraint, followed by 21 per cent and 17 per cent feel that taking insurance through insurance firm was easier and there is no sufficient service from banks as insurance firms respectively.Content of service provided got the maximum score and ranked as first, followed by procedure of availing credit which was ranked second. ,other factors were ranked by the respondents in the following order, rate of interest, timeliness of credit availability, treatment of respondents by bank officials and sufficiency of credit.

Keywords: Financial Inclusion, Credit, Banking, Financial services,

1. Introduction

State Governments are playing a pro-active role in facilitating financial inclusion that includes issuing of official identity documents for opening accounts, creating awareness through non-governmental organizations or self-help groups and involving district and block level functionaries in the entire process, Meeting cost of cards and other devices for pilot projects, undertaking financial literacy drives are some of the ways in which the State and district administration have involved themselves. India Post is also looking to diversify its activities and leverage on its huge network of post offices, the postman's intimate knowledge of the local population and the enormous trust reposed in him. Banks are entering into agreements with India Post for using post offices as agents for branchless banking.All these activities of the government and Reserve Bank of India are mainly aiming to avoid financial exclusion for social and economic empowerment.

Financially excluded people are those who do not have any access to the banking services. Financially exclusion can be a broad concept related to a lack of access to a range of financial services or a narrow concept reflecting particular circumstances such as geographical exclusion, exclusion on the grounds that charges and prices are prohibitively high, or exclusion from marketing efforts (Rafi & Palanichamy, 2024). Self-exclusion is also important where an individual believes there is little point in applying for a financial product because they expect to be refused (or) sometimes because of a previous experience of refusal (or) because they know someone else who has been refused. These aspects of exclusion are not mutually exclusive. They will overlap and reinforce each other, resulting in individuals, households and communities having little or no connection to mainstream banking and financial services. Another facet of exclusion which needs to be addressed is "Social Exclusion"– which is an extreme consequence of what happens when people do not get a fair deal throughout their lives, often because of disadvantages they face at birth, and this can be transmitted from one generation to the next. Social exclusion is about more than income poverty. It is a short-hand term for what can happen when people or areas have a combination of problems such as unemployment, discrimination, poor skills, low incomes and poor housing. These problems are linked and mutually reinforcing (Karupusamy& Palanichamy, 2011).

The financially excluded sections largely comprise marginal farmers, landless labourers, self-employed, unorganized sector enterprises workers, urban slum dwellers, migrants, ethnic minorities, socially excluded groups, senior citizens and women. Thus, financial exclusion particularly in the context of banking services and affordable credit is associated with those on the lowest incomes, and long-term recipients of benefits. Exclusion has generally been associated with consumers in the lowest income/socioeconomic cohorts. It is true that the most vulnerable consumers in society are the most affected by financial exclusion and its associated disadvantages. However, exclusion affects a much wider population of consumers on lower-median incomes (Murugananthi et al., 2021).

Herrick (1953) conceived credit as that form of confidence reported in a person who enables him to obtain from another the temporary use of a thing of value. Baker and Holcomb (1964) defined credit as the capacity to borrow or the ability to sell debt to reap a rich dividend. Mellor (1966) defined credit as a device for facilitating the temporary transfer of purchasing power from one individual or organization to another. Desai (1996) defined credit is the temporary means of raising funds for defraying various obligations. About 7 percent of the total work force is employed in the formal or organized sector (all public sector establishments and all non-agricultural establishments in private sector with 10 or more workers) while remaining 93 percent work in the informal or unorganized sector. Girija (2002) observed that savings is the popular instrument and many households report that they save to manage emergencies. Borrowing is another mechanism by which they smoothen their liquidity, which is affected by risk-induced shocks. They borrow mostly from informal sources, being the quickest and timely means of raising funds. Reddy et al (2004), Sivakumar et al. (2013) defined credit is the amount borrowed, and is also referred to as loan. Prasanna (2004) defined credit as an arrangement whereby the bank allows the borrower to borrow upto a certain limit, the cash credit limit.

Reserve Bank of India (2006) defined credit is the amount provided by way of loan or advances, cash credit or overdraft or purchase of discount bills other than advances against security of or by way of purchasing of demand documentary bills drawn in connection with movement of commodity.Manohar and Uthira (2007) defined credit as the financial requirement of the borrowers to carry out various economic and social activities at grass root level. Swaminathan (2007) defined credit as extending loans to poor people for self-employment projects that generate income, allowing them to care for themselves and their families.Aggarwal & Klapper (2013) examines regulatory measures that were put in place to remove the physical, bureaucratic, financial, and trust barriers to the use of formal accounts. It also analyzes some typical reasons why people do not have a formal account.Allen et al., (2014) discovered that, compared to other regions, population density has a far greater impact on financial inclusion and development in Africa. Lastly, we present data demonstrating how mobile banking, a recent development in financial services, has aided in resolving infrastructure issues and enhancing financial accessibility.In order to present financial literacy as a moderator of the relationship between access to finance and company growth, the study by Adamoko (2016) leans on the resource-based view.Bongomin et al., (2018) presented the results of a study on the mediating role of social networks in the relationship between financial inclusion and institutional framework in rural Uganda.Ali (2019) investigated the empowerment of women through financial inclusion. Mudimigh&Anshari (2020) emphasizes FinTech's definition and significance to the financial ecosystem, particularly in Southeast Asia. It focuses on the history of financial technology, or FinTech, and how transactions changed over time from largely utilizing cash to credit cards to cashless transactions.

2. Data and Methodology

The case firm (Indian Bank) wanted to increase the usage of financial facilities under financial inclusion by large number of socially disadvantage people. These customers were selected for the present study. The case firm is the lead bank,so the entire Pondicherry region is selected as area of study.The data required for the study was collected through interview methodfrom the sample.The data collected from the sample customers include the general characters like, educational status, banking experience, using pattern, source of information, awareness about banking facilities of financial inclusion. Secondary data required for the study like the location of the study area, demography etc., were collected from the web site and published sources.

Tools for analysis

Garrett's ranking technique

Garrett's ranking technique was used to rank the major factors the respondent considers for availing credit in bank through the NPPFI scheme.

Per cent position = 10 (Rij-0.50) / Nj

Where, Rij = Rank given to the ith attribute by the jth individual

Nj = Number of attributes ranked by jth individual

By referring the Garrett's table, the percent position estimated was converted into scores for each problem, the scores of various respondents were added and the mean value was calculated.

Chi-square test

In the present study to find out, whether there was any association between adoption and non-adoption, awareness about financial inclusion with regard to general characteristics of the consumers such as age, education, etc., chi square test was used,

$$\text{Chi square} = \sum (O-E)^2 / E$$

Where,

O= Observed frequency;

E= Expected frequency;

Expected frequency of any cell= (CRT X CCT)/ Grand total

Where,

CRT- corresponding row total,

CCT- corresponding column total

The test of significance was carried out at one per cent level of probability. If the calculated value was greater than the table value, we concluded that there is a significant association between the attributes.

Multiple regression analysis (Impact of financial inclusion)

The total effect of financial inclusion on the target groups was estimated through the following equation

$$Y= a+b_1x_1+b_2x_2+b_3x_3+b_4x_4+b_5x_5+b_6x_6$$

Where,

Y= Monthly savings per member due to financial inclusion of the Indian bank (Case firm)

a = Constant term

x_1 = Age of the sample respondents.(Age of the respondents is an important factor since the savings made by the respondents will be influenced by the age of the respondents. As the respondents become older there will be more contribution to savings than in young ages.)

x_2= gender of sample respondents. (The gender is an important factor influencing a person's financial freedom as it depicts the ability of in opening a new account for their savings and contribution to the family.)

x_3 = Marital status of the sample respondents. (Marital status is an important factor in influencing the saving behaviour and implementation of the financial inclusion scheme by the respondents as married women may be affected by her husband and family constraints in savings contribution.)

x_4 = Employment status of the sample respondents. (Employment status is an important factor in affecting the respondent's contribution to savings. Unemployed respondents may not be able to or contribute much to savings.)

x_5 = Monthly income of the sample respondents. (The monthly income of the respondents is an important factor in affecting the savings of the respondents as the monthly income is more the savings might be more.)

x_6 = Educational status of the sample respondents. (Educational status indicates the level of education attained by the respondents and it will also influence the respondent's savings pattern under the financial inclusion. Educated respondents will be more conscious in savings than an illiterate respondent.)

b_1- b_6= Parameters indicating the impact of financial inclusion on the respondents.

3. Results and Discussion

Demographic characters and satisfaction of Financial Inclusion

$H_{0:}$ There is no association between demographic characters (age, education, occupation and income) and satisfaction towards financial inclusion

$H_{1:}$ There is association between demographic characters (age, education, occupation and income) and satisfaction towards financial inclusion.

Table 1 Demographic characters and satisfaction towards financial inclusion

S. No.	Demographic characters	Calculated χ^2value	Table χ^2value	Degrees of freedom
1	Age	0.9443	9.488	4
2	Education	1.2881	9.488	4
3	Occupation	0.6044	9.488	4
4	Income	2.4652	7.815	3

At 5% level of significance table value is higher than the calculated value thus the null hypothesis was accepted and there is no association between demographic characters(age, education, occupation and income) and satisfaction towards NPPFI.

Demographic characters in relation to improvement in financial management ability

The relation between demographic characters (age, education, occupation and income) and financial management ability is given as

H_0 : There is no association between demographic characters (age, education, occupation and income) and financial management ability

H_1 : There is association between demographic characters (age, education, occupation and income) and financial management ability.

Table 2 Demographic charactersand financial management ability

S. No.	Demographic characters	Calculated χ^2value	Table χ^2value	Degrees of freedom
1	Age	0.4602	9.488	4
2	Education	4.317	9.488	4
3	Occupation	0.6044	9.488	4
4	Income	1.3943	7.815	3

It could be inferred that table value is higher than the calculated value thus the null hypothesis was accepted there is no association between demographic characters(age, education, occupation and income) and financial management ability.

Relationship between Demographic characters and savings ability

The relation between demographic characters and savings ability

H_0 : There is no association between demographic characters (age, education, occupation and income) and savings ability

H_1 : There is association between demographic characters (age, education, occupation and income) and savings ability.

Table 3Relation between Demographic characters and savings ability

S. No.	**Demographic characters**	**Calculated χ^2value**	*Table χ^2value*	*Degrees of freedom*
1	Age	5.0146	9.488	4
2	Education	2.9938	9.488	4
3	Occupation	2.3526	9.488	4
4	Income	1.1508	7.815	3

It could be inferred that table value is higher than the calculated value thus we accepted null hypothesis and say there was no association or relation between demographic characters(age, education, occupation and income) and savings

Impact of financial inclusion

The effect of National Pilot Project for Financial Inclusion over the target people can be accessed by responses over few statements through the statements. It could be found that 53 per cent of the sample respondents were aware of banking services, followed by 15 per cent of respondents feel that there was improvement in savings and financial management ability. And only 12 per cent accept that it will alleviate poverty from their life and five per cent of respondents feel it had contributed to their economic development and none respondent positively to that financial inclusion had brought change in their life style.

Table 4 Impact of financial inclusion

S.No.	Impact	Number of respondents	Percentage
1	Increased awareness about banks and its services	53	53.00
2	Economic development (Income, employment)	5	5.00
3	Improvement in Financial management	15	15.00
4	Alleviation of poverty	12	12.00
5	Increase in savings	15	15.00
	Total	100	100.00

It could be found that 60 per cent of sample respondents responded that their income level had increased to the extent of 500 rupees, followed by 38 per cent of respondents responded that their income level has increased to the range of Rs.500 and Rs.1000 rupees and merely two per cent said their income rose above rupees 1000.

Table 5 Level of Income Increase

S.No.	Details on income increment(Rs/month)	Number of respondents
1	100-500	60(60.00)
2	501-1000	38(38.00)
3	>000	2(2.00)
Total		100(100.00)

(Figures in the parentheses are percentage to the total)

All the six variables considered together the co-efficient of determination was 0.3605. It means that all the six variables would bring the increase in income under the financial inclusion as 36.05 per cent. In this case, among the independent variable such as age of the respondents, educational status, marital status, gender of the individual, occupational status and monthly income, monthly income factors has a very high level of influence on financial inclusion behaviour of the respondents.

Table 6 Relationship between increase in income under financial inclusion and demographic factors

S.No.	Variable	Co-efficient	t value
1.	Age of the individual	-0.00491	-2.015
2.	Gender	-0.23926	-3.33561
3.	Marital status	-0.16226	-1.78706
4.	Occupation status	-0.01684	-0.77926
5.	Income status	0.000163	7.051749***
6.	Education status	-0.01829	-1.79812

(R^2=0.3605) ***-significant to 1 percent level

And regarding savings concerned, it was found that 57 per cent of the respondent's savings did not even improve and lies below Rs.100. 39 per cent of respondents had their savings improved between Rs.100 and Rs.500 .followed by four per cent of respondent's savings had been improved above Rs.500.

Table 7Increase in Monthly savings among Respondents

S.No.	Details on savings increment(Rs/month)	Number of respondents
1	<100	57(57.00)
2	100-500	39(39.00)

3	501-1000	4(4.00)
Total		100(100.00)

(Figures in the parentheses are percentage to the total)

It is inferred that there exist no significant relation between savings and demographic factors.

Table8 Relationship between Savings under financial inclusion and demographic factors

S.No..	**Variable**	**Co-efficient**	**t value**
1.	Age of the respondents	0.001893	0.470047
2.	Gender of the respondents	-0.04253	-0.35877
3.	Marital status	0.149332	0.995228
4.	Occupation of respondents	-0.01409	-0.39463
5.	Income status	5.09E-05	1.331881
6.	Education status	0.018249	1.08555

(R^2=0.0213)

Constraints in Using Financial Inclusion Facilities

It is found that many constraints were existing in using financial inclusion facility. There may be number of factors behind use and not using a product. The major factors were made as statement and the respondents were asked to respond for those and the results were given in the tables below

Table 9 Constraints in using the No frill account

S.No	**Constraints**	**Respondents**	
		Number	**Percentage**
1	No adequate earnings	85	85.00
2	Distance of account possessing bank	15	15.00
	Total	100	100.00

Even though all the respondents possessed the no-frill account it was found that majority were not utilizing it effectively. The reason behind is, 85 per cent of respondents were not earningenough to use the account, 15 per cent feel that the bank is too far to access.

Table 10 Constraints in using general credit card

S.No	Constraints	Respondents	
		Number	Percentage
1	Lack of adequate knowledge	69	69.00
2	Problem in acceptance of General Credit Card	13	13.00
3	Felt unwanted	18	18.00
	Total	100	100.00

With respect to the usage of general credit card among the sample respondents, it was found that 69 per cent of respondents were unaware of existence of such facility throughfinancial inclusion, 18 per cent felt that credit card was not useful to them and 13 per cent were aware but and also feltusing it was little complex.

Table 11 Constraints in using Credit facility

S.No	Constraints	Respondents	
		Number	Percentage
1	Lack of adequate knowledge	26	26.00
2	Delay in obtaining credit	34	34.00
3	Availability of other source of credit	26	26.00
	Total	100	100

Regarding the credit facility up to the maximum limit of Rs.25000, it was found that 40 per cent of sample respondents said that easy source of credit from private lenders make them not to go for bank credit, followed by 34 percent felt that getting credit from bank is a slow process, and 24 per cent of respondent were not aware of credit facility available through banks.

Table 12 Constraints in utility of Life insurance and health insurance products

S.No	Constraints	Respondents

		Number	Percentage
1	Lack of adequate knowledge	62	62.00
2	Presence of insurance firms	21	21.00
3	No sufficient service compared to insurance firms	17	17.00
	Total	100	100.00

It could be found that 60 per cent of sample respondents feel that lack of knowledge as a constraint, followed by 21 per cent and 17 per cent feel that taking insurance through insurance firm was easier and there is no sufficient service from banks as insurance firms respectively.

Table 13 Constraints in using Mutual fund option

S.No	Constraints	Respondents	
		Number	Percentage
1	Lack of adequate knowledge	91	91.00
2	Not felt its need	5	5.00
3	No enough earnings to invest.	91	91.00
	Total	100	100.00

It could be found that 91 per cent of sample respondents were unaware of the termsand conditions of mutual funds, Followed by five per cent feltthat the need of mutual fund was not felt by them. Lastlyfour per cent saidthat they did not have enough earning for a mutual fund investment.

Customer's perception towards Credit access and utility

It was found that the content of service provided got the maximum score and ranked as first, followed by procedure of availing credit which was ranked second. ,other factors were ranked by the respondents in the following order, rate of interest, timeliness of credit availability, treatment of respondents by bank officials and sufficiency of credit.

Table 14 Customer's perception towards Credit access and utility

Statements	Score	Rank
Content of service	69.47	I
Procedure for availing credit	65.27	II
Rate of interest	57.67	III
Timeliness of credit	41.13	IV
Treatment by bank officials	37.13	V
Sufficiency of credit	30.33	VI

Conclusion and Policy suggestions

Banks can clear ambiguities and user friendly approach through bank staff, advertisement and pamphlets for creating more awareness and usage of banking facilities to the neglected group. Steps should be taken to clear the customer's apprehensions regarding complexity in use of banking facilities by providing more help for them by appointing some special marketing officer to facilitate user friendly banking to the underprivileged people. Proper extension efforts on financial inclusion can be taken up through special camps to educate the target people by volunteers, SHGs and NGOs. The case firm can appoint special task force to monitor the progress in financial inclusion; the banks can also provide loans through NGOs and SHGs rather than directly lending to people. The banks can also plan to recruite special financial advisors to advice the disadvantaged people about bank and banking. The bank can also provide incentives to the people who are saving more under this scheme. Customized product can be developed to suit the varying requirements of the local people. The processes of access to such products can be simplified to reach the rural poor. Without compromising on regulatory prescriptions of the banks, in areas of high levels of exclusion the banks may integrate with local financial markets and offer a host of financial services including savings, credit, remittances, insurance, etc to the weaker section of the society. The SHG-Bank Linkage programme has to reach a critical scale, the Department of Women and Child Development at State-level can be actively involved in promoting and nurturing the SHGs in regions where high levels of exclusion is prevailing.

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