

# Antecedents and Extent of Financial Inclusion : A Cross-Sectional Study

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## Abstract

According to the latest study by World Bank on financial inclusion, globally 31% of people are excluded from access to formal financial services. But despite growth in account ownership, inequality persists. The objective of the present study was to examine the current status of financial inclusion and to further explore the factors leading towards the lower level of financial access among the households. The study was conducted in four districts of the National Capital Region in India namely, Ghaziabad, Noida, Gurugram, and Faridabad, with a sample size of 300 respondents between the period of 2018 – 2019. The study is unique in nature, as the survey was conducted both in rural and urban areas. The factor analysis technique was applied to explore a large set of variables into few factors affecting the financial inclusion. Further, the households were grouped into three degrees on the basis of their financial behavior and attitude. Finally, the study concluded that supply-side and demand-side factors were the main factors for the lower access to basic banking services. Furthermore, financial attitude, financial knowledge, and financial behavior were the factors shaping the minds of the respondents. The results revealed that majority of the respondents fell under Degree 1, that is, having access to banking products, but their level of financial literacy and active usage of bank accounts was significantly low. Therefore, it is concluded that though a sufficient number of people had a formal bank account, there existed a low level of financial literacy due to which they were not active users of financial services.

**Keywords :** financial inclusion, economic development, financial access, commercial banks, RBI

**JEL Classification :** I3, O1, O16

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Financial inclusion is one of the cornerstones for an emerging economy like India. According to Demirgüç-Kunt et al. (2018), still 40% of the world's population is unbanked, with majority of them being women (56%) and poor people (40%). Financial inclusion becomes the top priority while moving towards inclusive growth and development (Iqbal & Sami, 2017). The definition of financial inclusion as defined by Reserve Bank of India (2008) is, “the process of ensuring access to appropriate financial products and services needed by vulnerable groups such as weaker sections and low-income groups at an affordable cost in a fair and transparent manner by mainstream institutional players” (p. 297). Financial inclusion may alone not provide the poorest segment of the population with the skills out of poverty, and for this, inclusive finance must be strengthened (Kuada, 2019). India is a country of 1.3 billion population spread across 28 states and eight union

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territories. Majority of the population resides in rural areas, which are excluded from the formal financial system (Gounasegaran et al., 2013). Thus, keeping this in mind, the RBI is continuously working towards these issues and launched the financial inclusion strategy for the year 2024 (“RBI chalks out financial,” 2020). This step by the central bank signifies an aggressive approach towards achieving the goal of financial inclusion with a special focus on vulnerable sections of the society. The Government of India also launched the milestone scheme PMJDY towards achieving the goal of financial inclusion.

Allen et al. (2016) reported lower educational attainment, gender, and low income as the main barriers to financial inclusion. Similar findings were also reported by Demirgüç - Kunt et al. (2014). There is still a persistent gender disparity in achieving financial inclusion (Adegbite & Machethe, 2020). A similar study conducted by Iqbal and Sami (2017) argued that gender disparity, limited knowledge of financial services, income, bank charges, and rigid documentation procedure were the main hurdles while leading towards the path of inclusive finance for all. The barriers are high in those countries where there are more restrictions on banking activities (Beck et al., 2009). On the other side, financial literacy and financial inclusion are regarded as twin pillars (Joshi, 2011) and are the key ingredients in financial inclusion (Gandhi, 2015). The Reserve Bank of India (2015) reported some of the persistent barriers to financial inclusion as gender issues, age, legal identity, occupation, terms and conditions attached to the products, literacy level, etc. NABARD (2009) suggested two factors explaining the level of financial inclusion: demand-side and supply-side factors.

Numerous studies have been conducted and explored the likely barriers to access the formal financial services and developed the financial inclusion index and ranked states/countries. Sarma (2008) proposed a Financial Inclusion Index. Erra and Acharya (2021) developed the Index of Financial Inclusion (IFI) for major Indian states for the time-period from 2003–2016 and suggested that states that had low financial inclusion remained less included during the time period. Another index was developed by Ghosh and Sahu (2020) in line with Sarma (2008). However, there is no single measure that can be used to measure the extent of financial inclusion (RBI, 2008). The existing literature on financial inclusion works with the indices that use supply-side information on financial services and has failed to capture demand-side information (Mukhopadhyay, 2016). Further, with the available information on demand-side information, there has been no survey on rural households (Subba Rao, 2019). Thus, it provides incomplete facts regarding status of financial inclusion in the country, as the main party are the rural people.

Most of the available literature captures the determinants affecting financial inclusion. In the present scenario, financial inclusion is not mere opening of a bank account ; rather, it is beyond that. An operative bank account and active usage of financial products and services by the customers is now regarded as complete financial inclusion (Sinha & Azad, 2018).

With this backdrop, the present study attempts to explore the barriers or determinants of financial inclusion in the Delhi – NCR region, including both rural and urban areas. The study is unique in nature as it tries to categorize the respondents of the sample area into three degrees of financial inclusion namely, Degree 1 : Access to bank account, Degree 2 : Financially literate, and Degree 3 : Active users of financial products and services. Hence, the present study is the first study so far to estimate the degrees of financial inclusion using demand side information of the households. Furthermore, with the above underlying theory and concept, the following are the objectives of the study :

- To find out the current status of financial inclusion in NCR.
- To explore the various determinants of financial inclusion in NCR.
- To estimate the degree/extent of financial inclusion in NCR.

## **Review of Related Literature**

The studies concerning financial inclusion are vast and cover a wide variety of issues that affect the level of financial inclusion (Ozili, 2020). Some of the key issues are reviewed and listed in the following paragraphs.

### ***Studies Covering the Demand- Side Factors Leading to Financial Exclusion***

The demand-side factors include demographic factors such as age, income, occupation of the beneficiaries ; level of poverty ; level of education, etc. (Yangdol & Sarma, 2019). The study conducted by Cabeza-Garcia et al. (2019) examined the effects of female financial inclusion on inclusive economic development and found significant evidence of a positive relationship between them. Yadav and Sharma (2018) concluded that gender, age, and size of landholding were statistically significant in predicting the probability of an individual being financially included or not.

Further, Morgan and Long (2020) studied the linkage between financial literacy, financial inclusion, and savings behavior in Laos. For making financial inclusion a success, financial literacy is the need of the hour (Rashdan & Eissa, 2020). The recent technological advancement that has the potential to remove the barriers to financial inclusion is block chain technology and fintech (Senyo & Osabutey, 2020). Mushtaq and Bruneau (2019) studied the nexus between microfinance, financial inclusion, and ICT concerning poverty and inequality. The variation and determinants of financial inclusion and their association with human development were studied in a cross-country analysis for the years 2011 – 2014 (Datta & Singh, 2019). The culture/traditions/custom norms were also identified as a determinant to financial inclusion by Demircuc-Kunt et al. (2014) and physical access and location by Nandru et al. (2015).

### ***Studies Related to the Supply - Side Factors Leading to Financial Inclusion***

The supply-side factors that are associated with the functioning of the financial institutions are namely : bank branch penetration ; the effect of digitalization such as the use of ATMs, credit cards, mobile banking, etc. ; rules, procedures, and penalty imposed by banks and other financial institutions. Kotishwar (2018) studied the impact of technology on select banks concerning transactions related to online digital pathway usage by the customers. Kaur and Pasricha (2019) succeeded in exploring the factors related to issues faced by bankers in implementing the schemes that are defined as predictors of financial inclusion by the government. Other studies conducted on supply-side factors are lack of customized products (Planning Commission, 2009), branch timings, lengthy procedure/too many documents required (United Nations Capital Development Fund, 2006), collateral requirements, language and attitude of the employees, high penalties and charges (Acharya & Parida, 2013). The demand for poor households is less, practical, and convenient and just because of their worthiness, they are being overlooked by the formal financial institutions (Planning Commission, 2009). Financial innovation also plays a crucial role in defining the level of financial inclusion (Lee et al., 2020). The study conducted by Patel and Patel (2020) concluded that after joining self-help groups, the decision-making ability of women improved significantly.

Sharma et al. (2018) conducted a study on PMJDY where the authors attempted to explore the effectiveness of PMJDY and ranked the Indian states by computing the Financial Inclusion Index. Another study conducted by Singh and Naik (2018) reported that new PMJDY accounts have been opened by women, small and marginal farmers, and rural people but with no formal education. Rastogi and Ragabiruntha (2018) reported that online banking as well as understanding banking services and financial literacy are drivers of financial inclusion concerning the PMJDY account holders. On a similar note, Verma and Garg (2016) and Bhuyan et al. (2018)

studied the effectiveness of the PMJDY scheme through product awareness and found significantly low awareness.

## Research Gap

After going through extensive literature review concerning financial inclusion, it is clear that various studies have been conducted on demand and supply related factors using already published data by World Bank and IMF. But there are limited studies concerning the issues of financial inclusion using household survey at the state level. Also, there is a dearth of studies estimating the degree of financial inclusion in India (Demirguc-Kunt et al., 2008 ; RBI, 2008). Therefore, with this backdrop, the present study tries to explore the determinants of financial inclusion in four districts of NCR. Thus, the following are the research gaps identified :

- ✦ There have been limited studies in the current review of literature regarding analyzing demand and supply related factors separately.
- ✦ There is no known available study regarding /categorizing of the extent of financial inclusion in India.
- ✦ There is no known quantitative research regarding analyzing the degree of financial inclusion in India.

Thus, looking over the unavailability of information, the present study aims to measure the degree of financial inclusion in the selected sample area which is segregated on three levels of degrees namely, Degree – I : Financial accessibility, Degree – II : Financial literacy ; and Degree – III : Extensive users of financial services.

## Research Methodology

### *Sampling*

In the present study, four districts of the NCR are selected namely, Faridabad, Gurugram, Noida, and Ghaziabad. The reason behind choosing the above districts as a sample is their majority share in NCR growth and income. The above - mentioned districts also comprise of the maximum population who are engaged in industrial activity. The worker's participation rate is also high in these regions. Due to the proximity to Delhi, the region has also experienced rapid development in terms of employment, GDP, and per capita. Thus, the above-selected districts act as an important area to study the level of financial inclusion in this area.

### *Data Collection*

The data collected for the study is primary data, which were collected using a structured questionnaire. The sample size for the study was fixed at 400 respondents using the convenience sampling method. Four hundred questionnaires were equally distributed (100 in each district) in the NCR region. Out of 400, only 318 respondents returned the questionnaire. Therefore, after removing the incomplete entries, the valid number of responses considered for the study is 300. The pilot study was conducted with 100 questionnaires (25 in each district). The data were collected in four districts of NCR from 2018 – 2019. The reason for selecting this period is because the year 2018 was the fourth year since the launch of the financial inclusion policy PMJDY, and we aimed to check the status at ground level 4 years after the initial launch.

Till now, there have been approximately 41.70 crores Jan-Dhan bank accounts opened so far and 1.26 lakh Bank-Mitras are providing service in sub-service areas (Pradhan Mantri Jan Dhan Yojana, n.d.). But the mere

**Table 1. Research Variables Used in the Study**

Variable	Demand-Side Variables
Demographic	Age, gender, occupation, gender, family size, education
Psychological	Perception about banks, Attitude towards banks, Voluntary use of services
Economic	Factors include the level of income, assetlessness of customers, the certainty of income, collateral requirement
Financial Literacy	Variable is measured on dimensions – financial awareness, financial knowledge, and financial attitudes
	<b>Supply Side Factors</b>
Factors	Physical access to banks, Bank charges, Terms & conditions, Documentation, Legal identity, Branch timings, Inappropriateness of products, Penalties

Source : Compiled by the authors from the literature review.

opening of a bank account does not reflect the true picture of financial inclusion. Several factors are responsible for reaching the benchmark. The present study will help in capturing the real picture of the policy which has been launched to foster the level of financial inclusion in India and to bring every section of the society under the ambit of the formal financial system. The details of the variables used in the study are presented in Table 1.

The questionnaire was segregated into three degrees : Degree 1, Access to account ownership ; Degree 2 : Financial literacy ; and Degree 3 : Active usage. The respondents who fulfilled the Degree 1 criteria but not Degree 2 and Degree 3 are said to be financially excluded because they only had account ownership but were not financially literate and active users. When respondents fulfilled the criteria of Degree 1 and Degree 2, then they are considered financially included but not active users of the financial products. Finally, respondents those who fulfilled all the three-levels of degrees are said to be financially included with active usage.

### **Statistical Tools**

Data have been analyzed through the statistical package SPSS 23.0. The prerequisite for analyzing the primary data is the validity and reliability of the data and Cronbach's alpha value (Table 2) is estimated for the same. As per Kline (1999), the general criterion for the acceptable range of Cronbach's Alpha is 0.8. The Cronbach's alpha value for all the statements is above the threshold limit of .80, which is a good sign for the model (Table 2). Factor analysis with principal component analysis method is used to explore the various determinants of financial

**Table 2. Results of Reliability Testing Using Cronbach's Alpha**

Level of Degree	Constructs	Cronbach's Alpha
Degree I	Likely reasons for not opening accounts	.846
	Likely reasons for not taking loan/credit	.838
Degree II	Financial attitude	.813
	Financial behaviour	.709
	Financial knowledge/skills	.947
	Awareness about financial products/services	.964
Degree III	Usage of financial services	.864

inclusion. This technique assumes that the sample used is the population, and so results cannot be extrapolated beyond a certain limit (Field, 2009).

## Data Analysis and Results

### *Status of Financial Inclusion in the NCR Region*

Table 3 presents the current status of financial inclusion in the NCR region. From the results, it is clear that 36.5% of the respondents in rural areas and 63.5% of the respondents in urban areas had access to bank accounts, however, this parameter was very low in the case of female respondents (25.4%). Similarly, access to formal credit was also very low (Table 3) in rural areas (34.1%). At the district level, respondents in Ghaziabad had more access to formal accounts ; whereas, respondents in Gurugram had more access to formal credit (15%) (Table 4). Therefore, it can be inferred that rural areas still lack access to formal finance as compared to urban areas. The results also depict that women were far less in number than men in terms of financial inclusion. The findings of the study are in line with the findings of Adegbite and Machethe (2020) and Ghosh and Vinod (2016).

**Table 3. Status of Financial Inclusion as Per Different Parameters (in %)**

Variables	Location		Gender	
	Rural	Urban	Male	Female
Account at any financial institution	36.5	63.5	74.6	25.4
Preferred public sector banks	35.9	34.1	75.7	24.3
Availing loan/credit facility	34.1	65.9	79.5	20.5

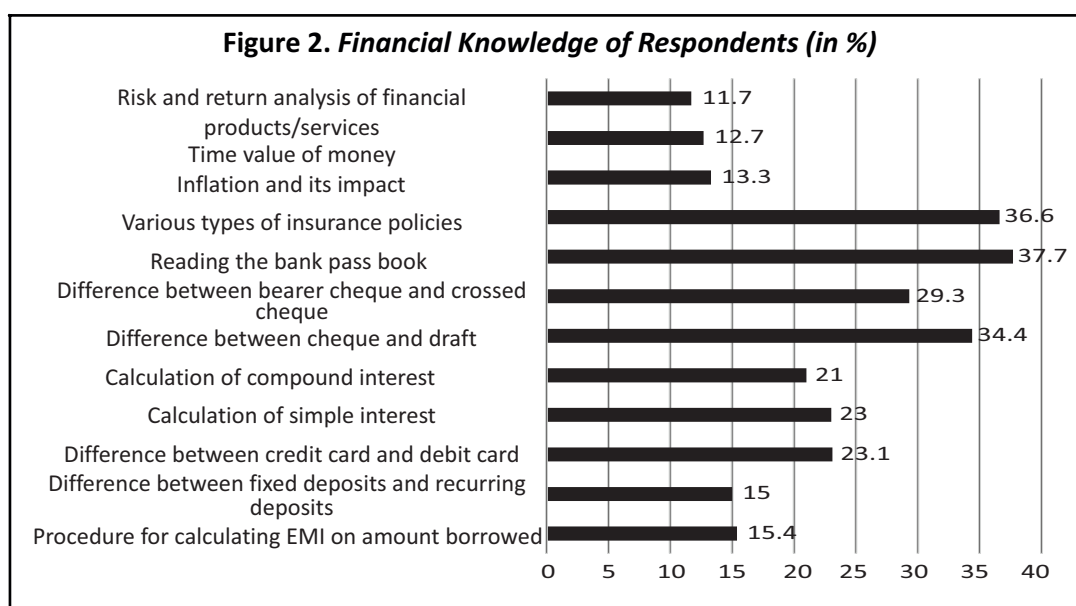
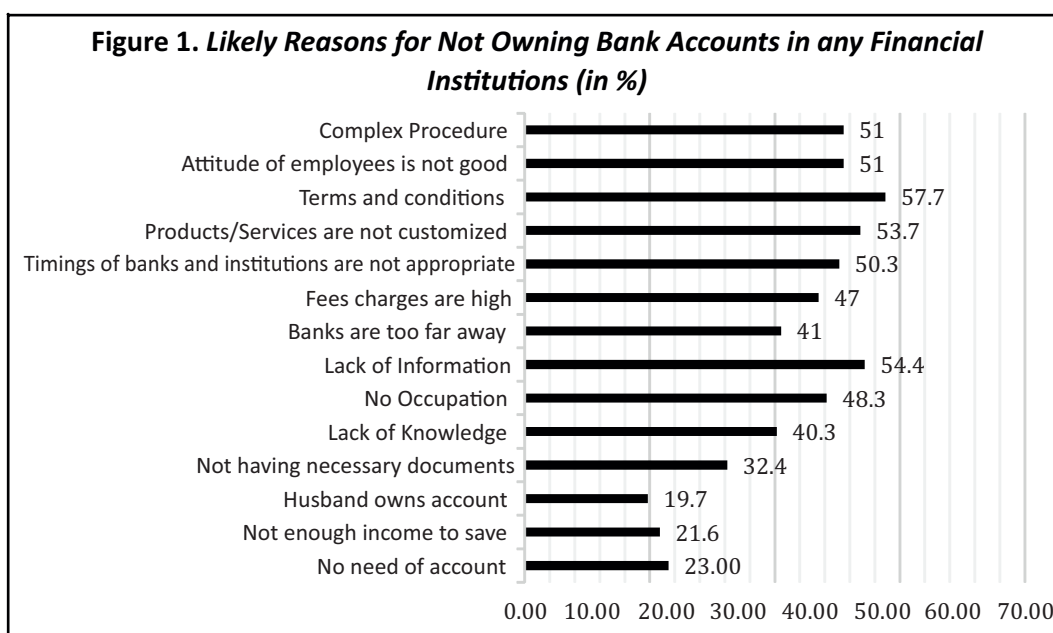
**Table 4. Current Status of Financial Inclusion in Each District (in %)**

Variables/Districts	Ghaziabad	Noida	Gurugram	Faridabad
Ownership of accounts	65	62	63	62
Preference of public sector banks	63	69	59	60
Availed loan facility	13	12	15	4
Availed loans from friends/ relatives	52	58	58	61
Availing insurance services	38	26	19	17

Further, Figure 1 presents the barriers to financial inclusion in the NCR region. It is clear from the results that the biggest barrier for financial inclusion is the supply-side factors, that is, terms and conditions (57.7%), non-customized products (53.7%), complex procedures (51%), attitude of employees (51%), and institution timings (50%). The given reasons play a major role in low access to formal finance in the NCR region. Financial literacy also emerged as one of the critical factors leading to low level of financial inclusion as reported by 40.3% of the respondents (Figure 2). Only 1% of the respondents knew the difference between fixed deposits and recurring deposits, 37% could only read the bank account passbook, 34% knew the difference between a cheque and a draft. Other reasons that were reported by households are – not enough income to save, gender issues, branch located in far-flung areas, and no occupation of households.

Thus, it can be concluded that the NCR region lacks in terms of financial literacy among the respondents, which is the basic reason behind the lower level of financial inclusion, especially in rural areas. Also, respondents





were not much satisfied with the kind of services provided by formal institutions. Therefore, it is evident that financial institutions must provide customized products and services with ease and should have less stringent documentation procedures.

### **Results of Exploratory Factor Analysis**

The results arrived from the factor analysis help in segregating the factors into demand-side factors and supply-side factors. The results for the factor analysis are discussed in the following sections.

## (1) Degree 1 : Likely Reasons for Not Opening a Savings Bank Account

Respondents were put under Degree I when they had mere ownership of accounts in any formal financial institutions such as commercial banks and post offices. Respondents who did not have access to bank accounts were asked about the reasons why they did not own financial products. Various reasons mentioned by them have been explored and most significant factors have been extracted using factor analysis (Table 5).

A principal component analysis (PCA) was conducted on 14 items with orthogonal rotation (varimax). The Kaiser – Meyer – Olkin measure verified the sampling adequacy for the analysis, KMO = .795 (“Good”, according to Field, 2009) and all KMO values for individual items are greater than .70, which is well above the acceptable limit of .50 (Field, 2009). Bartlett's test of sphericity [ $\chi^2$  (91) = 2522.472,  $p < .05$ ] indicates that the correlations between items are sufficiently large for PCA. Four components had Eigen values over Kaiser's criterion of 1 and in combination explained 73.92% of the variance. Given the large sample size, the Kaiser's criterion was followed and thus four factors were retained for the final analysis. The communalities for all the subscales are equal to 1 while the extraction is greater than .650. A relatively small value of the communalities shows misfit in the model and was not considered (Table 5). The sample with more than 30 variables and sample size greater than 250 must extract the factors with communalities greater than .70 (Field, 2009).

**Table 5. Likely Reasons for Not Opening Accounts**

Research Statement	Component			
	Inefficiency of Institutions	Individual - Level Factors	Household - Level Factors	Level of Education
No need for bank account			.803*	
Not enough income to save		.674	.406	
Husband owns account			.796*	
Do not have necessary documents			.736*	
Lack of knowledge				.887*
No occupation		.823*		
Lack of information	.471	.473		.573
Banks are too far away		.749*		
Fees/charges are high	.464	.687		
Complex procedures	.528	.619		
Attitude of employees is not good	.809*			
Banks/institution timings are not appropriate	.853*			
Services/products are not appropriate	.828			
Terms and conditions	.797			

**Note.** Extraction Method : Principal Component Analysis.

Rotation Method : Varimax with Kaiser Normalization.

<sup>a</sup> Rotation converged in 8 iterations.

\* Factors with values greater than .70 are extracted.



## (2) Degree I : Likely Reasons for Not Availing Credit/Loan from Formal Financial Institutions

A principal component analysis (PCA) was conducted on 10 items with orthogonal rotation (Varimax). The Kaiser – Meyer – Olkin measure verified the sampling adequacy for the analysis, KMO = .785 (“Good”, according to Field, 2009) and all KMO values for individual items are greater than .70, which is well above the acceptable limit of .50 (Field, 2009). Bartlett's test of sphericity [ $\chi^2(45) = 1485.704, p < .05$ ] indicates that the correlations between items are sufficiently large for PCA. Four components have Eigen values over Kaiser's criterion of 1 and in combination explained 71.40% of the variance. Given the large sample size, the Kaiser's criterion was followed and thus three factors were retained for the final analysis (Table 6).

**Table 6. Rotated Component Matrix (Not Availing Credit/Loan)**

Research Statements	Component		
	Supply - Side Factors	Household - Level Factors	Demand - Side Factors
No need for credit/loan		.777*	
Lack of knowledge	.438	.734*	
No collateral/ security		.734*	
Do not have necessary documents			.782*
Availed from non-institutional sources			.882*
Banks are too far away	.783*		
Cost of financing (interest on loan) is high	.840*		
Complex procedures	.742*		
Attitude of employees is not good	.825*		
Due to lengthy and time taking procedure	.792*		

**Note.** Extraction Method : Principal Component Analysis.

Rotation Method : Varimax with Kaiser Normalization.

<sup>a</sup>. Rotation converged in 4 iterations.

\* Factors with values greater than .70 are extracted.

## (3) Degree II : Financial Literacy

Financial literacy can be studied with three perspectives : Financial attitude, financial knowledge/skills, and financial awareness of the beneficiaries. Those respondents who performed well on these parameters are said to be under Degree II, that is, they already had formal access to finance along with the financial knowledge. Table 7 presents the component matrix of financial attitude and all constructs that have value greater than .7 and variables with values less than .7 were omitted from further analysis. Table 8 presents the component matrix for financial knowledge/skills and Table 9 presents the component matrix for financial awareness. Finally, the factors that collectively define the financial literacy of the respondents are presented in Table 10.

## (4) Degree III : Active Usage of Financial Products and Services

Finally, after Degree II, only those respondents have been categorized under Degree III who along with having a formal bank account in any financial institution were financially literate and were also actively using the financial

**Table 7. Rotated Component Matrix (Financial Attitude)**

Subscales	Component	
	Attitude Toward Traditional Banking	Attitude Toward Modern Banking
I believe in timely payment of bills.	.774*	
I believe in selecting or purchasing affordable products.	.831*	
I believe in regular/active savings in bank account.	.928*	
I prefer paying through card instead of cash.	.575	
I believe in timely payment of EMI on loans borrowed.	.890*	
I wish to use internet banking for branchless banking.		.934*
I wish to do proper financial planning for family.	.774*	

**Note.** \*Factors with values greater than .70 are extracted.

**Table 8. Rotated Component Matrix (Financial Knowledge/Skills)**

Research Statements	Component		
	Basic Banking	Technical Skills	Advanced Skills
Procedure for calculating EMI on amount borrowed.		.844*	
Difference between fixed deposits and recurring deposits.		.808*	
Difference between credit card and debit card.	.479	.717*	
Calculation of simple interest.	.556	.718*	
Calculation of compound interest.	.491	.707*	
Difference between cheque and draft.	.780*		
Difference between bearer cheque and crossed cheque.	.857*		
Reading the bank pass book.	.829*		
Various types of insurance policies.	.847*		
Inflation and its impact.		.420	.794*
Time value of money.			.888*
Risk and return analysis of financial products/services.			.885*

**Note.** \*Factors with values greater than .70 are extracted.

**Table 9. Rotated Component Matrix (Financial Awareness about Various Schemes)**

Research Statements	Component		
	Traditional Banking	Rural Schemes	Insurance Schemes
Fixed and recurring deposits	0.858*		
Credit card/debit card/ATM	0.818*		0.435
Remittances (NEFT/RTGS)	0.827*		
Online/internet banking	0.801*	0.47	

Bank overdraft/Cash credit	0.768*	0.464	
Kisan Credit Card	0.492	0.5	0.442
Pradhan Mantri Jan Dhan Yojana	0.519		0.565
Atal Pension Yojana			0.869*
Pradhan Mantri Suraksha BimaYojana			0.854*
Pradhan Mantri Jeevan Suraksha BimaYojana		0.417	0.842*
Business correspondents		0.656	0.49
Agri-clinic and Agri-business centers		0.881*	
Gramin Mahila Sowbhagya Scheme		0.879*	
Multi-city cheque facility	0.421	0.667	0.419
RuPay Kisan Card		0.679	0.401

Extraction Method : Principal Component Analysis.

Rotation Method : Varimax with Kaiser Normalization.

<sup>a</sup> Rotation converged in 5 iterations.

**Note.** \*Factors with values greater than .70 are extracted.

**Table 10. Factors Leading Towards Lower Level of Financial Inclusion**

Not Opening of Bank Accounts	Not Opening Credit Accounts	Financial Attitude	Financial Knowledge	Financial Awareness	Active Usage
<b>Component 1:</b>	<b>Component 1:</b>	<b>Component 1:</b>	<b>Component 1:</b>	<b>Component 1:</b>	<b>Component 1:</b>
Inefficiency of Institutions	Supply-Side Factors	Attitude Toward Traditional Banking	Basic Banking	Traditional Banking	Tech-Savvy Services
<b>Component 2:</b>	<b>Component 2:</b>	<b>Component 2:</b>	<b>Component 2:</b>	<b>Component 2:</b>	<b>Component 2:</b>
Individual-Level Factors	Household-Level Factors	Attitude Toward Modern Banking	Technical Skills	Rural Schemes	Basic Banking Services
<b>Component 3:</b>	<b>Component 3:</b>		<b>Component 3:</b>	<b>Component 3:</b>	<b>Component 3:</b>
Household-Level Factors	Demand-Side Factors		Advanced Skills	Insurance Schemes	Remittances
<b>Component 4:</b>					
Level of Education					

**Note.** For further analysis (measuring degree of financial inclusion), factors have been clubbed into three degrees namely., Degree 1 : Access to basic banking services (Not opening of bank accounts and Not opening of credit accounts), Degree 2 : Financial Literacy (Financial attitude, financial knowledge, and financial awareness) and Degree 3 : Active usage.

services. Active usage of financial services here means that they had used the financial services within the last year (as per the time period of the study). The results for the factors analysis for this construct are presented in Table 11.

### **Degree/Extent of Financial Inclusion in NCR Region**

Eighty four percent of the respondents fell under Degree I, that is, they only had bank accounts but were not financially literate and also were not active users of financial products and services (Table 12) ; 17.67% of the

**Table 11. Rotated Component Matrix (Active Usage of Financial Services)**

Research Statements	Component		
	Tech - Savvy Services	Basic Banking Services	Remittances
Depositing money in bank account			.702*
Withdrawals through ATM			.890*
Availing loan facility	.628		
Using cards for point of sale	.810*		
Using remittance services such as NEFT/RTGS	.872*		
Overdraft/Cash credit facility	.833*		
Internet banking	.757*		
Cheque facility		.834*	
Use of credit facility for some specific purpose		.825*	
Recurring deposits	.860*		
Payment of insurance premium	.568		
Investment in shares/mutual funds	.678		

**Note.** Extraction Method : Principal Component Analysis.

Rotation Method : Varimax with Kaiser Normalization.

<sup>a</sup> Rotation converged in 5 iterations.

**Note.** \*Factors with values greater than .70 are extracted.

**Table 12. Respondents on Different Levels of Degrees of Financial Inclusion in NCR**

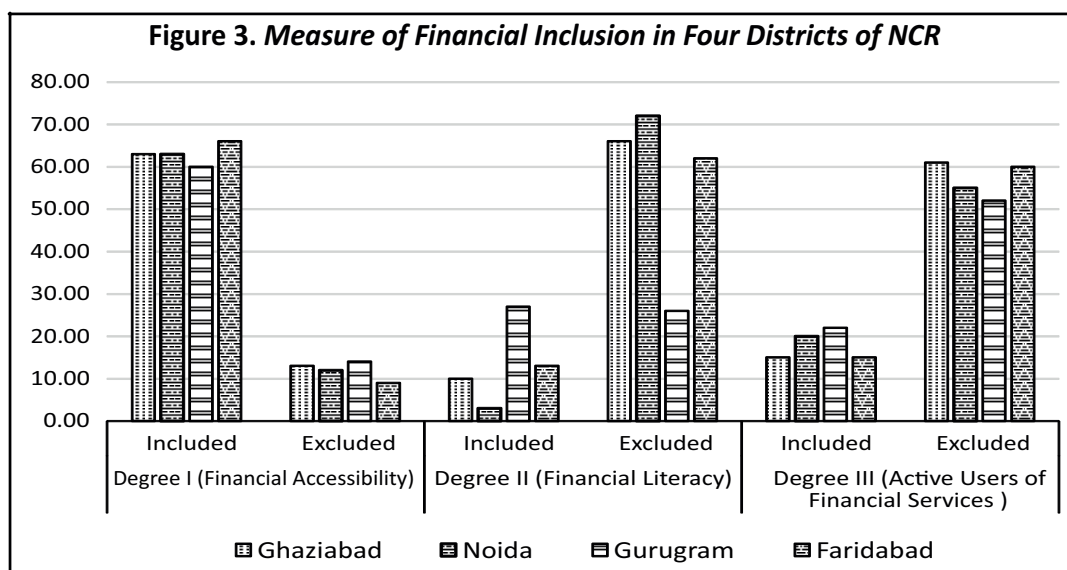
Degree I		Degree II		Degree III	
Included	Excluded	Included	Excluded	Included	Excluded
252	48	53	247	112	192
% Fall in Degree I	84%	% Fall in Degree II	17.67%	% Fall in Degree III	37.3%

respondents fell under Degree II, that is, approximately 18% of respondents surveyed were those who had a bank account and were also financially literate but they were not active users ; 37.3% of the respondents fell under Degree III, that is, they were active users of the formal financial services with financial literacy (Table 12).

Thus, it can be concluded that the mere opening of an account is not sufficient for achieving the goal of financial inclusion ; rather, active usage of accounts is necessary for an inclusive financial system. No doubt, 84% of the population had access to a formal bank account, but it is of no use when they were not using it. Approximately 60% of the respondents were not active users of financial products. Figure 3 depicts the status of financial inclusion in the NCR region. It clearly shows that though there is a satisfactory level of access to financial services, but the level of financial literacy and active usage of these services is a matter of concern.

## Discussion and Practical Implications

The demographic statistics reveal that nearly 85% of the respondents owned bank accounts in the NCR region, and the majority of the respondents preferred to use services rendered by public sector banks. Nearly half of the



respondents used their accounts for their personal use. Less than 20% of the respondents reported that they used a credit/loan facility. In analysis, various reasons have been reported concerning lack of financial access such as less income, less financial knowledge or low educational attainment, one family member already had an account, gender disparity, distrust in the financial system (the majority had distrust in private institutions), and lack of proper documents. The majority of the reasons reported are demand-side factors, which is in line with the results obtained by Demirguc-Kunt et al. (2018). Some other reasons reported are stringent terms and conditions, poor attitude of bank employees, uncustomized financial products and services ; reasons reported for no credit/loans are : using a non-institutional source of finance, complex procedures, no documents, lengthy procedure, and less financial knowledge. Principal component analysis has been used to explore the factors determining financial inclusion. The factor analysis technique helps in reducing a large set of data. Institutional related factors, individual-related factors, voluntary exclusion, and information related are the factors causing a barrier to financial inclusion. Supply-side factors and demand-side factors are causing low access to credit/loans. Thus, the findings from the survey of the present study reveal that there are two sets of factors responsible for the low level of financial inclusion in the NCR region namely, demand-side factors and supply-side factors.

Concerning the degree/extent of financial inclusion, the results reveal that 84% of respondents fell under Degree I and the least number of respondents fell under Degree II and Degree III. Thus, it can be concluded here that despite ownership of bank accounts, still there is a low level of financial inclusion as people are not actively using the financial products and services for transactions.

Thus, the results imply that despite the stringent steps taken by RBI and the Government of India, there is still a majority of the population who are unbanked. Furthermore, a more serious issue is that the households are not financially literate. Financial inclusion is beyond the mere opening of a bank account (Sinha & Azad, 2018). Therefore, with this backdrop, it can be inferred from the results of the present study that there is less active usage of financial products and services. Thus, it is of utmost importance that regulatory bodies should put special focus on the financial education of the households, especially in rural areas. The mission for an inclusive financial system is said to be completed when people are financially literate and active users of financial products and services.

## Conclusion

The present study is conducted with an objective to understand the likely reasons for the low access of financial inclusion in the NCR region. The results reveal that out of 300 respondents, only 48 respondents did not have a formal bank account, which is a significant sign ; however, overall, there was a very low level of financial literacy among the respondents (Table 12). We observed that 37% of the respondents were actively using the financial products and services. Therefore, it is concluded that though a sufficient number of people had a formal bank account, there existed a low level of financial literacy due to which they were not active users of financial services.

The findings of the present study are in line with the findings of the report submitted by NABARD (2009). Hence, it can be concluded that to bring a paradigm shift in the financial system and to include each group (especially vulnerable groups) under the umbrella of the financial system, it is imperative to provide financial education to the ultimate consumers of the services. So, it is recommended that FI should be declared as a national objective, and to fulfill this objective, there is an urgent need for increasing awareness for credit penetration, monitoring of infrastructure of financial institutions, improving basic infrastructure facilities, taking advantage of the post offices and fair price shops, provide diverse & customized set of products to be offered, restructuring of RRBs and co-operative banks, and promote research in the area of financial inclusion. The findings of the present study will be helpful for regulatory bodies, banks, and other intermediary agents working in the area of financial inclusion.

## Limitations of the Study and Scope for Future Research

Due to the paucity of time and resources, the research has been conducted only in four districts of the NCR region. The present study provides the scope to conduct the study across the country or any other specific state/region. Further studies can also be conducted with reference to PMJDY and its effectiveness in select regions. The usage and adoption of fintech can also be estimated.

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