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ACADEMIC PAPER

Do demand side variables influence financial inclusion? Lessons from South Punjab – Pakistan

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ABSTRACT

Financial inclusion helps to eradicate poverty and unemployment and improves the livelihoods of the public. This research aims to examine the demand side variables that influence financial Inclusion in south Punjab, Pakistan. This research has examined the influence of education, income, accessibility, and religious belief on financial inclusion. This study has used a quantitative research design. The Likert scale questionnaire was distributed among two hundred and eighty respondents through convenience sampling. SPSS 16 has been used for data analysis in this research. Results showed that income, education, and accessibility have a significant and positive impact on financial inclusion, but no significant relationship between religious belief and financial inclusion is found due to the availability of Islamic banking in Pakistan. This research is significant for financial inclusion policymakers and for financial institutions as it will help them to make programs to promote financial inclusion accordingly. On the supply side, a lot of work has been done but negligible work has been done on the demand side of financial inclusion. This study investigated the demand side variables that influence financial inclusion.

KEYWORDS

Financial Inclusion, demand side variables, south Punjab



1. INTRODUCTION

Financial inclusion has become a very vital factor for strategic economic and social development globally in recent decades. As monetary opportunities are directly associated with the access and usage of formal financial services. Access to financial services affects the lives of poor people because it provides the opportunity to save money, make investments and get benefits from credit (Subbarao, 2009). An efficient and inclusive financial system is very important. Among other reasons such a system is also needed for the efficient allocation of resources and to vanish inequalities in outcomes and opportunities among small enterprises (World Bank, 2014). Financial inclusion enables the financially excluded sections of society to become a part of a formal financial system that eventually assists to reduce poverty, increase income, stimulate job security and enhance social (Alliance for Financial Inclusion, 2013).

Financial inclusion is the process of ensuring access to appropriate financial products and services for an example bank account, savings, insurance, and cheaper credit facility". Financial inclusion mainly targets disadvantaged groups like low-income and weaker sections of society at a reasonable cost in a transparent and fair way by the mainstream institutional players (Raza, 2015). Financial inclusion helps people to fight poverty and to deal with asymmetrical income and infrequent huge bills. Financial inclusion also can take them out of poverty with superior education and health facilities. Financial inclusion also can help a micro-enterprise in risk management, in providing resources for the business, and for the expansion of the business. If we talk about the macro level financial inclusion can increase economic growth by mobilizing savings. It can also drag more firms into the formal financial system, increases tax income, and makes workers entitled to better benefits and protection (Raza, 2015).

Efforts to include the majority of the public in the formal financial system have increased the efficiency of an economy. But these benefits are only taken by the developed countries yet. Most developing countries still don't have an inclusive financial system. So, the promotion of financial inclusion is necessary on an urgent basis for developing countries and growing markets where above ninety percent of 1.7 billion persons don't have a bank account or account in any financial institution (Demirguc-Kunt et al., 2018). According to World Bank (2015) two billion people don't use formal financial services and 73% of poor people don't use formal financial services due to cost, travel distance and often heavy requirements for opening a bank account.

Pakistan has been left behind India, Nepal, Sri Lanka and Bangladesh in most indicators of financial inclusion like access of people to bank credit, population percentage using bank accounts for savings and female percentage using banking services. The financial inclusion level in Pakistan is very low. Just 13% of adults have an account in formal financial institutions in Pakistan and this is very low from the average of south Asia which is 33% and all low middle-income countries have 41.4%. 56% of adults in Pakistan don't use formal or informal financial products. Thirty-six percent save but only four percent make savings in formal financial institutions. One-third of adults in Pakistan borrow but only 3% borrow from financial institutions (State Bank of Pakistan, 2015). Therefore financial inclusion is not just important but is a matter of top priority for developing countries like Pakistan.

Lack of access to the financial system or lack of financial inclusion is due to two types of factors supply factors and demand factors. Supply factors that affect financial inclusion are irregular information, oligopoly or monopoly in the financial market, barriers in the entry of new competitors or new products are the factors that are the barrier for people who are excluded from the financial system due to price, reduced supply and risk (Claessens, 2006). According to Beck and de la Torre (2006) on the demand side of financial inclusion income and price are more important determinants of demand for financial services like payment services and savings products. The economic development and rise in per-person income raise the financial inclusion need. Martínez, Hidalgo, and Tuesta (2013) have studied financial inclusion and discussed demand factors and concluded that income level, education, gender and occupation have a positive relation with financial inclusion. Bhanot, Bapat, and Bera (2012) have done research on financial inclusion in India and concluded that financial education, income, and distance to the financial institution



are the factors that have a direct effect on financial inclusion

So a lot of work has been done on financial inclusion in the world but in Pakistan, negligible work has been done on the demand side of financial inclusion. And as Pakistan is a Muslim country and in Islam, the interest is haram so the novelty of this study is that this research also studies religious belief among other demand variables. So this research is aimed to investigate the impact of demand side variables that are income, education, religious belief and accessibility on financial inclusion in South Punjab, Pakistan. This study is very significant for the Government, Banks and other financial institutions to make policies and procedures accordingly to attract the public to use financial services. Respondents of this study are the people living in rural areas of South Punjab, Pakistan.

2. LITERATURE REVIEW

Financial inclusion and its importance are very much debated in the literature. It can grow national productivity if a big proportion of the population involves in it. Financial inclusion has a vigorous role in the welfare of individuals and households, it stimulates small and medium business activities and rises employment and economic growth (Naceur, Barajas, & Massara, 2017). Shreds of evidence show that proper financial services improve the living standards of an individual and household and also improve the performance of small businesses. There are many different products that give benefits to the poor public and small businesses differently (CGAP, 2016). This concept of financial inclusion is vibrant and it is evolved considerably from its origin. When this concept was started it was considered to reduce the poverty and inequality of income and now it is considered to be the requirement for economic development and financial stability (Kanter & Nagabhushan, 2012). The countries with a big percentage of the public not using financial services represent high poverty ratios and high-income inequalities (State Bank of Pakistan, 2015).

Financial inclusion at an individual country level and at the international level is increasing the reform schemes. Several endeavors have been made for the development and globalization of this concept of financial inclusion. Establishment of the organizations like the alliance for financial inclusion, Global partnership of financial inclusion, International Finance Corporation and Consultative group to assist the poor is the most important effort and these organizations are made to give assistance and the implantation structure of financial inclusion (Kanter & Nagabhushan, 2012). World Bank is also taking many initiatives to promote financial inclusion level in the world. World Bank created Global Findex Database in 2012 with the partnership of Gallup. Global findex database is working in 148 countries to create comprehensive data set and examines how the public males and females make savings, take loans and manage their risk and how much people use financial services from formal financial system (Bergh, 2015).

While there are a lot of efforts are being done on an international level to promote financial inclusion but still, a huge percentage of the public is excluded from the financial system. The difficulties and problems in using financial services are from two sides, one is the supply side which consists of the features of products and the way they are being offered and other is the demand side which consists of the financial position and the situation of a customer. Analysis of both sides' demand and supply sides is important for financial inclusion (European Commission, 2008).

There are two basic dimensions of financial inclusion that are Access to financial services and usage of financial services. The access dimension of financial inclusion refers to the ability of the public to use the financial products and services provided by the financial institution. In the Access, dimension data is collected from the supply side like financial institutions, State banks, and National statistics. While the Usage dimension refers to the intensity or degree of use of financial services. In the usage dimension the data is collected from the demand side of financial Inclusion like the general public, customers of banks, etc. (Alliance for Financial Inclusion, 2013).

2.1. Empirical Literature

Previous literature suggests that the following variables influence Financial Inclusion the most. So this



study has taken the following variables to examine their impact on Financial Inclusion. Previous literature on the impact of these variables on Financial Inclusion and hypotheses are given below.

2.1.1 Income

According to Cano-Sánchez et al. (2013) there is a direct relationship between income and financial inclusion. Tuesta et al. (2015) have defined the different barriers to financial inclusion and finally concluded that income and age is the significant barrier to financial inclusion. Martínez et al. (2013) have concluded that income is directly proportional to financial inclusion and low income is the main barrier to financial inclusion. Ghatak (2013) have concluded in his research that Income plays important role in the demand for financial services. Inganga et al. (2014) have also concluded in his paper that income level is the main factor that affects the demand of customers for financial services. Fungáčová and Weill (2015) have studied financial inclusion in china and his study concludes that if there is a higher income level the financial inclusion level will also be higher. Bhanot et al. (2012) have studied financial inclusion in northeast India and concluded that Income is one of the influential factors leading to financial inclusion.

H 1: *Income has a positive impact on financial inclusion.*

2.1.2 Education

Kempson, Perotti, and Scott (2013) have concluded in his research that the variables which influence financial inclusion are Income, gender, occupation, education and geographical factors and informality. Mitton (2008) concluded in his study that low education is one of the important barriers to financial inclusion. King (2012) have researched the barriers to financial inclusion in Nigeria and concluded that the four fifth that are unbanked among other characteristics have lower education and they have very low financial knowledge also. Ghatak (2013) have studied demand factors that affect financial inclusion and stated that education has a significant role in the demand side of financial inclusion. Fungáčová and Weill (2015) have studied financial inclusion in china and concluded that better education is connected with the greater use of bank accounts and credit products. Bhanot et al. (2012) have studied financial inclusion in northeast India and concluded that education is one of the influential factors leading to financial inclusion. Izquierdo and Tuesta (2015) have done research on financial inclusion and concluded that among other factors low education level is deemed to be the main barrier that keeps individuals excluded from the formal financial system. Gupta and Singh (2013) have also concluded that literacy level plays a vital role in financial inclusion.

H 2: *Education has a positive impact on financial inclusion.*

2.1.3 Accessibility

King (2012) his study has concluded that distance to bank branches is one of the most important barriers to financial inclusion. Ghatak (2013) have studied demand side factors affecting financial inclusion and concluded that Accessibility plays important role in the demand for financial services. Bhanot et al. (2012) have studied financial inclusion in northeast India and concluded that closeness to the post office will increase financial inclusion and also education and income are very important. Sharma, Jain, and Gupta (2014) in his study has also concluded that easy access is a very important factor that influences financial inclusion. Mawuli Akpandjar, Quartey, and Abor (2013) have studied financial inclusion and concluded that geographical characteristics are important in obtaining financial services from the financial market. Sharma et al. (2014) his study has concluded that easy access is a very important factor that influences financial inclusion. Central Bank of Samoa (2015) have also studied financial inclusion and concluded that distance from the bank branch is a very significant factor that influences financial inclusion. Christabell and Vimal (2012) have done research on financial inclusion in rural areas of India. This study concluded that the main barrier the access to financial services in rural areas is the distance from the point of access.

H 3: *Accessibility has a positive impact on financial inclusion.*

2.1.4 Religious belief

Sharma et al. (2014) his study analyzed the recent situation of financial inclusion in rural Oman and



investigated the factors that affect financial inclusion and concluded that because Oman is an Islamic state and Interest is haram in Islam so religious belief is the main barrier to financial inclusion. (The Global Findex Database, 2014) A policy working paper has concluded that in Muslim countries religious belief is one of the important barriers to financial inclusion.

H 4: *Religious belief has a negative impact on financial inclusion.*

Ignorable work has been done on religious belief variables in the investigation of demand side variables that influence financial inclusion. So religious belief is the novelty of this study because a very limited study has been done on this variable Pakistan is a Muslim country and in Islam interest is haram so religious belief is a very important factor.

2.2. Theoretical Framework and Hypothesis

2.2.1. Hypothesis

H 1: *Income has a positive impact on financial inclusion.*

H 2: *Education has a positive impact on financial inclusion.*

H 3: *Accessibility has a positive impact on financial inclusion.*

H 4: *Religious belief has a negative impact on financial inclusion.*

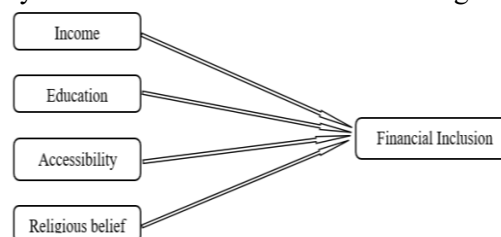


FIGURE 1 Theoretical Framework

3. METHODOLOGY

3.1. Research Design

In this research quantitative research was used to investigate the demand side variables that influence financial inclusion in Bahawalpur Division. Variables that are investigated in this study are Income level, Education level, religious belief, and Accessibility. Primary data is collected through the questionnaire in this study.

3.2. Population

According to Sharma et al. (2014) people living in rural areas are disadvantaged and underprivileged to get financial services. So, the population of this study was the individuals living in the rural areas of South Punjab, Pakistan because they are underprivileged to get financial services.

3.3. Sample Selection technique

A convenience sampling technique was used to collect the data in this research because the population of the research is undefined. The samples included individuals living in the rural areas of South Punjab because people living in rural areas are underprivileged to get financial services. The questionnaire was distributed among the respondents of the study.

3.4. Size of sample

Comrey and Lee (1992) suggested that a sample size of 50 is a weaker sample size, a size of 100 is weak, a 200-sample size is sufficient, and a 300-sample size is considered good. So, this study had taken sample size of 300.

3.5. Data Collection Technique

In this research, a Questionnaire was used to collect the data from the targeted population. Five points Likert scale Questionnaire was distributed among respondents.

3.6. Analysis Techniques

SPSS 16 has been used for data analysis in this research. The following tests were conducted in SPSS 16. A reliability test was conducted to check the stability and accuracy of data, a Normality test was conducted to identify that the data were distributed normally, a Multicollinearity test was conducted to examine the degree of correlation between independent variables, Correlation analysis was conducted to examine the relationship between a dependent variable and independent variable, Regression analysis was conducted to check that how much impact independent variable has on the dependent variable.



4. DATA ANALYSIS AND RESULTS

In this chapter analysis of the data obtained from the questionnaire is discussed. Statistical analysis is performed by using SPSS version 16. Various statistical tests have been applied to the data to get the results.

TABLE 1 Reliability Statistics

Cronbach's Alpha	N of Items
.731	17

4.1. Reliability analysis

The reliability statistics table shows that chronbach's alfa value of this scale is .731 which is greater than .70 so this scale will give consistent results to measure the impact of independent variables on the dependent variable of financial inclusion.

TABLE 2 Descriptive Statistics

	N	Skewness		Kurtosis	
		Statistic	Std. Error	Statistic	Std. Error
Financial Inclusion	280	.102	.146	-.301	.290
Accessibility	280	.192	.146	-.481	.290
Religious Belief	280	.184	.146	-.876	.290
Income	280	-.182	.146	-.265	.290
Education	280	.043	.146	-.971	.290
Valid N (listwise)	280				

4.2. Normality Test

Skewness and kurtosis test is applied, and the results show that kurtosis statistics of Financial Inclusion is -.301, Accessibility is -.481, Religious belief is -.876, Income is -.265 and Education is -.972. and skewness value of Financial Inclusion is .102, Accessibility is .192, Religious belief is .184, Income is -.182 and Education is .043. so, all values are in the normal range and data is normally distributed.

TABLE 3 Coefficients^a

Model	Collinearity Statistics	
	Tolerance	VIF
1 Accessibility	.821	1.217
Religious Belief	.939	1.065
Income	.857	1.167
Education	.955	1.047

4.3. Multicollinearity Test

In this Coefficients table value of VIF and Tolerance tells us whether there is a multicollinearity problem in data or not. Tolerance value is closer to 1 and VIF value is also closer to 1 so it shows that there is no multicollinearity problem exists.

a. Dependent Variable: Financial Inclusion

4.4. Correlation Analysis

TABLE 4 Correlations

		Financial Inclusion	Accessibility	Religious Belief	Income	Education
Financial Inclusion	Pearson Correlation	1	.576**	.096	.593**	.282**
	Sig. (2-tailed)		.000	.108	.000	.000
	N	280	280	280	280	280
Accessibility	Pearson Correlation	.576**	1	.212**	.361**	.206**
	Sig. (2-tailed)	.000		.000	.000	.001
	N	280	280	280	280	280
Religious Belief	Pearson Correlation	.096	.212**	1	.187**	.087
	Sig. (2-tailed)	.108	.000		.002	.147
	N	280	280	280	280	280
Income	Pearson Correlation	.593**	.361**	.187**	1	.097
	Sig. (2-tailed)	.000	.000	.002		.105
	N	280	280	280	280	280
Education	Pearson Correlation	.282**	.206**	.087	.097	1
	Sig. (2-tailed)	.000	.001	.147	.105	
	N	280	280	280	280	280

** . Correlation is significant at the 0.01 level (2-tailed).

In the above correlation table, we can see that independent variables Accessibility, Income, and Education have a significant relationship with Financial Inclusion as their p-value is .000 which is less than .05. But religious belief has no significant relationship with financial inclusion as its p-value is .108 which is greater than .05. So religious belief does not have any impact on financial inclusion. Accessibility has a correlation



of 0.576 with Financial Inclusion which strong and positive correlation which means as the accessibility of the public increases financial inclusion also increases.

Income has a 0.593 correlation value with financial inclusion which is also a strong and positive correlation that shows that if education increases financial inclusion also increases. Income has a 0.282 correlation value with financial inclusion which is a weak and positive correlation and it also means that if income increases financial inclusion also increases.

4.5. Regression Analysis

The above table of Model Summary R square value tells us how much change in the dependent variable is explained by this model. R square value is .527 which means that 52.7% of the change in the dependent variable (Financial Inclusion) is accounted for by this model and through these independent variables (Accessibility, Income and Education). The r value in the model summary is .726 which shows the strength of the correlation between the independent variables and dependent variables.

ANOVA table evaluates the significance of the model. The above ANOVA table shows the Sig. value is 0.000 which is less than .05 so this model is significant. This table shows that independent variables (Income, Accessibility and Education) significantly predict the dependent variable(Financial Inclusion).

In this table, standardized coefficients beta value tells us what is the rate of change in dependent variables due to Independent variables. Accessibility, Income and Education have a sig. value of .000 which is less than .05 so these independent variables have significant regression with a dependent variable which is Financial Inclusion.

The standardized coefficients beta of Income is .385 which means that income predicts a 38.5% variance in financial inclusion. And standardized coefficients beta of Education is .160 which means that education predicts a 16% variance in financial inclusion. And in last accessibility has a standardized coefficients beta value of .385 which means that accessibility predicts a 38.5% variance in financial inclusion.

4.6. Hypothesis Testing

H 1: *Income has a positive impact on financial inclusion.*

The correlation table shows that Income has a significant relationship with Financial Inclusion as the sig. value is .000 which is less than .05 and the correlation value is .593 which shows that income has a positive and strong relationship with financial inclusion and income has a 59.3% association with financial inclusion. It means that as the income of the public decreases financial inclusion level also decreases and as income increases financial inclusion also increases. So, hypothesis H1 is accepted by the study.

H 2: *Education has a positive impact on financial inclusion.*

The correlation table says that the independent variable Education has a significant relationship with Financial Inclusion as the sig. value of Education is .000 which is less than 0.05. The correlation between Education and Financial Inclusion is .282 which shows a positive relationship and education has a 28.2%

TABLE 5 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.726a	.527	.522	.54635

a. Predictors: (Constant), Education, Income, Accessibility

TABLE 6 ANOVA^b

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	93.038	4	23.260	78.817	.000a
Residual	81.155	275	.295		
Total	174.193	279			

a. Predictors: (Constant), Education, Religious Belief, Income, Accessibility

b. Dependent Variable: Financial Inclusion

TABLE 7 Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.290	.159		1.825	.069
Income	.395	.040	.439	9.877	.000
Accessibility	.431	.051	.385	8.519	.000
Education	.104	.028	.160	3.784	.000

a. Dependent Variable: Financial Inclusion



association with financial inclusion. It shows that if the education level of the public is less then the financial inclusion level of that area is also less and as the education of the public increases financial inclusion also increases. So, hypothesis H2 is accepted by the study.

H 3: *Accessibility has a positive impact on financial inclusion.*

The correlation Table shows that Accessibility has a significant relationship with Financial Inclusion because of the sig. value is .000 which is less than .05. Correlation between accessibility and financial inclusion is .576 which means a positive relationship and accessibility has a 57.6% association with financial inclusion. It is a strong relationship between financial inclusion and Accessibility. It means as the accessibility of the public decreases the financial inclusion level also decreases and as accessibility increases financial inclusion also increases. So, Hypothesis H3 is accepted by the study.

H 4: *Religious belief has a negative impact on financial inclusion.*

In Correlation table Sig. value of religious belief with financial inclusion is .108 which is greater than .05 so it means there is no significant relationship between religious belief and financial inclusion. And religious belief does not have any impact on financial inclusion. So, hypothesis H4 is rejected by the study.

4.7. Discussion

This research is done to investigate the demand side variables that influence financial inclusion in South Punjab, Pakistan. The variables that this study examined are Income, Education, Accessibility and Religious belief. Previous literature has been explored and on the basis of previous literature, the hypothesis has been developed. These hypotheses are tested using statistical analysis explained below.

H 1: *Income has a positive impact on financial inclusion.*

By using Statistical analysis of data the study has accepted hypothesis H1. This research concluded that income and financial inclusion have a direct relationship as income increases financial inclusion also increases and as income decreases financial inclusion also decreases. Regression analysis results show that Income predicts a 43.9% variance in Financial Inclusion. The people who have high income uses more financial services and the people who have less income use fewer financial services. Because the person doesn't have enough income to meet his daily needs and wants how can it be expected that he will open a bank account and savings and purchase insurance and use other financial services?

The results are consistent with the previous studies. The results of this research also support the findings of the previous studies Martínez et al. (2013) have concluded in his study that financial inclusion is directly proportional to income and low income is the main barrier to financial inclusion. Tuesta et al. (2015) in his study concluded that income plays a very important role in financial inclusion and also said that low income is the main barrier to financial inclusion. Inganga et al. (2014) in his study concluded that Income level is the main factor that affects the demand for financial services. Fungáčová and Weill (2015) in his study also concluded that higher income leads to a higher financial inclusion level. The income level of rural areas is very low and most people are living a miserable life. They don't have money to get good food, good cloth, and good healthcare services.

H 2: *Education has a positive impact on financial inclusion.*

By using Statistical analysis of data the study has accepted hypothesis H2. This research explored the role of education in financial inclusion. Results show as education increases use of financial services also increases. Regression analysis results show that Education predicts a 16% variance in Financial Inclusion. The more people are educated the use more financial services. In rural areas, the literacy rate is low, and low education people don't know the importance of financial inclusion and they don't know how the usage of financial services can improve their living standards. They say that banking services are for educated people and only educated people can use financial services.



The results of this research support the findings of previous studies Mitton (2008) in his research concluded that low education is one of the most important obstacles to financial inclusion. King (2012) also studied education variables with financial inclusion and studied the unbanked people and their characteristics and concluded that unbanked people along with other characteristics had low education. Ghatak (2013) also concluded that education has a significant impact on financial inclusion and education plays important role in enhancing financial inclusion. Bhanot et al. (2012) have also concluded that education is one of the influential factors leading to financial inclusion.

H 3: *Accessibility has a positive impact on financial inclusion.*

By using statistical analysis of data the study accepted hypothesis H3. Results of the study show that accessibility is a very important variable that has very much impact on financial inclusion. Regression analysis results show that Accessibility predicts a 38.5% variance in Financial Inclusion. People living in rural areas are far from bank branches and other financial institutions due to this they cannot use financial services. People who are living near financial institutions and bank branches are likely to use more financial services and the people who are far from bank branches don't use or make less use of financial services from formal financial institutions so accessibility affects the usage of financial services.

The results of the study support the previous research findings Bhanot et al. (2012) in his study suggested that closeness to the post office or bank branch will increase the intention to use financial services by the public. Christabell and Vimal (2012) in his research concluded that the main barrier to financial inclusion in rural areas is the distance from the point of access. Mawuli Akpandjar et al. (2013) also concluded that locational characteristics of the people are very important to obtain financial services from financial institutions and nearness to financial institutions increases the intention to use financial services.

H 4: *Religious belief has a negative impact on financial inclusion.*

So, hypothesis H4 is rejected by the study in light of the results of the statistical analysis of data. The results show that religious belief does not affect financial inclusion. People don't consider religious belief as a reason for not using financial services. People do not want to use banking transactions that are against Islam and conventional banks are offering financial services that involve interest. People also consider interest as haram in Islamic shariah.

In Islam getting or giving interest is a major sin and there is a great punishment for this. Despite of this people in rural areas are using financial services and they responded that religious belief does not affect the usage of financial services because now Islamic banking has been developed in Pakistan. Islamic banking is offering financial services according to Islamic laws and it does not involve interest which is a factor against Islam in conventional banking. Now people have an alternative option for using financial services that is according to the Islamic shariah.

5. CONCLUSIONS

This research has studied the demand side variables that affect financial inclusion. The study is conducted in rural areas of south Punjab. The variables that were studied in this research were Income, Education, Accessibility, and Religious Belief. The results of the study showed that Income, Education and accessibility have a significant impact on Financial Inclusion while Religious belief doesn't have a significant impact on financial inclusion. According to the results Income predicts a 43.9% variation in financial inclusion, Education predicts a 16% variation in financial inclusion, and Accessibility predicts a 38.5% variance in financial inclusion. If people have higher income and education they will use more financial services and if people have easy access to financial institutions and the financial institutions are near to the public then financial inclusion will be high. Religious beliefs don't have any impact on financial inclusion because a lot of Islamic banks are working in Pakistan and almost all commercial banks are now offering interest-free Islamic banking services.

This research gives a guideline to the financial services providers that what factors are affecting the demand



for financial services and due to which people are not using financial services. This research is very helpful for financial institutions and governments to enroll people in the financial system that are not using financial services because a higher level of financial inclusion leads to higher economic development and poverty reduction. This research has cast light on the factors that affect the demand for financial services.

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Ethics statement

The Research meets all ethical standards. The patients/participants provided their written informed consent to participate in this study.

Conflict of interest

The author declares that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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Author contributions

MI and HMNS: conceptualization, methodology, instrument, and writing—original draft. MI and HMNS: conceptualization, data collection, formal analysis, and writing—revision. All authors contributed to the article and approved the submitted version.

REFERENCES

- Alliance for Financial Inclusion. (2013). *Measuring financial inclusion core set of financial inclusion indicators*. AFI. <https://www.afi-global.org/publications/measuring-financial-inclusion-core-set-of-financial-inclusion-indicators/>
- Beck, T., & de la Torre, A. (2006). *The basic analytics of access to financial services*. The World Bank. <https://ideas.repec.org/p/wbk/wbrwps/4026.html>
- Bergh, P. V. (2015). Overview of international and national initiatives to promote financial inclusion and its measurement. In *IFC Workshop on Financial Inclusion Indicators Co-hosted by Bank Negara Malaysia*. <http://www.bis.org/ifc/publ/ifcb38a.pdf>
- Bhanot, D., Bapat, V., & Bera, S. (2012). Studying financial inclusion in north-east India. *International Journal of Bank Marketing*, 30(6), 465-484. <https://doi.org/10.1108/02652321211262221>
- Cano-Sánchez, C. G., Esguerra-Umaña, M. d. P., García-Bohórquez, N., Rueda-Gil, J. L., & Velasco-Martínez, A. M. (2013). Acceso a servicios financieros en Colombia. *Borradores de Economía*; No. 776. <https://repositorio.banrep.gov.co/handle/20.500.12134/5916>
- Central Bank of Samoa. (2015). *Financial Services Demand Side Survey Samoa*. <https://www.cbs.gov.ws/assets/Uploads/DMS-5/5407Demand-Side-Survey-for-Samoa.pdf>
- CGAP. (2016). *What is Financial Inclusion and Why is it Important?* CGAP. <http://www.cgap.org/about/faq/what-financial-inclusion-and-why-it-important>
- Christabell, P. J., & Vimal, R. A. (2012). Financial Inclusion in Rural India: The role of Microfinance as a tool. *IOSR Journal of Humanities and Social Science*, 2(5), 21-25. <https://www.iosrjournals.org/iosr-jhss/papers/Vol2-issue5/D0252125.pdf>
- Claessens, S. (2006). Access to financial services: A review of the issues and public policy objectives. *The World Bank Research Observer*, 21(2), 207-240. <https://doi.org/10.1093/wbro/lk1004>
- Comrey, A. L., & Lee, H. B. (1992). *A First Course in Factor Analysis*. Sage Publications. <https://doi.org/10.4324/9781315827506>
- Demirguc-Kunt, A., Klapper, L., Singer, D., & Ansar, S. (2018). *The Global Findex Database 2017*:



- Measuring financial inclusion and the fintech revolution.* World Bank Publications. <http://hdl.handle.net/10986/29510>
- European Commission. (2008). *Financial Services Provision and Prevention of Financial Exclusion.* European Commission. <https://www.bristol.ac.uk/media-library/sites/geography/migrated/documents/pfirc0806.pdf>
- Fungáčová, Z., & Weill, L. (2015). Understanding financial inclusion in China. *China Economic Review*, 34, 196-206. <https://doi.org/10.1016/j.chieco.2014.12.004>
- Ghatak, A. (2013). Demand side factors affecting financial inclusion. *Research Journal of Social Science & Management*, 3(1), 2251-2157.
- Gupta, P., & Singh, B. (2013). Role of literacy level in financial inclusion in India: Empirical evidence. *Journal of Economics, Business and Management*, 1(3), 272-276. <http://www.joebm.com/papers/59-X10007.pdf>
- Inganga, B. W., Njeru, A., Ombui, K., & Ondabu, I. T. (2014). Factors affecting customer demand of financial services offered by commercial banks in Nairobi county. *International Journal of Scientific and Research Publications*, 4(11), 1-25. <https://www.researchgate.net/profile/Ibrahim-Ondabu/publication/270898074>
- Izquierdo, N. C., & Tuesta, D. (2015). Factors that matter for financial inclusion: Evidence from Peru. *Aestimatio: The IEB International Journal of Finance*, (10), 10-31. <https://dialnet.unirioja.es/servlet/articulo?codigo=5903902>
- Kanther, P., & Nagabhushan, S. (2012). *Workshop on Measuring Financial Inclusion from the Demand Side.* Centre for Advanced Financial Research and Learning. https://cafral.org.in/sfControl/content/DocumentFile/122201393050AM_Background%20Paper_June_8_event.pdf
- Kempson, E., Perotti, V., & Scott, K. (2013). *Measuring Financial Capability : A New Instrument and Results from Low- and Middle-Income Countries.* World Bank. <http://hdl.handle.net/10986/16296>
- King, M. (2012). *The unbanked four-fifths: informality and barriers to financial services in Nigeria.* IIS. <https://www.tcd.ie/triss/assets/PDFs/iis/iisidp411.pdf>
- Martínez, C. H., Hidalgo, X. P., & Tuesta, D. (2013). Demand factors that influence financial inclusion in Mexico: analysis of the barriers based on the ENIF survey. *BBVA Bank, BBVA Research Working Paper*, 13, 37. https://www.bbvaresearch.com/wp-content/uploads/mult/WP_1337_tcm348-415216.pdf
- Mawuli Akpandjar, G., Quartey, P., & Abor, J. (2013). Demand for financial services by households in Ghana. *International Journal of Social Economics*, 40(5), 439-457. <https://doi.org/10.1108/03068291311315322>
- Mitton, L. (2008). *Financial inclusion in the UK: Review of policy and practice.* Joseph Rowntree Foundation.
- Naceur, S. B., Barajas, A., & Massara, A. (2017). Can Islamic banking increase financial inclusion? In *Handbook of empirical research on Islam and economic life* (pp. 213-252). Edward Elgar Publishing. <https://doi.org/10.4337/9781784710736.00017>
- Raza, S. (2015). Financial Inclusion: A Road Pakistan Needs to Travel. *Journal of Institute of Bankers Pakistan*, 7-10 <https://ibp.org.pk/wp-content/uploads/2019/06/JOURNAL-JAN-MARCH-2015.pdf>
- Sharma, R. K., Jain, V., & Gupta, S. (2014). Financial Inclusion in Rural Oman: A Demand and Supply Analysis. *International Journal of Management and International Business Studies*, 4(3), 285-296. https://www.ripublication.com/ijmibs-spl/ijbmisv4n3spl_13.pdf
- State Bank of Pakistan. (2015). *National Financial Inclusion Strategy (NFIS).* State Bank of Pakistan. <https://www.sbp.org.pk/finc/NF.asp>
- Subbarao, D. (2009). Financial Inclusion: Challenges and Opportunities. *Reserve Bank of India's Bankers Club, Kolkata.* <https://unblock3d.net/rdocs/Speeches/PDFs/IFFG091209.pdf>
- The Global Findex Database. (2014). *Measuring Financial Inclusion around the World.* World Bank. <https://pubdocs.worldbank.org/en/681361466184854434/2014-Global-Findex-Report-DKSV.pdf>
- Tuesta, D., Sorensen, G., Haring, A., & Cámara, N. (2015). Financial inclusion and its determinants: the Argentine case. *BBVA. Research Paper (15/03)*, 1, 28. https://www.bbvaresearch.com/wp-content/uploads/2015/01/WP_15-03_Financial-Inclusion-in-Argentina.pdf
- World Bank. (2014). *Global Financial Development Report 2014 : Financial Inclusion.* World Bank. <https://openknowledge.worldbank.org/handle/10986/16238>
- World Bank. (2015). *Financial Inclusion.* World Bank. <http://www.worldbank.org/en/topic/financialinclusion/overview#1>





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