11-21-SRJ-243-82

SIAZGA RESEARCH JOURNAL, 2024
VOL. 03, NO. 02 | 188 – 202
DOI: https://doi.org/10.58341/srj.v3i2.82

Original Article

Assessing The Impact of Demographic Factors on Indicator of Inclusive Finance: Evident from Cross Analysis of South Asian Countries

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Abstract

The objective of this paper is to assess the impact of gender, age, income & education on inclusive finance in South Asian Countries. We utilize the World Bank's Global Findex database 2014 on 7 South Asian Countries to perform probit estimations. In South Asian Countries, we discover that being a man, deep-pocketed, more educated and elder in age Adored Inclusive finance. Lack of finance, distant location & lack of documents are common hindrance to inclusive finance. We discover that the indicators of informal funding differ from those of formal funding. We also found that Afghanistan has reported with lowest %ages regarding formal bank account utilizes Rs, formal savings and obtaining formal bank credits/borrowing s in the financial institutions. Whereas Sri Lanka shows higher level of accounts, savings & credits in financial institution. Therefore, our work includes insights into the design of strategies to promote inclusive finance in South Asian countries to boast social and economic well beings in the region.

Keywords: Inclusive finance; Financial Education; SAARC Countries, Operating activities, Financing Activities, Investing Activities

How to cite:
Habib, A., & Khan, . G. (2024). Assessing The Impact of Demographic Factors on Indicator of Inclusive Finance: Evident from Cross Analysis of South Asian Countries. *Siazga Research Journal, 3(2)*, 188 -202.

https://doi.org/10.58341/srj.v3i2.82

1. INTRODUCTION

Inclusive finance is on the rise globally, accelerated by uses of modern electronic devices & e-business, but gains have been uneven across countries both in total population as well as gender side.

Primarily, inclusive finance means an individual who have an account at a formal financial institution and deals all financial transaction (operational, financial & investing activities) through this account. .Inclusive finance is playing significant role in socio-economic development by reducing poverty, illiteracy, low living standards and economic dip. Inclusive finance refers to a promotional and developmental policy aimed at improving conditions of weak, neglected and low income groups in the societies at an economical cost across the board. This means every member of society has full access to financial services at affordable price.

Inclusive finance contains tactics in developing and promoting banking habits among population. A strong financial system ensures sustainable economic development, economic growth and progress of overall economy. Proper mechanism and flow of financial services will help in achieving national objectives of creating a market driven, competitive and productive economy. Factors leading to financial inclusion are divided into two broad categories i.e. 1)- Inherent inclusion (those factors which exist at large in every societies of developing and under-developing countries) and 2)- Acquired inclusion (resulting from strong and efficient policies and procedures regarding financial services in the country across the board).

South Asian region is male dominated society, a preference for male means that the female must struggle twice to survive and fulfill her potential in every walk of life. Female are restraint systematically

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across the region as structural inequalities and the low status of women affect inclusive finance. Education level in the region is also not up to the standards. An estimated 8.2 million children of primary school age (6-11) and 23.6 million children of lower-secondary school age (12-14) in South Asia do not go to school, United Nation International Children Education Fund–UNICEF. This growing gap in skills will stunt economic growth due to lack of involvement in inclusive finance. Per capital income in South Asian counties is still at lower side and far behind the developed countries. The main reasons like gender biasness, lack of income and education are the major hindrances to inclusive finance in all South Asian countries.

A study performed by Fungáčová and Weill (2014), concluded that demographic factors have greater impact on the indicators of inclusive finance. Seeing the impact of these factors on inclusive finance in other regions of the world, it is important to analyze these factors in South Asian countries perspective so that the policy makers could be given some insight to inclusive finance in South Asian countries. It is often assumed that increased inclusive finance is linked to sustainable economic development (Fakher et al., 2021, Mani, 2016). Furthermore, the role of inclusive finance in promoting socially inclusive growth by reducing income inequality is recognized in the existing literature. (Demirgüç-Kunt and Singer, 2017, Neaime and Gaysset, 2018). Additionally, inclusive finance is crucial to the resolution and recovery of the global economic crisis (UNSGSA, 2021).

So, understand the factors that affect inclusive finance. This is an important issue for the socio-economic development of South Asia. The objective of this paper is to contribute to the understanding of the indicators of inclusive finance in South Asia.

Our paper provides several contributions to the literature. First, it contributes to the expanding literature on the indicators of inclusive finance by focusing on South Asian countries in addition to former works world-wide (e.g., Allen et al., 2016) or examine inclusive finance based on individual country (e.g., Fungácová and Weill, 2015, for China). Demirgüç-Kunt and Klapper (2012) provide an investigation of inclusive finance, but they only provide statistics on this issue and do not aim to identify the indicators of inclusive finance. Second, our analysis contributes to the literature on key current finance issues for South Asian countries: informal finance, and mobile phone banking. In South Asian countries, there are organised financial markets as well as unorganized financial market running side by side. These dualistic markets organized around the interaction between formal financial institutions and informal agents. Financial literacy can shorten this gap. Balach et al., (2016) concluded in their study that boasting and developing better understanding of financial inclusion through impassive policies may result in the opening of formal bank account in financial institutions by excluded agents (individuals, household, firms) of the society. Maintaining sustainable growth in the economy and to remain competitive financial inclusion has become crucial. Widening financial services to all sections of society particularly to the poor section shall result in bridging gap between poor and rich through equal distribution of income and equal earning opportunities. Factors leads to financial exclusion could be market imperfection or lack of capacity. Financial exclusion as a result of market imperfection is supported by arguments such as high costs associated with formal financial transaction. This will make formal financial transaction impracticable as commercial exercise. The latter reason of financial exclusion is backed by statements such as individuals, organizations or certain groups are excluded from financial system. This is because they have little or no financial literacy or lack capabilities and competencies necessary to participate efficiently in the main stream financial system, We provide greater emphasis on achieving inclusive finance via focusing on demographic indicators in the region.

2. RELATED LITERATURE

In this part of study, we provide a brief review of the literature and discovering on inclusive finance, indicators of inclusive finance in societies.

Levels of inclusive finance

As per the Global Findex database 2014. Globally, 69.45 percent of adults – 3.85 billion people – now have bank account either at a financial institution. Formal bank account utilizes rs at financial institution enhanced by 700 million between period of a 2011 and 2014. And from 2014 to 2017, 515.48 million adults obtained an account. However, the share of the population with a formal bank account is still far lower than in high-income economies (94.35 percent). Second, 56.29 percent of adults worldwide declared having saved money aside in the past 12 months in 2014. One quarter of adults reported having saved money at a formal financial institution, representing half of the savers. However, the percentage of formal saving varies greatly between high-income societies (70.42 percent among savers) and developing societies (40.30 percent among savers).

The indicators of inclusive finance

A few studies have examined the individual indicators of inclusive finance.

In 2016, using World Bank Global Findex Database, Allen et al. investigate the impact of these individual characteristics on a worldwide scale. This means various personal characteristics or traits; attributes affect financial inclusion and access to financial services across the world. The study discover that the Likelihood of having a bank account at a formal financial institution is higher for Wealthier, Well-educated, Elder, Civic, Working class, Wedded or Parted individuals. The chance of getting formal saving is higher for the individual having same trait or attributes in the society. Finally, the Prospect of getting formal loan or borrowing increases for elder people, more civic,, richer and engaged and working class.

Agier et al., (2013) conducted a study in Brazil regarding gender biasness from banking and non-banking micro-financing activities with reference to terms and conditions attached to formal borrowings. They concluded that there did not exist any sign of discrimination and biasness with respect to borrowings negation. However, terms and conditions of granting loans for undertaking large business projects shown little biasness on the extent of the loan amount to women, it means there were gender prejudices regarding granted huge loan amount.

Fletschner et al., (2010) carried a study at rural Vietnam to analyze human attitude towards financial risk taking. He found that men are less risk averse than women and are more likely to choose to compete as they are less reluctant to borrow money and opt advance information and communication technologies that expose them to lower risk with higher return. On the other hand females are risk averse than male and are less likely to adopt to compete because they are more reluctant to obtain finance and opt advanced technologies that expose them to greater risk even if that contains higher expected return. Therefore, female in the society should have opportunity to avail high return loan with least risk and easy terms and conditions to enhance financial inclusion among female in the society.

Informal inclusive finance

The parallel economy, as per Schneider and Enste (2000), constitutes ungoverned economic Engagements focuses at avoiding fiscal tools like taxation and government Surveillance. Within unregulated economies, it encompasses events or financial transactions occurring outside formal financial systems, facilitating alternatives sources but exhibiting treats or risks like lack of governance, regulation, control and financial soundness. In 1997, Steel et al. reveal knowledge about informal finance in four African countries; they include (Nigeria, Tanzania, Malawi, and Ghana) with (1992-193) data range. They investigate in their study that African economies consist of dual financial systems in their countries, which collaborates both formal banking institutions and informal financial Intermediaries. There are two main causes of presence of the informal financial sector in these African economies. Firstly, excessive government Interference results less developed financial systems and mechanisms. Secondly, financial institution normally banks face costly procedures and troublesome staff, which contributes to Limited Opportunity to formal borrowing or credit.

Data

We have utilizes d secondary data in this research collected by World Bank's survey (Global Findex database of World Bank) of about 150,000 adults with age 15 and above in more than 140 countries in 2014. The data bank of World Bank comprises comprehensive information about the techniques of risk management in saving, borrowing, and making payment. This also contains data information about 100 indicators that comprises of gender, income, age and education. The set of data employed in probit regression for this study is related from South Asian countries. Our sample covers 7 South Asian countries representing 9007 individuals.

Estimation

An econometric model (Probit) is employed to clarify scales of inclusive finance, Obstacles to inclusive finance and means of borrowing as the study is based on dichotomous (divided) dependent variables and estimate the following Mathematical expression:

$$\text{finInc}_i = \alpha + \beta * \text{income}_i + \gamma * \text{education}_i + \delta * \text{age}_i + \sigma * \text{gender}_i + \varepsilon_i$$

Here

finInc =	Shows one of the dependent variable from indicators of inclusive finance.
i =	Represents the scale for person
Education, Gender, Income & age=	Independent variables that are individual characteristics given in the survey

3. METHODOLOGY

This study contains analysis of the secondary data. The research is arranged to determine the impact of demographic factor like gender, age, education and income level on the indicators of inclusive finance such as formal bank account, formal savings and formal borrowings. The state of inclusive finance is determined through three main indexes namely1) - having formal bank account at financial institution 2) _ having formal savings in last 12 months, and 3) - having formal debts in last 12 months. The design of research is qualitative in nature.

Outcomes and Assessments

Illustrative Data point

In Illustrative Data point, we focus to determine the usage of prime indicators of inclusive finance in South Asian regions. Further it also analyze the factors obstructing inclusive finance in the region and role of alternative sources of borrowings in preventing use of formal financial services in the region.

Prime Indicators of Inclusive finance

Several indicators warrant analysis of inclusive finance in any economy. However, commonly researchers utilize three main indicators for the dissection of inclusive finance. They are:

Formal bank account users: Whether you have bank account? It is the gateway for the individuals to avail financial services and delivers a broader prospective of inclusive finance in the society. Worldwide average for formal bank accounts of individuals is 62 % and South Asian average is 40 %. Table-5.1 shows highest on this indicator is Sri Lanka with 85 % individuals having formal bank account at financial institution. While lowest on this indicator is Afghanistan with (11 %), followed by Pakistan with 12 %.

Table 1

Formal bank account.

A Descriptive Statistics for South Asia			
Country	Formal bank account users		
Name	Observations	Means	Std. Deviations
Afghanistan	1000	0.111	0.314
Bangladesh	1000	0.348	0.477
Bhutan	1020	0.444	0.496
Pakistan	1000	0.122	0.327
India	3000	0.557	0.497
Nepal	1050	0.399	0.490
Sri Lanka	1062	0.849	0.359

Formal savers in financial institutions: Second indicator indicates formal savings at any financial institutions by the individuals. People are asked whether they have any savings during the previous twelve months for any reasons. The response regarding this question is relatively low as compare to first question because use of formal savings are dependent upon having formal bank accounts in the financial institutions. Worldwide average for formal savings of individuals is 27 % and South Asian average is 17 %. Table-5.2 shows highest on this indicator is Sri Lanka with 33 % individuals having formal savings. While the lowest on this indicator in South Asia is Afghanistan (4 %) individuals having a formal savings.

Table 2

Formal Savings.

A Descriptive Statistics for South Asia			
Country	Formal Saving Users		
Name	Observations	Means	Std. Deviations
Afghanistan	1000	0.038	0.189
Bangladesh	998	0.097	0.296
Bhutan	1016	0.301	0.458
Pakistan	1000	0.049	0.214
India	2932	0.169	0.375
Nepal	1043	0.211	0.408
Sri Lanka	1053	0.334	0.472

Formal bank credits/borrowing in financial institutions:

People are inquired in this case: Whether have you availed any loan from banking or non-banking institutions during the last twelve months of the year? The response of this question is least as compare to earlier two. Worldwide average for formal borrowings is 11 % and South Asian average is 9 %. Table-5.3 shoes the highest on this indicator in South Asia is Sri Lanka with 23 % individuals having savings at formal financial institution and lowest is Pakistan with 2 % individuals having credits from financial institution.

Table 3

Formal bank credits/borrowing s.

A Descriptive Statistics for South Asia			
Country	Formal bank credits/borrowing Users		
Name	Observations	Means	Std. Deviations
Afghanistan	1000	0.036	0.1839
Bangladesh	993	0.108	0.311
Bhutan	1018	0.045	0.206
Pakistan	1000	0.017	0.129
India	2936	0.072	0.258
Nepal	1046	0.133	0.339
Sri Lanka	1060	0.231	0.422

Conclusion: Prime Indicators of Inclusive finance

Afghanistan has reported with lowest %ages regarding formal bank accounts utilizes rs, formal money savings and obtaining formal borrowings or credits in the banking or non-banking financial institutions. The reason for this is that the country has been under war for last three decades resulting in least financial sector growth and development in the country. Whereas Sri Lanka is the only country in the region that shows higher level of inclusive finance %ages with respect to having formal bank account, formal savings and formal borrowings in the financial organizations.

OBSTRUCTIONS TO INCLUSIVE FINANCE

Although there are multiple obstructions from availing borrowings form financial institutions but the questionnaire contains five possible hindrances faced by prospective individuals in obtaining formal bank credits/borrowing are as follows:

Lack of money and finance

Finance is the life blood for carry any sort of operating, investing and financing activities. Absence of enough cash is the prevalent cause of not having bank account. In South Asians countries, with an average of 53 % individuals stating this reason for being unbanked except Sri Lanka where only 6.8 cited in favor of this reason as it is one of highest per capital income in region. Table 5.4 shows that 77.78 % people in Nepal, 76.99 % in Bangladesh and 66.83 % in Pakistan cited this reason for being unbanked. This is because that average per capital income of the South Asian individual is $2,149 dollar per annum as compared to average capital income of the people in developed counties like USA which is about $32,250.

Table 4

Lack of Money & Finance

Country Name	Observations	Mean	Standard Deviation
Afghanistan	872	0.738	0.441
Bangladesh	643	0.769	0.422
Bhutan	578	0.253	0.436
Pakistan	892	0.669	0.4713
India	1345	0.486	0.501
Nepal	628	0.779	0.416
Sri Lanka	157	0.69	0.465

Distant location of financial service centers

The Next prevalent cited cause for not having formal bank account was “distance from a financial institution”, with an average of 25 % individuals in South Asian stating this reason. Table-5.5 shows %age citing this reason as follow: Pakistanis (22%), Afghanistan (38%), Sri Lanka (13%), India (21%), Bhutan (31 %), Nepal (33 %), and Bangladesh (21 %). This is because financial institutions are profit oriented and opens branches of banks and other financial services centers only in urban areas having high population density and ignores rural areas of the country with low density of population. Most South Asian countries' population in leaves in villages & remote areas thus facing problem of distant location of bank and deprives from availing financial services from financial services.

Table 5

Distant Location of Financial Institutions

Country Name	Observations	Mean	Standard Deviation
Afghanistan	843	0.379	0.486
Bangladesh	632	0.211	0.408
Bhutan	576	0.308	0.462
Pakistan	890	0.218	0.414
India	1328	0.213	0.409
Nepal	616	0.329	0.469
Sri Lanka	156	0.128	0.336

Non-economical cost of financial transactions

Cost of financial transactions such as fund transfer cost, annual account charges etc in banks and other financial institutions are high therefore creating barrier to inclusive finance. On an Average of 22 % individuals in South Asia stating this reason for being unbanked. Table-5.6 shows that (20%) Pakistanis, (40%) Afghanis, (14%) Sri Lankan, (25%) Indian, (21 %) Bhutan, (20%) Nepali and (33 %) Bangladeshi cited this reasons for being unbanked. Therefore this ranks as the fifth most common mentioned clause for not possessing a formal bank account. in financial institutions was “too expensive” with.

Table 6

Non-economical cost of financial transactions

Country Name	Observations	Mean	Standard Deviation
Afghanistan	833	0.399	0.491
Bangladesh	621	0.327	0.469
Bhutan	569	0.022	0.144
Pakistan	889	0.198	0.399
India	1302	0.248	0.433
Nepal	602	0.192	0.394
Sri Lanka	152	0.145	0.353

Lack of documentation

Although digitalization of the banking system has draft down paper working requirement to a greater extent due advancement of information and communication technology but still hardships in this regard exist. The seventh reason for not having formal bank accounts was “lack of documentation”, with an average of 16 % individuals in South Asia stating this reason. Opening a bank account in financial institutions is easy but conducting financial transactions for financing and investing activities require bundle of working papers.

Table 7

Lack of Documentation

Country Name	Observations	Mean	Standard Deviation
Afghanistan	851	0.341	0.475
Bangladesh	628	0.102	0.303
Bhutan	568	0.043	0.202
Pakistan	896	0.168	0.374
India	1339	0.219	0.414
Nepal	617	0.169	0.375
Sri Lanka	155	0.065	0.247

Religious constraint

The ninth least mentioned cause for not having formal bank account was “Religious reasons”, with an average of 09 % individuals in South Asia stating this reason as shown in Table 5.8 Bangladesh, Pakistan and Afghanistan are Muslim majority countries and in Islam interest based financing is prohibited.

Table 8

Religious Constraint

Country Name	Observations	Mean	Std. Dev
Afghanistan	839	0.263	0.441
Bangladesh	629	0.041	0.199
Bhutan	577	0.007	0.083
Pakistan	893	0.068	0.253
India	1320	0.046	0.211
Nepal	615	0.026	0.159
Sri Lanka	154	0.156	0.364

Conclusion: Barriers to inclusive finance

Among all the South Asian countries, Afghanistan has reported highest %ages on all the factors of financial exclusion. The reason for this is that the country has been under war for last three decades resulting in least financial sector growth and development in the country and scarce of financial education. Sri Lanka stands unique country in the region that shows lower exclusion %ages than their corresponding averages for almost majority of exclusion factors. Taking into account financial exclusion for remaining South Asian countries, “High cost of financial services in banks” was reported as main hurdle by highest number of Bangladeshis and Indians with 33 % and 25 % respectively while “distant location of banks from residential and commercial locality” was cited as main barrier by highest number of individuals from Bhutan and Nepal with 31 % and 33 % respectively. However, 17 % Sri Lankans reported “can’t get an account in bank” as the main exclusion factor of inclusive finance in the region.

Alternative sources of borrowing

In South Asian countries problem of undocumented economy persist therefore running formal and informal borrowings means parallel. Particularly in rural societies of these countries informal sources of credits are dominant and trustworthy. Majority of the people depends on loan from friends, relatives and family members, store credit regarding daily usage items and basic necessities of life and loan from landlords, mahjins and hartis. The prime reasons for this is that these do not involve lengthy processing time, complicated documentation process and non-serious and least cooperative attitude of the banking staffs.

Availability of loan from family members, friends and relatives:

First and foremost reason for using informal sources of borrowings in all South Asians countries is availability of loans from family members and friends with an average of 24 % individuals in South Asia stating this reason.

Table 9

Availability of loan from family, friends or relatives

Country Name	Observations	Means	Standard Deviations
Afghanistan	1000	0.251	0.434
Bangladesh	997	0.249	0.433
Bhutan	1018	0.095	0.294
Pakistan	1000	0.341	0.475
India	2951	0.32	0.47
Nepal	1050	0.36	0.482
Sri Lanka	1056	0.098	0.297

Availability of store credits:

The second most cited reason for using informal sources of borrowings in all South Asians countries is availability of store credit for meeting requirements for daily usage items with an average of 15 % individuals in South Asia stating this reason. Table 5.10 shows second most important source for Pakistan with 23 %, Nepalese with 32 % followed by Bangladesh where 30 % individuals have utilizes d this as alternate source credit.

Table 10

Availability of store credit

Country Name	Observations	Means	Standard Deviations
Afghanistan	1000	0.035	0.184
Bangladesh	995	0.301	0.459
Bhutan	1020	0.052	0.222
Pakistan	1000	0.228	0.411
India	2932	0.046	0.210
Nepal	1049	0.3214	0.467
Sri Lanka	1056	0.046	0.209

Availability of loan from private parties:

The least and third cited reason for using informal sources of borrowings in all South Asians countries is availability of credit from private landlords, mahajins and arthis. The third most frequently utilizes d source for Pakistan is credit from other private lender with 6 % Pakistanis using this, on the other hand, highest number of individuals from Nepal have utilizes d this as credit source with 17 % followed by India (14 %)

Table 11

Borrowings from other private lenders

Country Name	Observations	Means	Standard Deviations
Afghanistan	1000	0.090	0.286
Bangladesh	992	0.048	0.213
Bhutan	1016	0.014	0.117
Pakistan	1000	0.058	0.234
India	2940	0.145	0.352
Nepal	1049	0.167	0.373
Sri Lanka	1056	0.023	0.149

Conclusion: Alternate sources of borrowings

It is important to mention that store credit is the most common alternative utilizes d source of informal bank credits/borrowing s for the region as whole. A borrowing from other private lenders is the least source of informal borrowings in South Asian countries with. However, the average frequently utilizes d source of credit for the region is borrowing from family or friends suggesting that most individuals rely on personal relations when they are in need of credit.

Main results/Multivariate results

Main indicators of Inclusive finance in Afghanistan

Outcome obtained from probit estimations' table 5.12 shows that coefficient of dummy variable for female population is Substantial and adverse. It means that women in Afghanistan are less inclined to have formal bank account in banking or non-banking organizations. Further the results of dummy variables for women in terms of formal savings are significant while for credits are Substantial and adverse. Education has positive relationship with ownership of accounts in financial institutions because dummy variable for secondary and tertiary are significant and positive. There is no significant impact of education on having or not having formal bank credits/borrowing in the financial institutions. We discovered a direct positive link between income and having bank account at financial institution as dummy variables for higher levels of education are significant and positive in the country. It means people with high level of income have high usage of financial services thus resulting in inclusive finance. However, the dummy variable for the first lower earnings statistics are substantial & adverse with larger coefficient. This shows that people with low level of earnings is unlikely to have formal bank account at financial institutions in Afghanistan. Further we could not discover impact of earnings level on inclusive finance in terms of formal saving and formal borrowings because the dummy variables for lower earning statistics are insignificant and adverse which do not authenticate any direct relationship of income with inclusive finance in the country. Table 5.12 also shows that dummy variable for Age is significant and positive while for Age² is considerate and negative in term of having formal banks account. The relationship shown by the indicator (having formal bank account) with the age is a linear one suggesting that elder people tend to utilize less formal financial services as compared to the young ones. It means people with growing age understand the value of finance and financial needs. However we could not found any significant impact of age on formal savings and formal borrowings/credits in Afghanistan.

Table12

Factors influencing Main Indicators of Inclusive finance in Afghanistan

AFGHANISTAN	Formal Bank Account	Formal Bank Saving	Formal Bank credit/Borrowing
Female	-0.668***	0.016***	-0.357**
	[0.000]	[0.001]	[0.035]
Secondary	0.787***	0.397**	0.247
	[0.006]	[0.053]	[0.174]
Tertiary	1.710***	1.343***	0.325
	[0.000]	[0.000]	[0.247]
Income -First poorest 20%	-0.472**	-0.385	-0.420
	[0.031]	[0.243]	[0.191]
Income – second poorest 20%	-0.074	-0.089	0.1460
	[0.680]	[0.730]	[0.526]
Income - third poorest 20%	-0.106	0.096	0.039
	[0.558]	[0.689]	[0.875]
Income - fourth poorest 20%	-0.112	-0.028	0.240
	[0.514]	[0.906]	[0.271]
Age	0.078***	-0.682	0.005
	[0.003]	[0.658]	[0.881]
Age^2	-0.001***	-0.001	-0.001
		[0.568]	[0.720]

Note: Asterisks on coefficient shows the level of significance i.e. at the ***1 %, **5 % and *10 % level

Factors influencing Main Indicators of Inclusive finance in Pakistan

This study reveals that individual in Pakistan with low income level are unlikely to have formal bank account and bank savings in the financial institutions as dummy variable for lower quintiles are Substantial and adverse. Further we found that there is no significant impact of income in relation to formal bank credits/borrowing in inclusive finance in Pakistan. This research also demonstrates that there is direct positive correlation between education and having banking account. This all is because dummy variable for low levels of education are insignificant while dummy variables for higher levels of education are significant and positive. Its shows that individuals with secondary and tertiary education are more incline to have accounts as compared to those with primary or less education in the country. Further in respect of having formal savings in financial institutions, secondary level of education has insignificant impact while territory level of education has positive and significant impact in Pakistani society. Higher savings requires higher level of education and resulting more inclusive finance. We could not found any relationship between education level and formal bank credits/borrowing in the country as dummy variable for formal bank credits/borrowing is insignificant. Dummy variable for Age are Substantial and adverse. This means that young people in Pakistan are less likely to have formal financial services. On the other hand dummy variable for Age² are significant and positive. This shows that people with elder age utilizes s financial services more than people with young age. It shows growing ages unveil the importance of financial services to the people in the society.

Table 13

Factors influencing Main Indicators of Inclusive finance in Pakistan

PAKISTAN	Formal Bank Account	Formal Bank saving	Formal Bank credit/Borrowing
Female	-1.053***	-0.556***	-0.467**
	[0.000]	[0.000]	[0.028]
Secondary	0.334***	-0.129	-0.208
	[0.007]	[0.404]	[0.385]
Tertiary	0.884***	0.445**	0.347
	[0.000]	[0.049]	[0.348]
Income -First poorest 20%	-0.647***	-1.030***	-0.595
	[0.002]	[0.001]	[0.143]
Income – second poorest 20%	-0.322*	-0.641***	0.327
	[0.075]	[0.006]	[0.212]
Income - third poorest 20%	-0.354**	-0.823***	0.102
	[0.031]	[0.001]	[0.728]
Income - fourth poorest 20%	-0.460***	-0.507***	-0.183
	[0.002]	[0.005]	[0.531]
Age	-0.044***	-0.055***	-0.102***
	[0.000]	[0.000]	[0.000]
Age^2	0.001***	0.001***	0.001***
	[0.000]	[0.000]	[0.000]

Factors influencing Main Indicators of Inclusive finance in Bangladesh

It is evident from the results shown in Table 4.14 that dummy variable for women in Bangladesh are Substantial and adverse with respect to formal bank account and formal bank credits/borrowing s in the financial institutions. Further, we could not discover any significant impact of gender on formal savings in inclusive finance in Bangladesh. It is evident that the dummy variables for higher levels of education are significant and positive with regards to formal bank account and formal bank credits/borrowing. However, we could not discover any significant impact of education on formal bank credits/borrowing in inclusive finance in Bangladesh. Dummy variables for all lower income statistics are Substantial and adverse with larger coefficients suggesting that individuals with lesser income levels are less likely to have a formal bank account at a financial institution. Dummy variables for Age are significant and dummy variable for Age² are significant and positive in case of formal bank account, formal savings and formal bank credits/borrowing. The relationship shown that elder people tend to utilize more financial services as compared to other individuals of the society realizing the needs of finance for spending their daily lives.

Table 14

Factors influencing Main Indicators of Inclusive finance

BANGLADESH	Formal Bank Account	Formal Bank saving	Formal Bank credit/Borrowing
Female	-0.230***	-0.085	-0.185**
	[0.010]	[0.482]	[0.034]
Secondary	0.474***	0.534***	-0.124
	[0.000]	[0.000]	[0.199]
Tertiary	1.277***	1.120***	-0.06
	[0.000]	[0.000]	[0.809]
Income -First poorest 20%	-0.635***	-0.507**	0.456***
	[0.000]	[0.016]	[0.002]
Income – second poorest 20%	-0.593***	-0.392**	0.577***
	[0.000]	[0.029]	[0.000]
Income - third poorest 20%	-0.4925***	-0.310*	0.152
	[0.001]	[0.087]	[0.152]
Income - fourth poorest 20%	-0.303**	-0.238	0.570***
	[0.016]	[0.141]	[0.000]
Age	0.095***	0.083***	0.062***
	[0.000]	[0.001]	[0.000]
Age^2	-0.011***	-0.001***	-0.001***
	[0.000]	[0.001]	[0.000]

Factors influencing Main Indicators of Inclusive finance in Bhutan

From table 5.15 shows that in Bhutan the dummy variable for formal bank account is Substantial and adverse. However, we could not discover any significant impact of gender on formal saving and formal bank credits/borrowing as dummy variable for these variables are insignificant. Dummy variables for higher levels of education are Substantial and adverse However, the report in terms of formal savings shows insignificant impact with secondary and tertiary education. The dummy variables for having formal bank credits/borrowing are Substantial and adverse with larger coefficients. Dummy variables for Age and Age^2 are significant for inclusive finance indicators. The relationship shown by the indicators with the age is a continuous one predicting that elder people tend to utilizes more financial services as compared to the rest of population in Bhutan.

Table 15

Indicators of Main Indicators of Inclusive finance

BHUTAN	Formal Bank Account	Formal Bank saving	Formal Bank credit/Borrowing
Female	-0.343***	-0.095	-0.102
	[0.001]	[0.302]	[0.467]
Secondary	0.957***	0.733	0.369
	[0.000]	[0.000]	[0.038] **
Tertiary	1.959***	0.928**	-0.234
	[0.000]	[0.000]	[0.482]
Income -First poorest 20%	-0.568***	-0.133	0.813***
	[0.001]	[0.370]	[0.001]
Income – second poorest 20%	-0.373**	-0.184	0.293
	[0.013]	[0.230]	[0.255]
Income - third poorest 20%	-0.447***	-0.22	0.425**
	[0.002]	[0.131]	[0.070]
Income - fourth poorest 20%	-0.257**	0.167	0.522**
	[0.055]	[0.190]	[0.014]
Age	0.214***	0.149***	0.041
	[0.000]	[0.000]	[0.158]
Age^2	-0.003***	-0.002***	-0.001*
	[0.000]	[-0.002]	[0.097]
	[0.000]	[0.001]	[0.000]
Age^2	-0.011***	-0.001***	-0.001***
	[0.000]	[0.001]	[0.000]

Factors influencing Main Indicators of Inclusive finance in India

In India the results of probit estimation Table 5.16 shows that gender factor has great influence on using financial services. This means that female in the country are less likely to have ownership of account and saving in the financial institutions. However we could not discover any significant impact of gender on having formal bank credits/borrowing in the financial institutions in India. The results obtain from probit estimation shows that the dummy variables for higher levels of education are significant and positive with larger coefficients. The individuals with secondary and tertiary education are more likely to have account and savings in the financial institutions than that of those with primary or less education. We have not found any significant impact of education on formal bank credits/borrowing at financial institutions in India. As dummy variable for low income quintiles are Substantial and adverse with higher coefficient whereas dummy variable for high quintiles are insignificant with lower coefficient. Further, the Dummy variables for Age are significant with positive coefficient and dummy variable for Age^2 are significant with negative coefficients for all three main inclusive finance indicators.

Table 16

Factors influencing Main Indicators of Inclusive finance

INDIA	Formal Bank Account	Formal Bank saving	Formal Bank credit/Borrowing
Female	-0.361***	-0.064***	0.015
	[0.000]	[0.000]	[0.854]
Secondary	0.551***	0.031**	-0.033
	[0.000]	[0.048]	[0.733]
Tertiary	1.124***	0.141***	0.105
	[0.000]	[0.000]	[0.496]
Income -First poorest 20%	-0.343***	-0.170***	-0.321**
	[0.000]	[0.000]	[0.024]
Income – second poorest 20%	-0.350***	-0.159***	-0.343***
	[0.000]	[0.000]	[0.007]
Income - third poorest 20%	-0.336***	-0.083***	-0.294**
	[0.000]	[0.000]	[0.013]
Income - fourth poorest 20%	-0.167**	-0.073***	-0.2963**
	[0.026]	[0.000]	[0.014]
Age	0.074***	0.009***	0.0280**
	[0.000]	[0.001]	[0.060]
Age^2	-0.001***	-8.842***	-0.001*
	[0.000]	[0.001]	[0.085]

Factors influencing Main Indicators of Inclusive finance in Nepal

Table 5.17 shows that in Nepal women are less likely to have a formal bank account and formal savings as the dummy variable for female is Substantial and adverse. We have not found significant impact of gender on formal bank credits/borrowing in Nepalese. Dummy variables for both secondary and higher levels of education are significant and positive with larger coefficients in terms of having formal bank account and formal saving. We cannot found significant impact of education on formal bank credits/borrowing at financial institutions in Nepal. In Nepal income is positively related to inclusive finance in terms of all three financial institution indicators. The dummy variables for all lower income quintiles are Substantial and adverse for formal bank account and formal savings. We found individuals with lesser income levels are less likely to have an account at a financial institution. Further individuals with low level of income less inclined to have formal borrowings as compare to individuals with higher level of income in Nepal. Dummy variables for Age and Age^2 are significant for all three main inclusive finance indicators. As the Dummy variables for Age are significant with positive coefficient and dummy variable for Age^2 are significant with negative coefficients for all three main inclusive finance indicators.

Table 17

Factors influencing Main Indicators of Inclusive finance

NEPAL	Formal Bank Account	Formal Bank saving	Formal Bank credit/Borrowing
Female	-0.176**	-0.215**	-0.045
	[0.045]	[0.032]	[0.605]
Secondary	0.499***	0.324***	0.039
	[0.000]	[0.004]	[0.700]
Tertiary	1.790***	0.938***	0.216
	[0.000]	[0.000]	[0.295]
Income -First poorest 20%	-0.984***	-1.101***	0.451***
	[0.000]	[0.000]	[0.001]
Income – second poorest 20%	-0.643***	-0.807***	0.458***
	[0.000]	[0.000]	[0.000]
Income - third poorest 20%	-0.527***	-0.538***	0.495***
	[0.000]	[0.000]	[0.000]
Income - fourth poorest 20%	-0.268**	-0.352***	0.276***
	[0.035]	[0.009]	[0.037]
Age	0.065***	0.086***	0.049***
	[0.000]	[0.000]	[0.000]
Age^2	-0.001***	-0.001***	-0.001***
	[0.000]	[0.000]	[0.000]

Factors influencing Main Indicators of Inclusive finance in Sri Lanka

In Sri Lanka dummy variable for women is Substantial and adverse with highest coefficient. However, we cannot discover any significant impact of gender in relation to formal bank accounts. We also found that dummy variables for higher levels of education are significant and positive with larger coefficients. There is significant impact of education on formal bank credits/borrowing from financial institutions because the dummy variable for formal bank credits/borrowing in the country is highest among the three variables of inclusive finance. In Sri Lanka, We can see that income has positive and direct impact on having formal bank account and formal savings in the financial institutions but we could not see any significant impact of income on having formal bank credits/borrowing from financial institutions in the country. This study shows that the dummy variables for Age and Age^2 are significant for all three main inclusive finance indicators showing direct relationship among indicators.

Table 18

Factors influencing Main Indicators of Inclusive finance

SRI LANKA	Formal Bank Account	Formal Bank saving	Formal Bank credit/Borrowing
Female	-0.131	-0.208**	-0.367**
	[0.197]	[0.014]	[0.030]
Secondary	0.404***	0.363***	-0.307
	[0.000]	[0.000]	[0.386]
Tertiary	0.719**	0.937***	0.247
	[0.043]	[0.000]	[0.446]
Income -First poorest 20%	-0.541***	-0.589***	-0.495
	[0.001]	[0.000]	[0.145]
Income – second poorest 20%	-0.371**	-0.406***	0.427
	[0.022]	[0.001]	[0.214]
Income - third poorest 20%	-0.213	0.044	0.102
	[0.250]	[0.743]	[0.630]
Income - fourth poorest 20%	-0.391**	-0.166	-0.182
	[0.017]	[0.174]	[0.632]
Age	0.028**	0.029**	-0.102***
	[0.064]	[0.037]	[0.000]
Age^2	-0.001***	-0.000**	0.001***
	[0.008]	[0.016]	[0.000]

4. CONCLUSION AND POLICY IMPLICATIONS

Conclusion

South Asian Countries have low Inclusive finance level as compared to rest of the world. Main findings are summarized as under:

The outcome of our research indicates that inclusive finance measured based on gender for having formal bank account, formal bank saving, and formal bank credits/borrowing , is much less in South Asian countries as compared to developed countries of the world. The outcome predicts that the major cause behind not having formal bank account is driven by inherent exclusion by the financial institutions. A cross comparison of reasons for not having formal bank account shows the most cited reasons on South Asian countries for not having formal bank account are fund deficits. Whereas trust deficit in financial institutions, proximity (closeness) to financial institutions, and cost of an account at financial institution are less cited reasons in South Asian countries if compared with the world standards.

In South Asian countries inclusive finance as measure of formal saving also shows that Asian countries are again lagging behind in the world community. With only 17% fraction of population is observed to have formally saved money in past 12 months which is well below the corresponding averages for the world 27 %.

The overall average of availing credit facility from financial institutions of South Asian countries is satisfactory. The significance of credit for human development and growth of economy is a established fact, but when it comes to the status of inclusive finance in terms of formal bank credits/borrowing, in the region which is again below the parallel averages for the world (11 %) and South Asia (9).

It is also significant to point out that formal bank credits/borrowing is not the only form of borrowing available to the individuals. The outcome of the study reveal that family, relative or friends is the most frequently utilizes d source of borrowing in South Asian countries that individuals are using this as alternate source of credit for meeting their daily personal and business utilizes .

The outcome of the research indicates that being a man of elder age, with higher income and higher education, contributes to higher inclusive finance as shown by the findings of the study that they are positively related with the formal bank account and formal saving in the society. In addition, the impact of individual attributes as discussed above is in line to the outcome of the other studies around the world with only exception of formal bank credits/borrowing in one of South Asian country i.e. Pakistan.

Furthermore, we found women closeness, involved in restricted activities, need for financial services and existence of an account in the family as the main obstacle in getting an account at financial institution in almost all South Asian countries. On the same ground, elder people also found proximity as hindrance while the younger ones mentioned lack of money as the main reason for financial exclusion in the country. Insufficient and non-availability of money is also observed as a problem by the section of society belonging to lower income statistic. We also found that education plays important and positive role in overcoming the hindrances to inclusive finance as higher education contributes to increased knowhow of financial system that not only enhances the level of trust in financial services but also equip individuals to better manage the costs associated to these services in personal as well as business life. We also found that the choice between formal and informal means of credit is not influenced by demographic factors in almost all South Asian countries.

Policy Implications

Our results of the research indicate that inclusive finance incorporated crucial problems in South Asian countries that demand immediate plans and actions from the concerned authorities. To overcoming obstacles related to gender by initiating specialized programs with relax terms and conditions that facilitate women inclusion in the financial system in these counties. The hindrances in terms of income and education levels are more of long-run issues that need consistent efforts and policies from the authorities so that these long run obstacles could be dismantled over the time. As all these countries have their formal association SAARC-South Asian Association for Regional Corporation. This platform can be use to formulate policies for promoting uses of financial services in the member countries.

Use of limited or no formal bank credits/borrowing at financial institutions is another major concern for the authorities in the South Asian Association for Regional Cooperation (SARRC). Member of association would have to enhance the limited utilizes of formal bank credits/borrowing. Although, other means of borrowing are available in the member country but a relatively less utilizes of formal bank credits/

borrowing could hamper economic growth in the long-run. Moreover, alternate sources of borrowing could also contribute to financial instability as all alternate borrowings are granted outside the formal financial system in the economy, consequently not being regulated in these countries. Hence, steps to be taken discourage and abolish availability of informal sources of borrowings from the society through strict implementation of laws and by facilitating easy access to formal bank credits/borrowing with ease term and conditions at low rate of interest and formalities could be utilizes d as a tool by the authorities for poverty reduction, and enhancement of financial stability and economic growth in the South Asian countries both by government and corporate sectors.

Competing Interests

The authors did not declare any competing interest.

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