Article

Financial Inclusion and its Effect on Alleviation of Poverty: A Case of Afghanistan

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Abstract

Financial inclusion is an enabler for many development goals including poverty alleviation, reducing inequality and inclusive growth. In the past two decades, many developing countries have started to put an emphasis on finance as an enabler of development objectives, and financial inclusion as a goal in their development agendas. Yet, financial exclusion remains a big challenge for many countries including Afghanistan. The latest data from Da Afghanistan Bank (2018) shows that 85% of the adult population has no access to financial services, while 54.5% of Afghan population lives below poverty line. In this regards this study is designed to investigate the role of financial inclusion on alleviation of poverty in Afghanistan using questionnaire as a tool to extract data from targeted population. Descriptive statistics is used for data analysis and bar graphs are used as a tool for interpretation of the analysis. Moreover, Linear Regression is used for hypothesis testing and analysis is done through IBM SPSS Statistics. It's found that access to financial services and quality of financial services has a significant impact on poverty alleviation, while usage of financial services doesn't have significant impact on poverty reduction. Factors like infrastructure, technology and financial literacy can reduce poverty through financial inclusion. Based on the results we recommend that number of access points should be increased, as well as financial awareness campaigns should be conducted to educate poor and underserved population from benefits of financial services.

JEL Classification: *G18, G21, G32 and G33*

Keywords: *Financial Inclusion, Poverty, Alleviation of Poverty*

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Introduction

Alleviation of poverty, inclusive and sustainable growth, sustainable development, reducing income inequality and ultimately achieving economic prosperity, constitute the main objectives of macroeconomic policy. Based on numerous researches, financial development and financial inclusion can help countries to achieve macroeconomic objectives through mobilization of savings and allocation of resources to productive investments. Macroeconomic objective can be achieved through financial inclusion which is the number of individuals and firms which utilize financial services and products in a country such as saving accounts, loans, insurances, payment means (debit card, credit card and etc.), ATM, POS, pensions, transactions, securities, E-banking, Mobile Money and etc. (World Bank, 2014).

Based on the data collected by World Bank, there is a significant difference in the usage of financial services among individuals of developed and developing countries on demand side/users. The share of people using financial services in developed countries is twice the share of people in developing countries. Similarly, composition and population density are also important in using financial services at the same country or region. Unemployed, poor, illiterate or poorly educated and rural are less interested to have bank accounts, benefitting insurance, pension or profiting other financial services. Therefore, financial inclusion should establish a suitable legal framework and solve the market problems (World Bank, 2014).

The importance of financial inclusion arises from financial exclusion of around 85 percent of the adult population in Afghanistan from the formal financial system in Afghanistan (DAB, 2018). In order to fulfill financial inclusion objectives and encourage a large percentage of people to use financial services, many countries have compiled and implemented "National Financial Inclusion Strategy" in which they included more deprived and poor to formal financial system and increased their financial capability. But some developing countries are in the process of formulating financial inclusion strategy like Afghanistan.

Nowadays, access to convenient and formal financial services is one of the critical issues internationally. So, financial inclusion recently has been come to attention of policymakers, decision-makers, researchers and other stakeholders, particularly has great importance for international organizations such as World Bank, IMF, G20 and other institutions. The World Bank's goal for year (2020) is to achieve greater financial inclusion all over the world and also an organization for promoting financial inclusion by the name of "Alliance for Financial Inclusion" has been established, which more than (90) countries, including Afghanistan, has its membership.

Findings of this study benefit society to better understand the role of financial inclusion in alleviation of poverty; For the FSPs to provide more convenient and responsible delivery of financial products for all deprived and vulnerable populations including poor; for regulators to adapt policies and strategies specific to reduce poverty through financial inclusion; for researchers to explore the gaps in this study; and for the students to learn about financial inclusion and its link towards poverty reduction and achieving economic goals of the society.

1.1 Objective

The objective of this study is to investigate the extent of financial inclusion effect on poverty alleviation in Afghanistan.

2 Literature Review

The role of financial inclusion in poverty alleviation is one of MDGs (Millennium Development Goals). Thus, today all the countries work on financial inclusion and setting it as a priority goal. Financial inclusion ultimately reduces the poverty, increases inclusive and growth and development and also fulfills the MDGs goals (Chibba, 2009).

The major goal of financial inclusion is not just social welfare but focusing on demand for financial services on unbanked and deprived segments of the population. Thus, financial service providers should focus on both urban and rural population (Prasad, 2010). Financial inclusion helps to speed up sustainable and inclusive growth and efficiently distributes resources to improve social welfare (Martinez, 2011). Similarly, Brune et al. (2011) argues that by increasing financial inclusion in rural Malawi the income of poor will increase and they can use their savings in agricultural input.

2.1 Access to Financial Services with Relationship to Poverty Reduction

Banerjee and Newman (1993) cite that access to finance is the key factor to alleviate poverty and boost productivity. Moreover, a study on Indian rural population shows that there's a significant impact of formal finance on lowering the rural poverty and formal finance increases non-agricultural employment (Binswanger and Khandker, 1995; Pande and Burgess, 2003).

In addition, branch expansion and coordinated loaning system improved output of small businesses. Thus, an aberrant effect of accessibility and openness of account on neediness decrease is affirmed through these examinations (Eastwood and Kohli, 1999).

2.2 Usage of Financial Services with Relationship to Poverty Reduction

DFID (2014) reports that using formal financial services and products leads to lower cost, lower risk, higher security, easier access and higher returns to poor households. But poor households prefer using informal financial services that could be more expensive and riskier than formal financial services and they won't be able to participate in economic growth of the country. Abimbola, Olokoyo and Farouk (2018) in Nigeria also found that number of accounts (current and saving), number of loans lent to agricultural sector and number of bank clients have positive impact on poverty reduction.

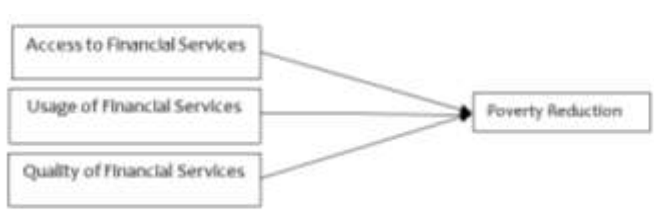
2.3 Quality of Financial Services with Relationship to Poverty Reduction

Offering innovative financial services and technological developments increases financial inclusion and reduces poverty (Avais, 2015). Similarly, Park and Mercado (2015) worked on examination of financial inclusion, income inequality and growth in Asian developing countries. They used a financial inclusion indicator to examine factors affecting financial inclusion level in 37 Asian developing countries. They found that factors like per capita income, demographics and rule of law have a positive impact on financial inclusion, while financial inclusion has a direct impact on alleviation of poverty, and reducing income inequality.

There might be direct and indirect channels to reduce poverty through financial inclusion. There might be indirect channels where one factor affecting another and the final destination is alleviation of poverty. Beck et al (2006) argue that financial inclusion increases the income growth of the poor and reduces income inequality; hereby it can strongly alleviate the poverty.

The expansion of bank branches in rural areas of India has decreased rural poverty rate in India (Burgess et al., 2004; Pande, 2004). Access, usage and quality of financial services which are the main indicators of financial inclusion directly increases economic opportunities of the poor, thus it leads to increased income, more savings, loan repayment, promoting financial capability of the poor, better decision making, increased productivity and decreased unemployment rate (IJHD, 2001). Based on the above model the linkage between financial inclusion and poverty reduction is shown in the (Figure 1).

Figure 1: Conceptual Framework: Linkage of Financial Inclusion to Poverty Reduction



Source: IJHD, 2001; Author's, 2019

3 Research Design

A quantitative research methodology is used for this study, with a positivism philosophy to explore the role of financial inclusion on alleviation of poverty. Hypothesis testing or explanatory research is used through deductive approach where the hypothesis is designed to analyze the relationship of access, usage and quality of financial services with poverty alleviation and the observation process is being done to confirm the hypothesis.

3.1 Population and Sampling Design

The research population includes all adult population (+15) in Kabul, which are possibly effected by financial inclusion directly through accessing and using financial services or indirectly by regulators. Sample size is taken 200 that represents overall population for analysis of the research findings. For selecting sample, population is categorized into "six" main stratums:

- Having knowledge of financial inclusion
- Users of financial services
- Business/Private sector
- Regulators
- Financial service providers
- Students

Stratified sampling is used to gather data from respondents, the study includes all adult population living in Kabul and it includes six subgroups and then individuals are selected randomly from subgroups. That's why stratified sampling is used here.

3.2 Data Collection Method

Data is collected from primary sources and the primary data is obtained by distributing questionnaire to individuals from various areas in Kabul such as: university students, government employees and all other areas. Questionnaire is used as a tool to extract data from the targeted population. Questionnaire made of close-ended questions, it has "three" main sections:

First section asked about demographics of respondents like age, gender, income level, education and job status. The second section includes the main questions for evaluating the effect of access, usage and quality of financial services on alleviation of poverty. This part consists of "seven" main sub-sections of access, usage and quality of financial services as independent variables. Each of these sections has (5-8) questions which gives participant the chance to choose the most appropriate answers.

All the questions are prepared in such a way that explains the indicators for the measurement of those variables very appropriately. The questions are answered based on "Five Likert Scale" (strongly disagree, disagree, neutral, agree and strongly agree). Starting from lowest number of "1" which shows that participant is "strongly disagree" and highest number of "5" which shows that participant is "strongly agree". Questions are designed based on variables (Dependent and independent), and each variable's questions is designed based on its indicators. The indictors being used for financial inclusion are GPFI's indicators and the source of questionnaire is also GPFI's questionnaires being asked from developing countries.

The secondary data is obtained from government publications, research articles, magazines, journals, booklets, books, e-journals, reports, manuals, the internet, websites and mainly collected from Da Afghanistan Bank, World Bank reports, IMF Reports, and Central Statistic Organization.

4 Analysis

4.1 Demographic Analysis

Table 1: Demographic Analysis

Attributes	Frequency	Percentage (%)
Gender		
Male	144	72
Female	56	28
Age		
(15-25)	52	26
(26-36)	112	56
(37-47)	31	15.5
(48-above)	5	2.5
Qualification		
Baccalaureate	10	5
Bachelor	94	47
Master	94	47
Ph.D.	2	1
Income		
Below 30,000	46	23
30,000-50,000	73	36.5
50,000-70,000	44	22
Above 70,000	37	18.5

Source: Author's Compilation

Table 1 shows that the 144 respondents were male and 56 respondents were female, where percentage of male participation is 72% and percentage of female participation is 28%. Moreover, 26% of respondents which consists of 52 respondents were from age category of (15-25). The 56% of respondents which consists of 112 respondents were from age category of

(26-36). The 15.5% of respondents which consists of 31 respondents were from age category of (37-47). The 2.5% of respondents which consists of 5 respondents were from age category of (48-above).

The highest level of education of 5% that consists of 10 respondents is baccalaureate, 94 of them that is 47% of total respondents were having a bachelor degree, 94 of them were having a master degree that is 47% of total respondents, and 2 of them were PhD which consists of only 1% of respondents. Moreover, income range of 46 respondents (23%) were below 30,000 AFs, while 73 respondents (36.5%) had an income between 30,000-50,000 AFs. 44 respondents (22%) were with an income range of 50,000-70,000 AFs and the remaining 37 respondents (18.5%) had an income above 70,000 AFs.

4.2 Reliability Analysis

The inter-item consistency reliability is tested to check how the variables are correlated to each other, shown in the Table 2.

Table 2: Reliability Analysis

Variable	No. items	Mean	Variance	Std. Dev.	Cronbach's Alpha
Access	8	17.3300	18.433	4.29340	0.751
Usage	7	15.5900	15.087	3.88424	0.737
Quality	5	10.6700	8.855	2.97580	0.703
Technology	5	10.7950	7.762	2.78600	0.608
Infrastructure	8	17.1500	18.289	4.27656	0.787
Financial Literacy	4	8.4100	5.972	2.44372	0.702
Demographics	5	10.4950	9.648	3.10616	0.678
Poverty alleviation	5	10.5750	10.597	3.25536	0.710

Source: Author's Compilation

The Cronbach's Alpha coefficient of all variables that consist of 48 items is obtained and it's between 0.608 and 0.787 that shows strong inter-item consistency reliability between variables. The closer Cronbach's Alpha coefficient is to "1" the stronger is the correlation among items.

4.3 Data Normality Testing

For analyzing the data, normality of data is tested through Skewness and Kurtosis approach is applied in this study. Based on (Table 3) Kurtosis and Skewness which show the symmetry of distribution and peak of the distribution, for all variables lies between -1 and +1, which shows that data is normally distributed.

Table 3: Test of Normality

Variable	N	Mean	Std. Dev.	Max.	Min.	Skewness	Kurtosis
Access	200	2.1571	0.54044	3.57	1.00	0.131	-0.366
Usage	200	2.2271	0.55489	4.43	1.14	0.875	0.505
Quality	200	2.1340	0.59516	4.60	1.20	1.00	0.244
Technology	200	2.1590	0.55720	4.40	1.00	0.852	-0.675
Infrastructure	200	2.1438	0.53457	4.50	1.13	0.172	0.483
Financial Literacy	200	2.1025	0.61093	4.25	1.00	0.801	-0.431
Demographics	200	2.0124	0.62123	4.60	1.00	0.889	1.002
Poverty Alleviation	200	2.1150	0.65107	4.00	1.00	0.595	0.334

Source: Author's Compilation

4.4 Correlation Analysis

Correlation between all variables is shown in the (Table 4). Based on the table below Access to financial services is more strongly positively correlated to Usage of financial services, r = 0.56, p<0.001 than Quality of financial services, r = 0.527, p<0.001. The Usage of financial services is strongly correlated with Quality of financial service, r = 0.610, p<0.001. And all the other variables are positively correlated to each other, thus the results show that there is a positive relationship between all the variables.

Table 4: Correlation between all variables

	AFS	UFS	QFS	PA	INFS	DEMO	FL	TECH
AFS	1							
UFS	.565**	1						
QFS	.527**	.610**	1					
PA	.160*	.329**	.455**	1				
INFS	.351**	.474**	.683**	.549**	1			
DEMO	.237**	.364**	.567**	.660**	.617**	1		
FL	.337**	.416**	.614**	.515**	.649**	.662**	1	
TECH	.452**	.585**	.647**	.511**	.612**	.523**	.589**	1

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

*. Correlation is significant at the 0.05 level (2-tailed).

Source: Author's Compilation

4.5 Linear Regression Analysis

The Table 5 shows the association between Poverty Alleviation and Financial Inclusion (Access, Usage and Quality of financial services). Based on the table below quality of financial services has positively significant impact (B=0.452) on poverty alleviation, p = 0.000, p<0.05. While the Usage of financial services has no significant impact (B=0.143) on poverty alleviation, p =0.094, p>0.05. And the Access to financial services has a negatively significant impact (B= -0.158) on poverty alleviation, p = 0.047,

$p<0.05$, which states that with increasing the access points poverty rate reduces.

Thus the financial inclusion has significant impact on poverty alleviation with access and quality indicators, but has no significant impact with usage indicators. Hereby, null hypothesis is rejected and alternative hypothesis is accepted.

H0: There is no significant impact of financial inclusion on alleviation of poverty. (Rejected)

H1: There is a significant impact of financial inclusion on alleviation of poverty. (Accepted)

Table 5: Association between Poverty Alleviation and Financial Inclusion

Model		Un-standardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.099	0.193		5.697	0.000
	Quality	0.494	0.090	0.452	5.472	0.000
	Usage	0.168	0.100	0.143	1.681	0.094
	Access	-0.191	0.095	-0.158	-1.999	0.047
a. Dependent Variable: PA						

Source: Author's Compilation

4.6 Multiple Regression Analysis

Table 6: Association between all variables

Model		Un-standardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.506	.262		5.738	0.000
	Access	-0.191	0.095	-0.158	-1.999	0.047
	Usage	0.168	0.100	0.143	1.681	0.094
	Quality	0.494	0.090	0.452	5.472	0.000
	Technology	0.159	0.084	0.025	1.296	0.043
	Infrastructure	0.224	0.087	0.202	2.574	0.011
	Financial Literacy	0.145	0.095	0.131	1.530	0.028
	Demographics	-0.019	0.075	-0.020	-0.251	0.802
a. Dependent Variable: Poverty Alleviation						

Source: Author's Compilation

The Table 6 shows the association between Poverty Alleviation and Financial Inclusion (Access, and Quality of financial services), technology, infrastructure, financial literacy and demographics. Based on the table below quality of financial services, access to financial services, technology, infrastructure and financial literacy have significant impact on alleviation of poverty (p-values are less than 5%). While demographics and usage of financial services have no significant impact on poverty alleviation.

Moreover, the Table 5 shows that there is a significant negative relationship (B=-0.158) between poverty and access to financial services while there is insignificant positive effect of usage of financial services on poverty alleviation (B= 0.143). Furthermore, there is a significant positive relationship between poverty alleviation and quality of financial services (B=0.452). The results also show a strong relationship between financial literacy, infrastructure and technology factors with poverty alleviation.

5 Conclusion

To conclude the study, we can say that Access to financial services has a significant impact on poverty alleviation, the more individuals and household have access to financial services the more they can be benefited from economic opportunities. They can save, repay loan, participate in economic activities, and in general escape from poverty. It will also encourage and enable those MSMEs and farmers to have access to finance in order to develop their entrepreneurial activities.

Also, Quality of financial services has a positively significant impact on poverty alleviation. Providing diversified, convenient and good quality financial services and products reduce the poverty rate among individuals and households. Thus, Quality dimension of financial inclusion plays a vital role in eradicating poverty.

Moreover, Usage dimension does not play a significant role in the alleviation of poverty. Usage of financial services does not help poor to escape from poverty, rather than having access to financial services which are convenient and at affordable cost for customer.

5.1 Recommendations

There are several recommendations which policymakers and regulators should take into consideration as:

Expansion of agent banking and promotion of e-banking can help poor to access to financial services easily. For this, regulators and policymakers should establish regulations and guidelines for promotion of agent banking and e-banking. With using agent banking models in rural areas poor will benefit the most by enabling them to access to financial services.

Moreover, financial awareness and literacy campaigns should be conducted for poor and individuals/households living in remote areas to make them aware about benefits of financial services and banking, through which they can escape from poverty.

In order to involve more people into formal financial system, the identification process should be easy that poor and underserved people could open an account easily or be able to use other financial services. Nowadays, the national identification cards are distributed among Afghans that helps financial inclusion directly and facilitates the documentation process for banks and financial institutions. Regulators should motivate microfinance institutions to teach farmers and small venture how to run and grow their business besides lending them. By which the farmers could use the loans they are taken in a productive and efficient way.

Furthermore, infrastructural changes should be brought to include people to formal financial system, such as establishing national payment law, consumer protection and market conduct law, agent banking law etc. Government support with financial institutions is needed to target excluded and vulnerable segments into formal financial system, like providing different financing instruments including credit guarantee schemes, financial leases, etc. to MSMEs, farmers, and women entrepreneurs.

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