

A Mediating Role of Financial Self-Efficacy (FSE) between the Relationship of Financial Inclusion and Economic Growth in Khyber Pakhtunkhwa, Pakistan

¹Ibrar Hussain, ²Muhammad Ilyas

ABSTRACT

Keywords:

*Financial Inclusion,
Economic Growth,
Financial Self Efficacy,
SMEs, Questionnaire,
SMEDA.*

The study was conducted to check the effect of financial inclusion on economic growth in Khyber Pakhtunkhwa with mediating role of financial self efficacy. The study has included SMEs for the conducting this study. The study has included those SMEs who are maintaining banks accounts and proper account reports, having credit facilities and loans. The study gathered data from the Small and Medium Enterprises (SMEDA) main office Peshawar. Conveniently, 400 respondents were included in the data collection process. The study used survey approach and questionnaire method was adopted for the data collection. The findings of reliability statistics showed that all the variables included were found reliable. The results of regression showed access to banking services, credit facilities, insurance facility and financial product showed positive and significant effect on the economic growth. The mediating role of FSE suggested that the R-square value without FSE is 0.647 while it has been increased to 0.821 when FSE was introduced between financial inclusion and economic growth. The positive change in the R-square confirmed the significant mediating role of FSE between financial inclusion and economic growth.

INTRODUCTION

For many years, the relationship between economic growth and financial inclusion has been a rich and challenging subject. There is a sizable literature that has emphasized the positive impact of a country's financial system development on economic growth. Many research shows that a well-developed and better functioning financial system supports faster economic growth (Ashraf et al., 201). Development of the financial sector increases the overall efficiency of the financial institutions. A developed financial system decreases transaction costs, information irregularities, market frictions, credit default risk and pool risk, which could motivate economic growth by mobilizing savings and facilitating investment in an

¹ PhD Scholar, Department of Management Sciences, Qurtuba University of Science and IT Peshawar. Email: Ibrar.finance12@gmail.com (Corresponding Author)

² Assistant Professor, Department of Management Sciences, Qurtuba University of Science and IT Peshawar. Email: m.ilyas@qurtuba.edu.pk

efficient manner. A strong and comprehensive financial system is required for the country's progress (Iqbal & Sami, 2017).

Financial inclusion is the provision of financial services, including banking products as well as equity, credits, lending, government initiative schemes and insurance products. However, banks are essential for financial inclusion since without them, achieving the appropriate degree of financial inclusion is difficult. Financial inclusion is promoted through increasing banking penetration and accessibility (Raman, 2012; Begum & Khan, 2022). To help the country's economy flourish, banks operate as financial intermediaries, identifying entrepreneurs who have the potential to start new financial businesses (Chakrabarty, 2013; Alam & Hoque, 2022; Noor, 2022).

Financial inclusion makes it easier for more individuals to access all essential financial services, has a significant impact on the poor's ability to increase their income, reduces income disparity, and is directly linked to poverty reduction (Lee et al., 2023). Extraordinary human development has been achieved as a result of decreasing trends in the severity of poverty. Providing affordable or free financial services to all people will undoubtedly help the poor and other deprived groups. In comparison to Bangladesh and India, Pakistan does not present an impressive picture of financial inclusion. Due to its propensity to depend on free and informal financial institutions, Pakistan is among the largest countries globally. (Finclusion.org, 2020). Only Pakistan's adult population 21% had access to financial services in 2021. According to the World Bank, 86.5% of female people are still not financially included (World Bank, 2022).

The relationship between financial inclusion, economic growth, and small and medium enterprises (SMEs) has garnered increasing attention in academic literature and policymaking. Financial inclusion refers to the access and use of financial services by individuals and businesses, while economic growth is crucial for the overall development of a region. SMEs play a vital role in driving economic activity and creating employment opportunities. However, there is a gap in understanding the mechanisms through which financial inclusion impacts SME growth and, subsequently, economic development. One potential mediating factor could be the level of FSE among SME owners, influencing their ability to effectively utilize financial services for business expansion. SMEs are facing rapid changes resulting in the current business model is no longer sustainable. The driving force for changes in the SMEs industry - self-efficacy and financial literacy - is increasing because these facts are interrelated (Fatah Yasin, Mahmud and Diniyya, 2020). Self-efficacy is

needed by every resource in order to be able to face changes so as to encourage innovation in business models (Putri et al., 2019), strengthening FSE can improve economic growth (Hidajat et al., 2016). So, SMEs need to sharpen their strategies so that they can remain relevant in the financial crises.

Very limited studies have been conducted on mediating role of FSE between financial inclusion and economic growth. The gap from the literature has recommended that the mediating role of FSE was explored between financial inclusion and economic growth can make a significant addition in the literature. Several research publications have explored the relationship between financial inclusion, FSE, and economic growth. One such example is a study conducted by Heng, Chiu, and Lee (2020), titled "The Mediating Role of FSE in the Relationship between FSE and Economic Growth. Heng et al. (2020) found that FSE plays a significant mediating role between financial inclusion and economic growth. They highlight that financial inclusion alone is not sufficient for achieving sustainable economic growth. Instead, the presence of FSE acts as an important intermediary factor that transforms financial inclusion into positive economic outcomes. This study aims to explore the mediating role of Financial Self-Efficacy (FSE) in the relationship between financial inclusion and SME growth, shedding light on the dynamics that underpin economic growth in the Pakistan region.

Objectives

1. To assess relationship between financial inclusion and SME sector growth (EG)
2. To assess the relationship between financial inclusion and economic growth while taking SME sector as a proximate indicator of economic growth (EC).
3. To assess the mediating role of FSE between financial inclusion and economic growth (FL)

REVIEW OF LITERATURE

Financial inclusion, according to Klapper et al. (2016), is the increase of use and access to financial services, which may help developing countries accomplish socioeconomic objectives. Financial inclusion, in its broadest definition, refers to the expansion of financial services access for all, properly, openly, and justifiably, with a special emphasis on weaker or more vulnerable segments of society at an accessible price (Solo, 2008; Sarma, 2008). For people without proper access to financial resources, which could alter their fate, financial inclusion is crucial. This underserved segment of society has a huge need for financial services that are reliable, simple to use, and considerate of their needs (Morduch and

Rutherford, 2003). Furthermore, consumers are more inclined to pursue informal, expensive financial services if formal financial services cannot be guaranteed. Financial exclusion negatively affects low-income and deprived people since it restricts the amount of money available for investment, which eventually results in less capital creation (Thathsarani et al., 2021).

According to Cnaan et al. (2012), a considerable percentage of laboring persons are still without bank in developing countries, whereas the unbanked people is in the minority and frequently remains unemployed in industrialized countries. Financial inclusion is frequently regarded as a crucial component since it increases access to formal financial services and increases involvement in economically productive activities, both of which contribute to ensuring economic growth.

However, lots of people have still incorporated in the formal financial sector due to low levels of earnings, particularly in developing nations. According to certain researchers, more than 70% of people worldwide lack approach to banking services (Yadav and Sharma, 2016; Sehrawat and Giri, 2016). Additionally, in many developing countries, women, low-paid workers, the poor, and marginalized individuals still lack approach to effective and sufficient financial assistance (Dirir, 2022). Adults make up 75% of those who live in poverty because they make less than \$2 a day and don't have an account in any bank (World Bank, 2012). In addition, there are almost 780 million individuals in Sub-Saharan Africa who make less than \$5.50 in a day and are at greater risk of flooding (Rentschler et al., 2022).

According to Lenka (2021), the financial sector can be broadly discussed within two folds—financial development (financial depth and liquidity) and financial inclusion (financial access). Financial development is the realisation of financial innovation and institutional developments to reduce information asymmetry, advance market inclusiveness, promote competitiveness and ease transaction cost in a financial system (Hartmann et al., 2007; Ibrahim & Alagidede, 2017). It defines the development of financial institutions and markets, and foreign capital flows that work together to reduce information, transaction and enforcement costs. However, the maxim of financial inclusion is connecting unbanked and underbanked people to affordable, transparent and reliable financial services which have far-reaching economic benefits (Sarma, 2015; Siddik et al., 2019).

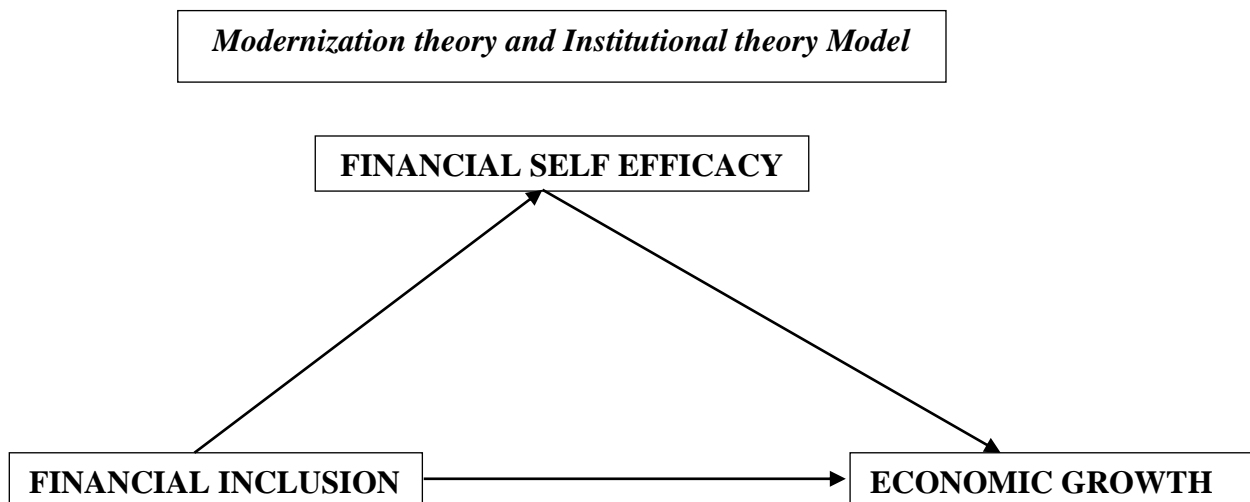
The favorable effects of financial inclusion on all economic and social consequences, both at the national and household levels, are well supported by the available data. Economic growth depends on a well-structured financial system (Law et al., 2014). Financial development is

supported by financial expansion because it promotes economic growth, which increases financial access. The proportion of households with formal financial services access was calculated by Honohan, (2008). Furthermore, Swamy, (2014) discovered that due to their link with financial inclusion, families headed by women were more significantly impacted by economic characteristics than households headed by males. Financial exclusion, particularly lack of access to credit, may result in income inequality and, ultimately, poverty traps, according to a number of development economics models.

According to Fink et al. (2014), loans given out for food security goals are suitable. According to Prina, (2015) research, financial inclusion helps people manage their medical bills so they can improve from a health crisis. People can improve their future education plans by saving products. Due to more people having access to free savings accounts, education spending and female contribution in advanced education have increased in Nepal (Chiapa et al., 2016; Prina, 2015). Similar to how Levine, (1997) and Schumpeter and Backhaus, (2003) described the financial sector's contribution to innovation and production through the allocation of capital, pooling of dispersed savings, and trade facilitation. Numerous research have examined the connection between human development and financial inclusion using correlation analysis.

Modernization Theory: This theory suggests that increased financial inclusion in Khyber Pakhtunkhwa (KP), Pakistan can be achieved through adopting modern financial technologies and practices, to limitless the urbanization, to enhance the Technological Infrastructure. It emphasizes the importance of technological advancements, such as digital banking and mobile financial services, in expanding access to financial services for underserved populations.

Institutional Theory: This theory focuses on the role of institutions, such as banks, microfinance institutions, and regulatory bodies, in shaping Government Policies for financial inclusion in Pakistan. It suggests that creating conducive institutional environments, implementing supportive policies, and establishing effective financial infrastructure are crucial for promoting financial inclusion.



Hypothesis

H₁: Financial inclusion has significant effect on economic growth.

H₂: Financial inclusion has significant effect on financial self efficacy.

H₃: Financial self efficacy has significant effect on economic growth.

H₄: Financial self efficacy has significant mediating role between financial inclusion and economic growth.

RESEARCH METHODOLOGY

A quantitative research design is adopted for this research study to explore the relationship between financial inclusion and economic growth in KP, Pakistan. To measure the impact of financial inclusion on economic growth of KP, Small and Medium Enterprises (SME) is taken as proxy of economic growth. The use of questionnaire survey allows for the collection of data from large sample size from different sectors of KP economy including construction, manufacturing, paint, agriculture tourism and hospitality, which will provide comprehensive perspective on the research topic.

According to SMEDA, there are 5,200,000 (SMEDA, 2022) SMEs operating only in Khyber Pakhtunkhwa (KP) province of Pakistan. Credit financing departments and SMEDA will be approached to get these customers contacts to get first-hand information through a well-structured questionnaire.

Data were collected from maximum customers of different banks from different segments of the Khyber Pakhtunkhwa (KP) economy, having access to financial system, credits and loan utilizers. A sample of 400 respondents studied in this research. These 400 respondents were those customers of the different banks, who have active access to proper financial system, credits and loans.

Primary data was collected using a self-administered and well-structured questionnaire developed specifically for this study from individuals having bank accounts, from SME owners and beneficiaries of loans and credits. The questionnaire was designed to gather information on the level of financial inclusion and economic growth factors like growth in small and medium enterprises, credits, loans etc from the respondents of different segments of Khyber Pakhtunkhwa (KP) economy. Likert scale questionnaire is used to enable the collection of quantitative data necessary for statistical analysis.

RESULTS & DISCUSSIONS

Reliability Statistics

Table 1: Findings of Reliability Statistics

Variable	Cronbach Alpha	Remarks
Access to banking services	0.849	Reliable
Credit Facilities	0.826	Reliable
Insurance	0.904	Reliable
Other financial product	0.805	Reliable
Economic Growth	0.793	Reliable
Self-Efficacy	0.896	Reliable

The table is the final result of reliability statistics used in the study to check the reliability of the factors included in this study. The alpha value of the variable is more than .70 which concluded that variables have been found reliable as it is more than 70 percent alpha. This has been concluded that the variables are reliable and the instrument can be used for the data collection.

Regression

Model 1: Financial Inclusion and Economic Growth

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-0.286	0.189		-1.5132	0.316
1 Access to banking services	0.407	0.110	0.557	3.70	0.000
Credit Facilities	0.681	0.138	0.394	4.934	0.000
Insurance	0.350	0.127	0.493	2.755	0.000
Other financial product	0.569	0.244	0.861	2.331	0.000

R-square: 0.647, **F-value:** 49.117, **P-value:** .000

The regression model 1 has been used in this study to check the effect of financial inclusion on the economic growth of KP. The regression model was used due to the fact that study was based on independent and dependent variable and the objective was based on the variance in

the economic growth due to the financial inclusion. After completing the assumption of regression model in the pilot study process, the study has used simple linear regression model to check the effect of financial inclusion on the economic growth of KP. The values in the table elaborated the R-square value of .647 which means that the financial inclusion has showed 64 percent effect on the economic growth. The value further explained that the financial inclusion has explained about 64 percent variance in the economic growth of KP. The model has been verified for the statistical significance of the model by checking the annova of regression model i.e. f-value. The value of f-value in the table is 49.117. The value has been found higher than the significance level and it has been concluded that the selected model has been found statistically significant.

The financial inclusion has been measured by including access to banking services and showed that it is having positive relationship with economic growth. The positive association between the access to banking services and economic growth can be seen in the positive beta value in the table. The beta value of access to banking services is 0.407 which elaborated that the access to banking services is having 40 percent relationship with the economic growth. The results further explained that 1 unit change in the access to banking services will lead to have .40 units change in the economic growth. This change can be found in the positive direction which means that the access to banking services will increase the economic growth of KP. The t-value of the access to banking services is 3.70 which is significantly higher concluded that the access to banking services showed positive and significant effect on the economic growth.

The financial inclusion has been measured by credit facilities and showed that it is having positive relationship with economic growth. The positive association between the credit facilities and economic growth can be seen in the positive beta value in the table. The beta value of credit facilities is 0.681 which elaborated that the credit facilities are having 68 percent relationship with the economic growth. The results further explained that 1 unit change in the credit facilities will lead to have .68 units change in the economic growth. This change can be found in the positive direction which means that the credit facilities will increase the economic growth of KP. The t-value of the credit facilities is 4.93 which is significantly higher concluded that the credit facilities showed positive and significant effect on the economic growth.

The financial inclusion has been measured by insurance facility and showed that it is having positive relationship with economic growth. The positive association between the insurance

facility and economic growth can be seen in the positive beta value in the table. The beta value of insurance facility is 0.350 which elaborated that the insurance facility are having 35 percent relationship with the economic growth. The results further explained that 1 unit change in the insurance facility will lead to have .35 units change in the economic growth. This change can be found in the positive direction which means that the insurance facility will increase the economic growth of KP. The t-value of the insurance facility is 2.75 which is significantly higher concluded that the insurance facility showed positive and significant effect on the economic growth.

The financial inclusion has been measured by other financial products and showed that it is having positive relationship with economic growth. The positive association between the other financial products and economic growth can be seen in the positive beta value in the table. The beta value of other financial products is 0.569 which elaborated that the other financial products are having 56 percent relationship with the economic growth. The results further explained that 1 unit change in the other financial products will lead to have .35 units change in the economic growth. This change can be found in the positive direction which means that the other financial products will increase the economic growth of KP. The t-value of the other financial products is 2.331 which is significantly higher concluded that the other financial products showed positive and significant effect on the economic growth.

Model 2: Financial Inclusion and Self-Efficacy

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error			
(Constant)	0.416	0.138		3.0144	0.000
Access to banking services	0.331	0.116	0.467	2.853	0.000
1 Credit Facilities	0.297	0.170	0.591	1.747	0.332
Insurance	0.497	0.191	0.299	2.602	0.000
Other financial product	0.347	0.114	0.671	3.043	0.000

R-square: 0.421, **F-value:** 17.703, **P-value:** .000

The values in the model 2 elaborated the R-square value of .421 which means that the financial inclusion has showed 42 percent effect on the FSE . The value further explained that the financial inclusion has explained about 42 percent variance in the FSE of KP. The model has been verified for the statistical significance of the model by checking the annova of regression model i.e. f-value. The value of f-value in the table is 17.703. The value has been found higher than the significance level and it has been concluded that the selected model has been found statistically significant.

Model 3: FSE and Economic Growth

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.631	1.136		0.555	0.691
	FSE	0.408	0.106	0.649	3.849	0.000

R-square: 0.599, F-value: 44.71, P-value: .000

The regression model 3 has been used in this study to check the effect of financial inclusion on the economic growth of KP. In this model was used due to the fact that study was based on independent and dependent variable and the objective was based on the variance in the economic growth due to the FSE. After completing the assumption of regression model in the pilot study process, the study has used simple linear regression model to check the effect of FSE on the economic growth of KP. The values in the table elaborated the R-square value of .599 which means that the financial inclusion has showed 59 percent effect on the economic growth. The value further explained that the FSE has explained about 55 percent variance in the economic growth of KP. The model has been verified for the statistical significance of the model by checking the annova of regression model i.e. f-value. The value of f-value in the table is 44.71. The value has been found higher than the significance level and it has been concluded that the selected model has been found statistically significant.

Model 4: Financial Inclusion and Economic Growth (Mediating FSE)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
	(Constant)	-	0.189		-	0.316
		0.286			1.5132	
1	Access to banking services	0.407	0.110	0.557	3.70	0.000
	Credit Facilities	0.681	0.138	0.394	4.934	0.000
	Insurance	0.350	0.127	0.493	2.755	0.000
	Other financial product	0.569	0.244	0.861	2.331	0.000
	(Constant)	0.316	0.033		9.575	0.000
	Access to banking services	0.556	0.205	0.663	2.712	0.000
2	Credit Facilities	0.702	0.319	0.503	2.200	0.000
	Insurance	0.346	0.055	0.516	6.290	0.000
	Other financial product	0.663	0.19	0.813	3.489	0.000
	Financial FSE	0.816	0.255	0.662	3.20	0.000

R-square: 0.647, F-value: 49.117, P-value: .000

R-square: 0.821, F-value: 118.761, P-value: .000

The regression model 4 has been used in this study to check the effect of financial inclusion on the economic growth of KP. The regression model was used due to the fact that study was based on independent and dependent variable and the objective was based on the variance in the economic growth due to the financial inclusion. After completing the assumption of regression model in the pilot study process, the study has used simple linear regression model to check the effect of financial inclusion on the economic growth of KP. The values in the table elaborated the R-square value of .647 which means that the financial inclusion has showed 64 percent effect on the economic growth. The value further explained that the financial inclusion has explained about 64 percent variance in the economic growth of KP. The model has been verified for the statistical significance of the model by checking the annova of regression model i.e. f-value. The value of f-value in the table is 49.117. The value has been found higher than the significance level and it has been concluded that the selected model has been found statistically significant.

Conclusion

If sufficient and necessary regulations can be made by the competent authorities in the banking system for the factors which reduce the bank profitability and efficiency, and thus the number of financial intermediaries and instruments may increase and access to loans may become more straightforward. In brief, if the banks with high financial performance are encouraged by the governments for increasing the number of agents and bringing to the banks new clients and new sources of revenues, financial inclusion is promoted by financial performance. The most important implication of the study is that various indicators of financial performance such as bank return on assets, bank return on equity, and bank net interest margin increase financial inclusion. As a matter of fact, according to our findings obtained in the study, we may say that the increase in the profitability of the banking sector is one of the triggers of financial inclusion for developing countries. Another implication of the study is that bank lending-deposit spread negatively affects financial inclusion since the high difference between deposit rates and loan rates may decrease the loan demand of households, and in this case, financial inclusion may decrease.

High financial inclusion brings intensive participation in the financial system and leads to high transaction and information costs. To eliminate this problem, banks work high financial performance and this situation brings a more efficient increase in financial inclusion, which is an important tool for poverty and income inequality. An uptrend financial performance is an increase in the size of the financial sector. The deepening of the financial system means an

increase in the number of financial intermediaries such as commercial banks, cooperative credit unions, and financial instruments available in these markets. On the other hand, an increase in the number of ATMs and branch cause fastly and straightforwardly access to financial goods and services.

Future Directions

Since this research has evaluated the relation between financial inclusion and economic development based on mediating role of FSE , there is still areas which are yet to be worked on. Future researchers can work on financial inclusion and economic growth using other controlled variables such as government policies, urbanization, which will not only help academia but will also help government to design special policies to strengthen financial system, leading to a grown economy.

In future studies, the relationship between financial inclusion and financial performance can be examined for countries according to income groups. By using different control variables and estimation models, the relationship between financial inclusion and financial performance for developing countries can be reexamined. In the relationship between financial performance and financial inclusion, financial inclusion can be examined on an indicator basis in addition to index-based analysis.

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