



## **Impact of Financial Sector Development & Savings on Economic Development of Pakistan**

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### **Abstract**

*The primary objective of this research was to examine the correlation between financial sector development, savings, and economic growth in Pakistan. As a developing nation, Pakistan holds considerable potential to enhance its economic condition through natural resources and favorable geographic allocation for both domestic and foreign investment. To accomplish this goal, the research utilized 2SLS techniques and yearly time-series data spanning from 1980 to 2022. The outcomes of all equations demonstrated that financial development is adversely impacted by inflation. Furthermore, high-interest rates are unfavorable for economic growth as they motivate individuals to deposit their funds in banks instead of investing them, which eventually leads to a reduction in economic activity. On the other hand, output had a positive connection with savings, whereas inflation had a negative impact on savings.*

*In conclusion, this study emphasizes the importance of developing the financial sector and promoting savings mobilization for fostering economic growth in Pakistan. These findings could assist policymakers and the government in implementing strategies to enhance the economic development of the country.*

**Key words:** *Financial Development, FDI, 2SLS, Savings*



## **Introduction**

The financial sector is the relationship of such markets in an economy those offering financial services, which are provided through financial intermediaries to the consumers, businesses and to the other financial institutions by transferring funds from savers to borrowers, for consumption and investment purposes. There are a vast variety of financial institutions in Pakistan that offer a variety of goods and services to meet the demands of both assets and liabilities. These consist of commercial banks, Islamic banks, savings institutes, insurance firms, stock exchanges and microfinance organizations.

The ability of an economy to increase the growth rate of human and physical capital and most effectively use productive assets while ensuring that the whole population has access to them is critical to its long-term sustainable growth. Financial intermediation is critical in supporting this investment process because it mobilizes funds for productive investments by enterprises, diversifies risk, and provides liquidity for firms to run additional capacity effectively. If an economy's financial sector is weak or chaotic, it can cause severe economic difficulties such as unemployment, a steady fall in industrial productivity, and a decrease in both profits and consumer income. The economy could be at risk, especially if policy measures are failing to correct the problem accurately and quickly (Orphanides, 2020).

The financial section refers to the markets in an economic system that provide special economic offerings via intermediaries to consumers, businesses, and other economic organizations. These intermediaries supports to transfer the funds from savers to borrowers for consumption and funding purposes. In Pakistan, a huge range of monetary institutions offer a variety of products and services to fulfill the wants of each property and liabilities. These establishments including commercial, investment, specialized, and Islamic financial institutions include banks, national financial savings plans, insurance firms, development finance organisations, stock exchanges and microfinance institutions.

Financial regional tendencies as well as financial savings are main factors of financing development of domestic assets, therefore the economic zone has been assigned strategic significance in financial improvement (Thrill wall, 2006). Most of the nations emphasized that the function of the economic sector is to mobilize financial savings and allocating investment.



Financial sector improves savings for investment and also impact the efficiency demands of these savings to the highest return on funding opportunities.

Financial area promotes savings and regulates economic system resources and put them at low transaction value to their most productive uses and grant facilities for financial savings and access to credit score which is critical for home aid mobilization and sustainable development.

Financial intermediation performs a key position in financial improvement by way of moving the allocation of financial savings to the productive sides, thus increasing productivity, practical alternate and the price of monetary growth (Schumpeter, 1911).

### **Financial Sector of Pakistan**

In Pakistan, there is a large scale in number of financial bodies available, such as commercial & Islamic banks, national savings centers, insurance corporations, stock exchanges, discount houses, and micro-finance organizations. In Pakistan process of financial reforms was started from 1980s with the decency of IMF and World Bank. But political instability in Pakistan is a big hurdle to provide the stability and the execution to pick the pace to achieve the targets but in 2000s soundness and performance of the financial sector was improved. These financial sector reforms mainly consist of interest rate liberalization, to subsidized credit schemes, developing secondary markets for government securities, bank's privatization, improving financial institutions and free entry of new secluded banks, due to all these activates governments aimed to bring and achieve significant economic benefits.

Financial sector development can be measured using various indicators. In this study, we utilized two widely accepted indicators based on financial depth to evaluate the financial sector development of Pakistan. Financial depth is often assessed using ratio of financial assets to GDP. The most used measure to determine financial depth is proportion of liquid liabilities to GDP (M2/GDP) that indicates scope of the financial sector comparative to economy's financial intermediates, as well as central bank and other financial institutions. M2/GDP is estimated by dividing the liquid liabilities of banks and non-banking financial intermediaries (NBFIs) by GDP.

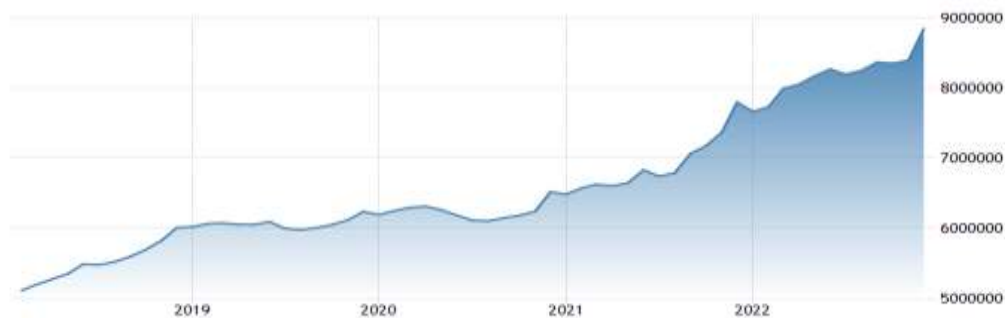
When people have more access to banks and savings, the M2/GDP ratio increases, while the availability of other financial instruments may cause it to decrease. In Pakistan, the M2/GDP



ratio tends to increase, but it remains low, showing that the financial sector has not been able to broaden the scope of its participation in the economy.

Private sector credit stands an important part of financial sector operations and economic activity. An increase in private sector credit can lead to economic development, while a decrease in private sector credit can impede economic growth. Private sector credit in Pakistan has been increasing, with the latest data indicating an increase from 8391738 PKR Million in November of 2022 to 8843127 PKR Million in December of the same year.

Figure 1  
*Private Sector Credit in Pakistan*



Source: State Bank of Pakistan

### **Savings in Pakistan**

Sustainable economic development, economic growth and long term investment are the every time desirable goal of every economy. Highest saving rates in the history of Pakistan were 21.3% in 1972 but it still very low to the desirable level and lower than the other neighbors at the same income level. Low savings rates in Pakistan economy are due to various unfavorable economic environments like; consumption oriented behavior of households, high inflation, budget deficits etc.

Financial savings which consist of (bank deposits, investment in national savings schemes, currency in circulation, deposits of NBFIs, investment in mutual funds and general provident fund) is a part of national savings historical data indicate a low financial saving rate in Pakistan which shows that most of the savings are not documented and not through formal sector, in other words it is due to the lack of confidence on the financial intermediation. Savings in public and private sector are components of national saving. In Pakistan, savings in public sector (government



savings and public sector enterprises savings) contribution to national savings is always minimum it's remained round about 1.0 to 1.9% during 1990 to 2019, this happens with public savings is due to poor financial performance. Private savings (household and corporate savings) have also shown a fluctuating trend in Pakistan but it is the primary source to support the economy, household savings play an important role to make bigger private savings which are 90% of private savings. The distinction between individual and household savings is referred to as corporate savings.

This study is very valuable because Pakistan is a developing country and the scarce resources of Pakistan are not efficiently utilized. Domestic and foreign investment decreases, external debt on Pakistan is also very high and still we are looking Aid to finance our developing projects. With the help of efficient and well organized financial sector, Pakistan can generate finance for development of their own home.

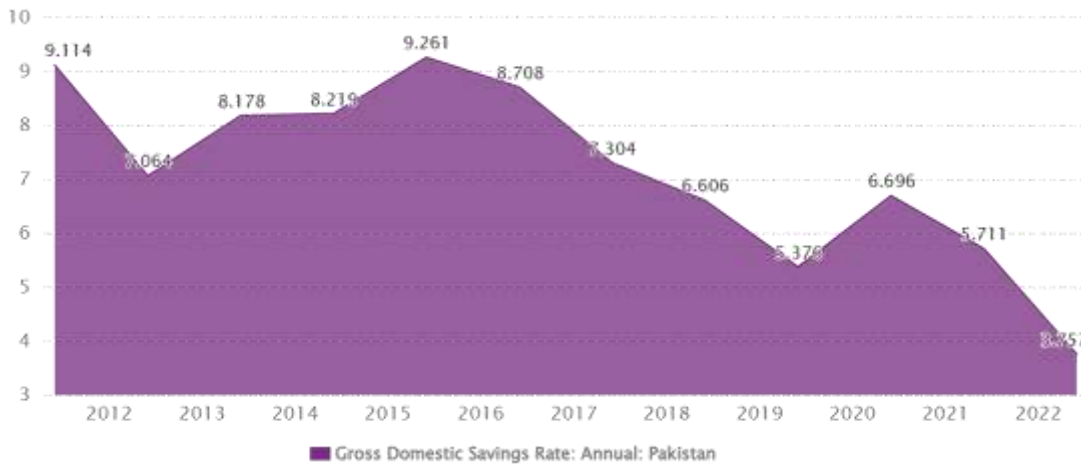
**Key information about Pakistan Gross Savings Rate:**

According to Pakistan's Economic Survey, the Gross Savings Rate for Pakistan was 3.8% in June 2022, which remained unchanged from the previous year. This rate is revised annually, and the data is presented during June 2000 to June 2022. Average saving rate for this period was also 3.8%. The Gross Domestic Savings Rate is calculated by subtracting the Consumption Expenditure from the Nominal GDP.

The PBS includes nominal GDP statistics in local currency and expenditure data in local currency, both of which are based on SNA 2008 with 2015–2016 serving as the benchmark year. In June 2022, the GDP deflator—a measure of how quickly prices is rising—rose by 13.0%. A low Gross Savings Rate may hinder the country's ability to finance in long-term projects along with may result in weaker economic growth.



Figure 2  
Gross Domestic Saving Rate

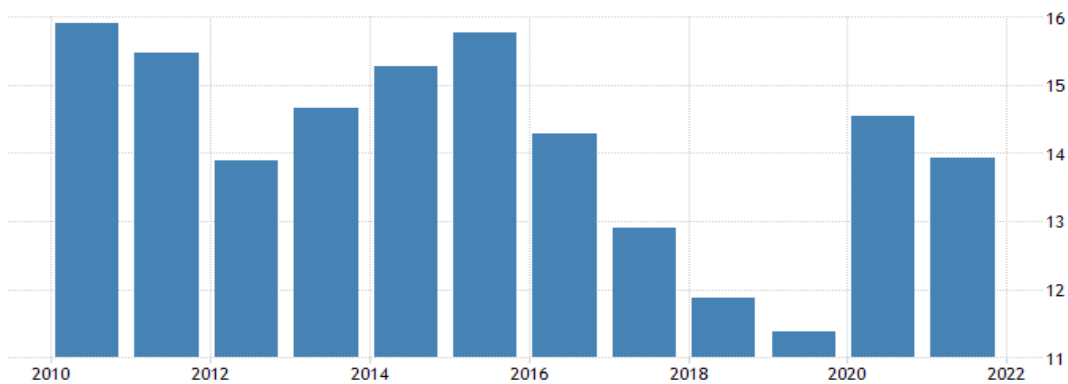


Source: World Bank

The percentage of gross savings in Pakistan was 13.92% of GDP in 2021, according to the World Bank. The data on Pakistan's gross savings were obtained from officially recognized sources and compiled into the World Bank collection of development indicators, which includes actual values, historical data, forecasts, and projections.

Figure 3

Gross Savings (% of GDP):



Source: World Bank

### Research Questions and Hypothesis:

The analysis examines the impact of financial sector development and savings in Pakistan's economic development. The core research questions are as followings;

- Does financial sector development affect Economic Development?



Pakistan is a developing country, unemployment, miss-utilization of resources, lack of investment and poverty are the major economic issues and hurdle to Development of Pakistan. These issues can be solved through the two important portions of domestic resources that are financial sector and Savings, which can play a vital role to reduce all these hurdles through various direct and indirect ways. Sustainable Economic Development can be achieved by promoting financial sector, mobilizing savings, easy access to credit, consistency in policy implementations and political stability.

- Is there any direct relationship among financial sector, savings and Economic Development?

Sound and developed financial sector can efficiently utilize the scarce resources of the economy. One of the very significant along with key functions of the financial sector is to improve Pakistan's Development by means of savings. When savings increases and utilize into a productive investment projects, as a result saving investment gap shrinks, it expends the businesses which creates more job opportunities, more investment in human capital and smoothing the consumptions of poor's and improve the access to credit. Thus there is a possibility that there is positive association among financial sector and savings.

- What is the effect of financial sector development and savings on Pakistan economy?

Pakistan is a developing country and it has a lot of potential to develop with the help of home resources. Financial sector and savings can efficiently utilize the scarce resources of Pakistan. Financial sector provides better financial services to households and firms for better investment and consumption purposes. Financial institutions providing and transferring funds from savings to borrowers which can used for the production of capital goods. Mostly financial sector and savings affect positively Pakistan's economy. These effects could be direct in a sense that financial sector reduced poverty, providing employment opportunities, mobilize savings and issuing loans and funds to governments, firms and household.

### **Significance of Study**

There are numerous factors that make Pakistan a useful case study. As Pakistan may be a creating nation, and the current financial circumstance in Pakistan isn't so great, however Pakistan has a variety of ability to improve its economic condition because of its natural assets and the perfect geographic allocation for domestic and overseas investment. Financial development results in a higher rate of financial growth in Pakistan through increasing the quantity of financial savings and



investment. This study is most crucial in offering the information to government and coverage makers to improve the financial development of Pakistan thru economic area improvement and financial savings mobilizing.

### **Objectives of Study**

This study aims to investigate the relationship between Pakistan's financial sector development, savings, and economic growth. This study intends to make a significant contribution to the current literature on the subject matter in Pakistan.

- To analyze inter-determinants of financial sector's development, savings and Economic Development in Pakistan.
- To analyze how the financial sector affects the Economic Development of Pakistan.

### **Literature Review**

In past various economists, researcher, and departments all around the world have analytically examined the association in financial sector development, savings and Economic development. Several research studies shows different Empirical results, difference in results are mainly due to different types of data, variables, models, techniques, socioeconomic structure, economic situation and behavior of household and government in the economy. Patrick Honohan (2003) investigation which is based on data from different developed and underdeveloped countries the topic, Correlation between development in financial sector, growth in economy and poverty, thy also found the poverty ratios and finance-intensive growth are empirically associated each other while only financial depth is an insignificant measure of financial development.

Agrawal et al. (2009). Studied savings behavior of Pakistan, India, Bangladesh, Srilanka, and Nepal. Study shows high access to banking facilities to every individuals of the economy and especially to the poor in rural areas generates higher domestic Savings. Studies also show that foreign savings can reduce national saving and it must be reduced by government. Ehigiamusoe, K. (2019) find out the purpose of this research is to look at the influence of macroeconomic stability on financial development in West Africa. The Maastricht Criteria's five indicators are used to measure macroeconomic stability: inflation rate, real exchange rate, government debt,





fiscal deficit, and real interest rate. The study demonstrates that macroeconomic stability has a major influence on financial growth in the region, with inflation, real exchange rate, and fiscal deficit having negative effects, and government debt and real interest rate having positive benefits, using dynamic models using panel data. This research demonstrates that macroeconomic stability indicators are important predictors of financial progress. As a result, emerging economies should strive for macroeconomic stability in order to support financial development and long-term economic progress.

Guru et al. (2019) explore the correlation between financial progress and economic expansion for the BRICS nations during the span of 1993-2014, utilizing measures of banking industry and stock market progress. The research discovered that the enhancement of the banking sector and the improvement of stock markets supplement each other in encouraging economic growth, and decision-makers should concentrate on the coexistent development of both sectors. The research bridged the void by examining developing economies and employing both banking and stock market measures.

Kotiso, M. S. (2019) investigate the importance of financial sector for Ethiopian's economic growth. The Ethiopian financial sector does not meet the economy's needs adequately, and many of the country's economies have not effectively mobilized their domestic financial resources. These issues are partly due to the financial sector's underdevelopment (including capital markets, banks, and other financial institutions) and the presence of unsound economic strategies and ineffective bodies in the country.

Marek Maciejewski & Głodowska (2020) investigate the financial and economic comparison, studies have shown that countries with main economic development level, there is no cause to claim that the side-by-side development in financial sector is too high, while economic growth is slowing down in the sector. Algaeed, A. H. (2021) analyzes the impact of capital market developments on Saudi Arabia's per capita GDP growth from 1985 to 2018 using ARDL models. He found the negative effects of market capitalization and liquidity, while stock indices and stock trading had a positive effect on GDP growth. Granger's causality test was not significant, but the stock market index was significant at 5%. The study recommends that the Capital Markets Authority create a roadmap for deepening capital markets and promoting economic growth.



Thathsarani et al. (2021) find out the financial inclusion's role in South Asia economies. Governments in emerging economies are showing growing interest in promoting financial inclusion as a crucial plan for attaining economic expansion and other developmental objectives. This research using secondary data for eight countries of South Asia from 2004 to 2018 to create metrics for measuring financial inclusion and its impact on public capital development as well as economic, social, and environmental sustainability. Governmental efforts to enhance access to financial services, including digital finance, could accelerate progress towards South Asia's Sustainable Development Goals.

Wen, J. et al. (2021) investigate the influence of financial development on important economic variables such as economic growth, inflation, and employment is examined in this study using a panel of 120 countries between 1997 and 2017. The study makes use of four distinct economic development proxies: private region credit, liquid liabilities, cash and quasi cash, and financial institution credit. The findings of this study appear to contradict the standard supply-lending concept, indicating a weak link between monetary development and economic growth. Moreover, monetary development was revealed to be inextricably linked to both inflation and employment growth. According to the findings, there is an urgent need to improve and reform financial intermediary supervision in order to ensure the implementation of good prudential lending practices. Furthermore, it is advocated that more credit be given to extremely efficient firms.

Batool et al (2022) explore the development of financial sector by analyzing the role of remittances on economic growth in Pakistan. The crucial role of remittances in supporting impoverished families is widely acknowledged, the establishment of a well-operating banking system is also considered essential in boosting migrant remittances by reducing costs and enhancing service accessibility. Through the application of the ARDL methodology, the study demonstrates the corresponding functions of both remittances and the financial sector in the short and long term by using time series data from 1980-2020. Nguyen, T. A. N. (2022) find out the link between financial development, human resources, and economic growth in 25 transition countries from 1995 to 2019. Using various methods, the study found that financial development and human resources had a positive effect on economic growth, with financial access and efficiency being particularly important. Human development was identified as a significant



driver of economic growth, and the interaction between aggregate financial development and human development index was a robust catalyst for economic growth. These findings provide valuable insights for policymakers in transition economies.

Radmehr et al. (2022) examines how economic growth in 62 countries from 1995 to 2016 was impacted by trade liberalization, foreign direct investment (FDI) and financial progress. Low-income countries showed good correlations with long-term economic growth, while high-income countries experienced good relationships between trade liberalization, FDI, capital, and economic growth. The study suggests that promoting access to a skilled workforce and international trade can foster sustainable economic development.

### **Description & Statistics**

In order to choose appropriate variables for our analysis, it is an important task to have a clear understanding of what monetary sector's growth involves and which factors are most appropriate in this growth. In this chapter, we'll investigate these points in detail.

### **Definition of Financial Sector Development**

This refers to the progress and development of the monetary system in a country that can encompass the improvement of economic markets which include stock and bond markets, in addition to financial groups like banks and insurance businesses. The ultimate aim of monetary area development is to create a green and stable financial system that helps monetary growth and development.

### **Empirical Measures of Financial Development**

Selecting a suitable empirical degree of financial development remains critical when researching the relationship of both financial and economic development. Many indicators have used here as proxies for measuring financial sector development.

### **Financial Intermediaries**

Beck et al. (2012) recommended measures to determine dimensions and operations of monetary arbitrators and different economic organizations to GDP, and the ratio of liquid liabilities to GDP. In any economic system, there are each formal and informal monetary institutions that offer a variety of services to companies, consumers, and different monetary entities, including



banks, insurers, microfinance providers, inventory exchanges, creditors, credit unions, and wholesale and retail offerings. Indicators for financial sector development can be assessed in several ways, such as a rise in the number and structure of financial institutions, instant availability of finance, improving efficiency, competitiveness, and regulation and greater integration into the international financial market.

### **Stock Market**

The stock marketplace is a massive player in promoting long-term financial increases, and developing them may make contributions to such growth. Several studies have shown that globally incorporated stock markets, which allow worldwide threat-sharing, can enhance useful resource allocation and accelerate growth. Similarly, stock markets can facilitate investments in efficient technologies and function as a low-cost means of mobilizing sources.

### **Stock Market Capitalization Ratio (MCR):**

The value of all listed shares divided by GDP constitutes the stock market capitalization ratio. Because of its less biased nature, this indicator is often regarded as the most useful for evaluating the stock market. This indicator, according to the theory behind it, is progressively correlated with risk diversification and capital raising across the entire economy (Yartey, 2007).

### **The Model**

We identify three equations model, these equations are developed for Financial Sector Development, savings and Economic Development.

#### **Model: 1**

$$FSD = f (EX, INF, i, ED)$$

Whereas, FSD represents financial sector development, EX represent Exchange rate, INF represents Inflation rate, i represents interest rate ED represents Economic development.

#### **Model: 2**

$$NS = f (INF, REM/GDP, i, FSD, ED)$$

Whereas, NS represents National savings, INF represents Inflation rate, REM represents Workers remittances as a ratio to GDP, i represents interest rate, FSD represents financial sector development, ED represents Economic development.

#### **Model: 3**



$$ED = f(\text{FSD}, \text{NS/GDP}, \text{FD/GDP}, \text{TO/GDP})$$

Whereas, ED represents Economic development, NS represents National saving as a ratio to GDP, FD represents foreign direct investment as ratio to GDP, TO represents Trade openness as a ratio to GDP.

### Econometric form of Models:

#### Equation 1:

$$\text{FSD} = \alpha_0 + \alpha_1 \text{EX} + \alpha_2 \text{INF} + \alpha_3 i + \alpha_4 \text{ED} + \mu$$

#### Equation 2:

$$\text{NS} = b_0 + b_1 \text{INF} + b_2 \text{REM} + b_3 i + b_4 \text{FSD} + b_5 \text{ED} + \epsilon$$

#### Equation 3:

$$\text{ED} = \delta_0 + \delta_1 \text{FSD} + \delta_2 \text{NS} + \delta_3 \text{FD} + \delta_4 \text{TO} + v$$

### Data and Sources:

We use annually time series data for Pakistan since 1980-2022. The sources of data are,

- International Financial Statistics (IFS)
- World Development Indicators (WDI)
- State Bank of Pakistan (SBP)

### Definition of variables & Sources:

**Table 1**

Variable Def & Source

VARIABLES	DEFINITION / CONSTRUCTION	UNIT	SOURCE
REM=Worker Remittances	Remittances refer to the share of income earned by migrants that is sent back to their home country in the form of funds or goods, with the primary purpose of supporting their families. (REM/GDP*100)	Percentage	WDI
I= Interest rate	Interest rate refers to the percentage at which money is either charged or paid for its use.	Percentage	IFS
FSD=Financial sector development	The financial sector is a segment of an economy that primarily consists of money markets, banking institutions, and brokers. (M2/GDP*100)	Percentage	WDI



NS=National Savings	It denotes all income not consumed, publicly or privately, during a given period.	Percentage	WDI
EX=Exchange Rate	The exchange rate is the value at which one currency can be traded or converted into another currency.	Percentage	SBP
TO = Trade openness	$(\text{Export} + \text{import})/\text{GDP} \times 100$	Percentage	WDI
INF=Inflation	it refers to rate at which the overall prices of goods and services in an economy are increasing.	Percentage	SBP
ED=Economic Development	Economic growth is the sustained increase in a country's real national income over an extended period of time.	Percentage	WDI
FD=Foreign Direct Investment	Foreign Direct Investment (FDI) as a percentage of GDP is a measure that indicates the level of investment made by foreign entities in a country's businesses and industries relative to its overall economic output.	Percentage	WDI

### Methodology

We have used a simultaneous equation model and employed the order and ranking conditions for identification in each equation. We found that all equations are over-identified, and the appropriate estimation method in econometrics is the 2SLS method.

#### Two stage least square method:

The 2SLS method is a statistical technique used to estimate a linear regression model when there is an association between independent variables and error terms, which can result in inconsistent and biased estimates. In econometrics, unobserved factors can affect the variables of interest, making the use of instrumental variables (IVs) necessary to ensure accurate estimates. Contrary to the error term, these IVs have a correlation with the independent variables.

The 2SLS method involves a two-stage process. In the first stage, the IVs are used to estimate the values of the independent variables. After this, we estimate the linear regression model for the dependent variable.

This method has several advantages, including its ability to handle non-linear and interaction effects, robustness to small sample sizes, and no distributional assumptions for independent



variables. In addition, the 2SLS method is preferred over ordinary least squares (OLS) when there is an omitted variable and error in variable problems, and when the model is over-identified.

### Results and Discussion-

#### Results of 2SLS:

#### Results of Equation 1:

$$FSD = \alpha_0 + \alpha_1 EX + \alpha_2 INF + \alpha_3 I + \alpha_4 ED + \mu$$

**Table 2**

Result of Equation 1

Variable	Coefficients	std. error	t-Statistic	prob
C	1.072164	0.296096	3.395051	0.0038
EX	-0.325782	0.118583	-4.414035	0.0012
I	-1.750945	1.743641	-0.760753	0.3079
INF	-3.102620	0.235206	-3.480582	0.0059
ED	0.540730	1.225409	0.299099	0.8183
R-squared	0.830781	Mean dependent var		0.176405
Adjusted R-squared	0.901650	S.D. dependent var		0.105868
S.E. of regression	0.125701	Sum squared resid		0.198804
F-statistic	7.062180	Durbin-Watson stat		2.501001
Prob(F-statistic)	0.002390	Second-Stage SSR		0.499088

According to our findings, our model explains 79% of the total variations, as indicated by the F statistics, which also demonstrates the model's joint significance and goodness of fit. The R<sup>2</sup> value also confirms that a significant proportion of the variations are explained by our model. Additionally, suggesting that our model is the best fit. Furthermore, the Durban-Watson statistics shows there is no auto-correlation in our model, with a value of 2.45.

We find out that a 1% increase in inflation results in a 3.28% reduction in economic development, and the chance value of zero.0039 indicates that inflation significantly affects financial development. This is due to the truth that changes in prices create uncertainty amongst



traders about their destiny income, which can cause confusion and in the end reduce investment levels, resulting in a decline in financial development.

Finally, the negative coefficient value of the interest rate signifies that a better interest rate is detrimental to the economic development of Pakistan. The cause for the negative link between actual interest rates and economic development is that when real interest rates rise, people choose to store their money in banks rather than invest it. This drop in investment may eventually lead to a drop in economic activity.

### Results of Equation 2:

$$NS = b_0 + b_1 INF + b_2 REM + b_3 I + b_4 FSD + b_5 ED + \epsilon$$

**Table 3**  
Result of Equation 2

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.170836	0.029384	4.290700	0.0004
REM	0.192701	0.441607	0.470949	0.5028
FSD	0.020963	0.028276	0.393013	0.7019
INF	-0.394094	0.198181	-2.791075	0.0103
I	1.309756	0.790828	2.183664	0.0513
ED	0.270952	0.299038	1.812023	0.1726
R-squared	0.570961	Mean dependent var		0.190396
Adjusted R-squared	0.209573	S.D. dependent var		0.012092
S.E. of regression	0.065927	Sum squared resid		0.006075
F-statistic	3.020900	Durbin-Watson stat		1.812107
Prob(F-statistic)	0.051802	Second-Stage SSR		0.008049





The findings reveal that our model accounts for 59% of the total variation. However, with a probability f-statistic of .05, the model is not the best fit. The DW statistic (D. W= 1.98) suggests no evidence of autocorrelation.

Notably, the calculated GDP growth coefficient demonstrates a substantial impact on the savings rate, with a positive sign indicating a positive relationship between output and savings. These results align with the Keynesian theory, which posits that a country's savings depend on its production level. Modigliani's work also supports this, as he found that a simple life cycle model could predict higher growth due to increased savings.

In addition, negative signs of inflation indicates an inverse link between savings and inflation. However, the prob value (0.0123) suggests that inflation's impact on savings is insignificant. When prices are high, people may have to pay more for goods and services, leading to a decrease in savings.

### Results of Equation 3:

$$ED = \delta_0 + \delta_1FSD + \delta_2NS + \delta_3FD + \delta_4TO + v$$

**Table 4**  
Result of Equation 3

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.089191	0.029184	2.25913	0.0209
NS	0.201594	0.039801	2.12099	0.0395
FSD	0.329011	0.631432	0.51278	0.7022
TO	0.210791	0.190426	3.73824	0.0022
FD	-0.687321	0.720834	-0.29135	0.0291
R-squared	0.901109	Mean dependent var		0.049201
Adjusted R-squared	0.909121	S.D. dependent var		0.016115
S.E. of regression	0.004101	Sum squared resid		0.001414
F-statistic	92.41061	Durbin-Watson stat		1.593019
Prob(F-statistic)	0.000000	Second-Stage SSR		0.001316



Our analysis indicates that our model accounts for 96% of the total variations, suggesting that it is the best fit for the data as evidenced by the probability f statistics of 0.00. Furthermore, the Durbin-Watson statistic of 1.96 suggests that no auto-correlation in our model.

Our study's findings support the concept that there is a satisfactory link among savings and economic development in Pakistan. Statistical examination, however, suggests that this link is not significant, as highlighted by P value of 0.039. A 1% increase in trade openness or inflation results in a 210.1% increase or a 329.9% increase in economic development, respectively. The study also revealed a significant relation among economic growth and both financial development and trade openness.

### **Conclusion**

Using time series data from 1980 to 2022, our goal is to examine the impact of Pakistan's financial sector development and savings on its economic growth. We have used a simultaneous equation model, first established by Deger and Smith (1986), to explore this effect. This model captures both the direct and indirect effects of Pakistan's financial sector expansion on the country's economic development.

Our analysis reveals several relationships in our estimations of these equations. Financial sector development is positively affected by interest rates and economic development, but negatively impacted by exchange rates and inflation rates. The saving ratio is positively influenced by foreign remittances, financial sector development, interest rates, and economic development, while negatively associated with inflation rates. Finally, Pakistan's economic development is positively influenced by savings rate, financial sector development, and trade openness, but negatively impacted by the fiscal deficit.

Our investigation and analysis demonstrate that financial industries' development has a positive change in the economic development. The financial sector and savings are crucial components of financing domestic resource development, highlighting the strategic importance of the financial sector in economic development.



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