

# The Influence Of Financial Development And Structure Of Economic Growth: A Critical Analysis For Market Evaluation Of Pakistan

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## Abstract:

This study looks at the empirical relationship that is measured by the weighted sum of structural activity and structural size in between long-run growth and financial structure. We discovered that, in the context of economy of Pakistan, the financial structure substantially explains output levels and that this is a proxy which is positively connected with growth. We contend that the latter conclusion comes from financial liberalization in an inadequate regulatory framework. Our results also demonstrate that efficiency rather than volume is the primary means of transmitting financial development to growth. Additionally, we investigate a number of theories on the potential impact of financial development and structure on economic growth. Overall, the results of our research suggest that economic growth and output levels are influenced by financial development and structure. But our research goes a step further and suggests that the relationship between financial development and economic growth is most noticeable at lower income levels, meaning developing nations like Pakistan stand to gain the most from the expansion and improvement of the financial sector. However, it's also critical for supporting institutions to play a complementary role in regulating and aiding Pakistan's financial structure development.

**Key words:** Financial, Growth, Development, Analysis, Pakistan.

## Introduction:

The idea that long-term economic growth requires an effective, well-functioning financial system is supported by a substantial corpus of theoretical and empirical research. (Asghar et al. 2012) discover that physical capital which comprises of machinery, equipment, and infrastructure has a major impact on economic growth. They found that Pakistan's GDP growth is favorably and strongly impacted by physical capital. Physical capital investments boost economic growth because they raise output and productivity. In their investigation of economic growth in Pakistan, (Munir & Arshad, 2018) discovered that human and physical capital had a

positive and statistically significant impact on economic advancement. These findings are consistent with the theoretical narrative, which emphasizes investments in people and physical capital.

He conducted another empirical investigation to examine the impact of human and physical capital (Sarwar, 2021). They looked into the various educational levels and how each affected Pakistan's economic growth and economic development.

Almost a century ago, (Schumpeter, 1911) contended that the banking system's financial intermediation, which affects how savings are allocated, is essential to economic growth,

productivity, and technological advancement. The modern financial theory places a strong emphasis on the intermediary role that borrowers and savers play in mobilizing savings, allocating capital funds, overseeing the use of funds, and controlling risk—all of which contribute to the process of economic growth (Levine, 1997). This study aims to investigate the factors influencing Pakistan's economic growth and under observation 1972 to 2021, this study looks at the causal relationship between economic variables and growth, where it employed labor force, bank credit, physical capital stock, human capital, exports, and imports are among the model's key determinants. Utilizing the Autoregressive Distributed Lag (ARDL) model allowed for the accomplishment of the study's goals. Long-term co-integration between the variables was discovered by the study. It was discovered that human and physical capital both have a statistically significant positive impact on economic growth. As a result, rather than being alternatives to economic progress, both are complementary. According to the study, bank lending, exports, imports, and the labor force in employment had no bearing on economic growth. It implies that export promotion and import substitution are ineffective strategies for achieving desired targets (Ahmed & Shaikh, 2023). Econometric analysis had been a major component of the empirical study of the relationship between financial development and economic growth (King & Levine 1993). The results of (King & Levine, 1993) are typical of this literature group. Physical capital accumulation, improvements in economic efficiency, and faster rates of current and future economic growth are all strongly and robustly correlated with higher levels of financial need development. Finance does not follow; growth finance appears to play a major role in driving economic growth. It is noteworthy that investments in public infrastructure, as opposed to those in private infrastructure, usually have a

greater impact on the results in many scenarios. The research's conclusions have significant policy ramifications for gauging the impact of sector-specific regulations and creating an environment that encourages private investment. One of the main reasons Pakistan was chosen as the main research subject was the significant public funding invested in infrastructure renovation and improvement, which is being done in collaboration with China.

(Javed, 2021) investigated the relationship between infrastructure investment and economic growth in Pakistan using empirical studies utilizing disaggregated data, including the country's overall economy as well as specific sectors. The writer conducted a comparative evaluation of several forms of infrastructure investments. This study established a differentiation between investments made by the public and private sectors as well as those made in specific subsectors including telecommunications, power, and highways. The study addressed the problem of reverse causality by utilizing the fully modified ordinary least squares technique. The evaluation of the long-term relationship between infrastructure spending and economic advancement also made use of the FMOLS technique. According to the study's findings, public and private infrastructure investments are statistically and positively significant for output determination.

For more than a century, people have debated the relative benefits of market-based versus bank-based financial systems. Still, there is very little agreement on a theoretical level. Rival theoretical frameworks either declare financial structure to be unimportant or assert the superiority of one kind of financial system over another.

On the one hand, some, like (Stiglitz, 1985), contend that the market-based system is inferior than the bank-based one. (Levine, 1997), (Boyd & Smith, 1998), and other authors, on the other hand, make the opposite suggestion. However,

(Levine, 1997) contends that the delivery of comprehensive financial services—rather than the banks or the markets—is what really matters in fostering growth.

The rate of economic growth is significantly influenced by the employment situation in a given market. A proficient and productive workforce raises overall productivity and acts as a spark for future economic growth. (Asghar et al. 2012) looked at the connection between the number of workers employed and the volume of output in a different study. An important positive association has been found by the investigation between Pakistan's economic growth and the percentage of its labor force that is employed. The results of the study suggest that enacting laws intended to boost labor productivity and broaden employment opportunities may benefit the growth of the economy. (Gonzalez et al. 2022) looked closely at Philippine economic growth indicators in other regional studies.

### **Research Questions:**

- i) What is impact of financial services on output?
- ii) What is impact of physical capital on output?

### **Literature Review:**

The Philippines' economy was examined, and it was found that trade volatility and economic growth are strongly correlated with each other. Based on an analysis of the core components using statistical and economic techniques, the task was completed, and it was determined that many economies throughout the world should be experiencing a good trend (Gonzalez, 2022). By examining many key economic determinants, the impact on Pakistan's economy was examined, with particular attention paid to the education system and other issues that reduced the ratio of students to economic performance (Haider et al., 2022). The study conducted a comparative

analysis based on human and physical capital to establish sustainable economic growth at various economic stages.

(Datta, 2021) uses a regional panel data analysis to investigate the relationship between commercial bank loans and per capita GDP in Pakistan. The study's findings suggest that bank loans and economic growth are significantly correlated. This suggests that banks' provision of financial resources facilitates the accumulation of savings and increases the formation of capital, both of which advance the economy. The distribution of loans among various private sectors has a notable impact on the economic growth of Pakistan. The purpose of this study was to examine Pakistan's economic growth rates at the sectoral and sub-sectoral levels, with an emphasis on the connection between credit and the banking industry.

Similar results are reached by the (World Bank, 2001), which asserts that each can complement the other: both the development of banking and of market finance help economic growth. However, (Arestis et al. 2001) offer proof of the advantages of bank-based systems, which has obvious consequences for emerging markets. As previously mentioned, it is acknowledged that institutional structure may still have an impact on growth even when economic performance is obedient to financial structure (Demirguc- Kunt & Levine, 2001). Another possibility is that financial structure is determined by economic structure,

in a more recent study, (Allen et al. 2006) discovered that economic structure actually determines

the level of output in any economy.

The progress theory literature suggests that human capital, or the education, training, and knowledge of the labor force, is what propels economic progress. Growth is more boosted by human capital than by physical capital. Cross-country analysis was utilized by (Mankiw et al. 1992) to assess the relationship between human

capital and economic growth. A country's rise in per capita GDP is positively correlated with the number of students enrolled in school, following the findings of a study done in (Bils & Klenow, 2000). Additionally, (Abbas, 2001) attests to the impact of human capital on economic growth. (Mujahid et al. 2014) state that enrollment in school, health, and physical capital are key factors in Pakistan's economic growth. Awan and colleagues in the year 2021 underscore the importance of human capital accumulation and its impact on national living standards.

However, a reevaluation of the Japanese financial sector's role in light of the 1990s economy's underwhelming performance has come to the contrary of the advantages of a bank-based system. Because banks charge their corporate clients rent, a company's cost of funding may increase if it relies too heavily on banks (Weinstein & Yafeh, 1998).

Research from the US and the UK (Wenger & Kaserer, 1998; Levine, 1997) focuses on the function of market takeovers as corporate control tools and ends up endorsing market-based financial systems. Nonetheless, (Goldsmith, 1969) contends that these comparisons between Germany and the UK between 1864 and 1914 don't add anything to the discussion since one cannot easily assert that a superiority in the German financial structure was responsible for the loss of output in that times.

According to recent research on economic growth, trade openness strengthens the economy. In the empirical literature, trade and economic growth have been the subject of much research. (Dollar & Kraay, 2004) found that trade and globalization had a favorable impact on poverty reduction in the economic structure under analysis and economic growth.

Economic growth and globalization are examined

by (Sachs et al. 1995). The study looks into the relationships between economic development, trade liberalization, and periods of economic crises. The research findings demonstrated the importance of trade liberalization in the broader trend of globalization. The impact of trade liberalization on the economy of Pakistan is examined by (Ali & Rafiq, 2019). To determine how open the economy was to trade, the researchers used the trade-to-GDP ratio as a stand-in measure.

(Beck & Levine, 2002) tested the hypothesis of whether financial structure promotes the growth of industries that rely extensively on outside financing disproportionately, using a panel of 42 nations and 36 industries. Their primary hypothesis is not supported by their findings. Financial structure metrics don't seem to have much of an impact on the development of new businesses, industrial expansion, or effective capital allocation. Sectoral industrial growth, or the expansion and rate of new establishments of labour- and R&D-intensive businesses, is also not explained by financial structure. On the other hand, all of these factors are substantially explained by measures of general financial development and the effectiveness of the judicial system. (Demirguc-Kunt & Levine, 2001) bring together several studies on financial structure and economic growth as well as a new cross-national database.

Economic growth is the increase in a region's value of output of goods and services over a specific period of time. The Gross Domestic Product (GDP) change as a percentage is the most commonly used indicator of economic growth. As economic growth has been studied more and more, a variety of theories and models have been developed to try to explain its dynamics and drivers. Economists and policymakers alike have paid close attention to Pakistan's economic progress. There have been significant swings in

the nation's economic performance, with times of fast expansion and times of stagnation. Because of this, understanding Pakistan's economic growth is crucial for investors, policymakers, and the advancement of the country as a whole in the face of the economy's frequent boom-bust cycles. One of the oldest and most significant ideas in the study of economic growth is the neoclassical theory of economic development, which Robert Solow first presented in the 1950s (Solow, 1956). According to the theory, advancements in technology and capital accumulation are crucial for propelling economic growth. According to the neoclassical growth hypothesis, persistent economic growth can result from advances in technology and capital assets. (Romer, 1990) then presented the endogenous growth hypothesis, another important theory of economic growth.

According to this view, innovation and human capital are both important drivers of economic progress. This idea maintained that technological change is endogenous, not exogenous, as opposed to exogenous growth theory.

Using the ARDL model for long-term integration between basic variables, it is analyzed for the Pakistani economy that the fundamental determinants and economic growth are closely tied to exchange rate and other core economic parameters (Ahmed & Salman, 2024). According to research, the interest rate and other fundamental parameters for the development of the relationship between the interest rate and other fundamental economic factors of foreign direct investment, gross capital formation, and industrialization with employment opportunities in Pakistan have worked for the impact of FDI on employment in Pakistan (Khan et al., 2023). It is based on trade liberalization and trade performance, taking into account the rise of the global economy and the constructive regulation of human capital.

According to Majeed et al. (2019), there was appropriate work done on the banking sector's credit and growth performance, providing empirical evidence of credit to households and various other enterprises for the Pakistani economy. This led to the belief that positive economic decision-making could be achieved through proper working and exchange of goods and services. Human capital was combined into a physical base or working base by a variety of elements for trade accumulation and economic expansion in Pakistan, which led to the right decisions being made both short- and long-term (Munir et al. 2018). The foreign exchange market is a highly organized marketplace that exchanges currencies between several nations at either a group or individual rate for banking purposes.

Certain hedging and speculation-based methods may have an effect on the purchasing and selling of currencies. Additionally, it is examined that the foreign exchange market is the biggest financial market in the world and the most liquid one for the international sale of goods and services under various spot prices, future prices, and other risks to the market's performance that could reveal opportunities or losses related to the financial system's inherent unpredictability (Raksong & Sombatira, 2021). It looked at how trade liberalization affected the economy of Pakistan. The trade-to-GDP ratio served as a proxy for the researchers' evaluation of how open the economy was to trade.

The study found that trade liberalization has little impact on Pakistan's economic growth.

According to the authors, trade-advantaged and highly competitive economies are the only ones that benefit from policies that encourage exports, diversification, and liberalization (Ali & Rafiq, 2023). They calculated the results in both the short- and long-term analyses, finding that trade openness increases and decreases poverty.

Nevertheless, conflicting results have been found in a number of empirical studies examining the relationship between trade openness and economic growth, especially when emerging countries with erratic development patterns are taken into account (Santos, 2016).

The concept of exchange rate was classified by various economists based on floating and fixed exchange rate systems; however, the work of the Central Bank system of any country may manage for the determination of demand and supply in the economy (Hassan & Dantama, 2017). Exchange rate is a macroeconomic variable that has some important effects on the microeconomic variation of daily life activities. The analysis also reveals that the foreign exchange market arrangement between two or more countries may exhibit distinct behavior based on the currencies of those countries relative to other currencies. However, it is crucial to acknowledge that there exists a specific advantage on international borders regarding the actual movement of goods and services (Raksong & Sombathira, 2021).

There is a proper relevance of a certain economy that can influence the assessment of an economy's health. This assessment is based on the inflation rate and interest rate, which can both influence the exchange rate in an economy by directing the quantity and quality of a country's imports and exports in relation to other nations. However, it is analysed so that if one country's price changes in relation to another, it may affect other nations, but it should be analysed for the purpose of promoting import substitution policies and exports (Nguyen et al., 2021).

The primary characteristic of the contemporary foreign exchange market is its centralization and organisation, which facilitates the buying and selling of various currencies for worldwide foreign exchange dealers in order to maintain the smooth operation of the global economy

(Beckmann and Czudaj, 2022). There isn't a single physical market where people exchange money; instead, there is a foreign exchange market with proper market organisation where people can trade currencies online using electronic platforms that facilitate interbank transactions and have a global reach (Dung and Okereke, 2022). The idea of exchange rates differs from other rates because they are an integral part of the nation's economic basis and must be adjusted whenever one currency is exchanged.

In order to improve the state of the economy's balance of payments, it is more important to consider how the rate of exchange may be used to determine the availability of money in any economy and the ability to determine finance based on various transactions across international borders (He et al., 2021). According to some, the rate of exchange is calculated for various policies and strategies, possibly for various civilizations, in conjunction with the creation of a policy for the system's affairs to be regulated (Fathia et al. 2021).

It is considered that volatility has a negative impact on statistical economic data related to international trade. It also has an adverse effect on the balance of payments, which is counterproductive when combined with rising inflation and interest rates. Additionally, red volatility has an impact on plans for growth and development that address issues such as rising youth unemployment and the general caste of living, which together contribute to the reduction of poverty in various economies across the globe (Ali et al., 2022). The term "inflation" is typically used to describe changes in consumer retail prices; however, official market exchange rates, which are based on buying and selling and are connected with exchange rates for volatility, are what actually assist (He et al. 2021).

According to Dantama (2017), there is a feeling that when two countries trade, they are trading in a policy for volume losses without speculating. It is argued that there is no guarantee for a strategy of operation for the foreign exchange market in which normal losses are abnormal losses for the best traders wear sometimes it is encountered for the situations of trading for different profits which are maximised into trade with large volume. It is widely acknowledged that the electronic marketplace for various currency types can be traded with exchange rates based on the level of liquidity in the foreign exchange market, which is typical with high volatility because there are many dealers in the financial market.

### Model and Methodology:

The Philips-Perron (PP) and Augmented Dicky Fuller unit root tests are used to determine whether there is a long-term link between the study's variables (ADF).

$$Y = FD + KP + FS + \mu$$

Where,

Y = Output

FD = Financial Development

KP = Capital Formation

FS= Financial Structure

$\mu$  = Error Term

The official sources of government of Pakistan, the State Bank of Pakistan, the handbook of statistics on the Pakistani economy, and the Pakistan Economic Survey are the sources of all the data sets used in this study, which spans the years 2000 to 2023.

### Estimation and Results

The Philips-Perron (PP) and Augmented Dicky Fuller unit root tests are used to determine whether there is a long-term link between the study's variables (ADF).

**Table No 1: Stationarity of Results**

Variables	ADF test statistics				PP test statistics			
	I(0)		I(1)		I(0)		I(1)	
	C	C & T	C	C&T	C	C&T	C	C&T
FD	-2.22	-2.31	-3.31	-2.13	-2.60	-3.12	-2.21	-2.29
KF	-0.12	-2.71	-3.26	-2.51	-0.17	-3.71	-2.31	-3.91
Fs	-0.02	-1.31	-3.02	-2.91	-0.05	-2.51	-2.01	-2.10
Y	-2.21	-2.11	-1.12	-3.12	-2.91	-1.31	-4.05	-3.13

Source: Authors Calculations.

**Table No 2: Long run ER and other determinants:**

Variables	Coefficient	t-statistics	Prob.
Constant	3.280	76.68	0.00
FD	0.250	1.66	0.00
KF	0.202	1.80	0.06
FS	-2.90	0.62	0.38
Adj.R <sup>2</sup>	0.47	F-statistics	314.26

D.W	2.30	Prob.	0.00
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Source: Authors estimations

The aforementioned analysis concludes that all of the findings are in line with earlier research, with output, financial performance, and financial structure all being closely related to Pakistan's economy's overall performance.

### Discussion and Conclusion:

This research has looked at the contentious question of whether financial development or structure affects economic expansion and whether bank- or market-based financial systems are more prevalent. In Pakistan, the bank-based financial system is supported by low financial structure (FS) values rather than market-based ones. The variables capital stock, financial structure, financial development, and output level are co-integrated. According to our research, financial development and financial structure are important in explaining production levels, and this is supported by time-series estimation tests. Short-term behavior does not paint a positive picture; in a short amount of time, physical capital building greatly accelerates economic growth.

Overall, the results of our research suggest that economic growth and output levels are influenced by financial development and structure. But our research goes a step further and suggests that the relationship between financial development and economic growth is most noticeable at lower income levels, meaning developing nations like Pakistan stand to gain the most from the expansion and improvement of the financial sector. However, it's also critical for supporting institutions to play a complementary role in regulating and aiding Pakistan's financial structure development. Our results are more consistent with Beck and Levine (2004), Abdul Qayyum (2005), and Levine and Zevros (1998).

Our analysis' primary policy recommendation is for policymakers to support the capital market and eliminate any vulnerabilities that are brought to light in previous studies.

By recapitalizing and restructuring, enhancing their autonomy and accountability, and permitting more private banks and institutions to enter the market, you can strengthen the competitiveness and overall health of the banking sector. Enhance the prudential oversight and regulation of every financial institution.

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