

ROLE OF FINANCIAL DEVELOPMENT, HUMAN CAPITAL, TRADE OPENNESS AND ECONOMIC GROWTH IN PAKISTAN

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Abstract

This study investigates how Financial Development, Human Capital, and Trade Openness affect Economic Growth in Pakistan from 1999 to 2024. The theoretical and statistical framework has been developed to investigate the results. For this purpose, balanced panel data has been used and analyzed through E-views software by using regression technique. Data was collected from authentic sources such as the World Bank and HDI. The Endogenous Growth Theory were used to explain the purpose of the study. The outcomes reveal that financial development considerably increases economic growth by encouraging investment and increasing access to credit. Human capital, mainly through knowledge and skill improvement, also plays a significant role in fostering efficiency and innovation. Trade openness also show positive and significant effects on economic growth by growing markets and generating revenue. These understandings offer valuable suggestions for decision makers in driving long-term economic growth within the Pakistan.

Chapter # 1

Introduction

1.1 INTRODUCTION:

The purpose of this study is to examine the relationship between economic growth (EG), human capital (HC), financial development (FD), and trade openness (TO) within the Pakistan based on the outcomes of the research effective measures will be taken by the policymakers. As Balsalobre-Lorente et al. (2020) noted, "financial development is a key factor in driving contemporary economic growth, as it allows economies to progress their financial institutions by efficiently altering their banking intermediaries and economic systems." Financial systems that are well-developed help economies grow by making it easier to get credit and invest money. When banks and financial markets work better, they help businesses use resources in

better ways and come up with new ideas. This is very important for Pakistan because good financial systems help increase investment and lower the cost of doing business (Khan, 2021). Countries with strong financial markets can grow faster because money moves to the right places in the economy. (Balsalobre-Lorente et al. (2020) highlighted that financial development is directly associated with economic growth, especially in countries with strong and well-organized capital markets. In the framework of Pakistan, financial development plays a significant role in supporting GDP. Pakistan does not have advances economic systems that assist a variety of financial activities, from technological and industrial investment to business growth like developed nations which have advanced capital markets, a broader range of economic products and robust regulatory

backgrounds that confirm stability and stakeholder confidence (State Bank of Pakistan, 2023). Moreover, financial development in Pakistan has promoted the flow of foreign direct investment, which has contributed to its economic growth. Human capital and trade openness are key drivers of economic progress. This encompasses not only the exchange of goods and services but also the advancement of novel innovations, concepts, and technologies. This is essential to the growth of Pakistan as it directly promotes global competitiveness, innovation and productivity. By investing in learning and growth, these countries progress highly trained labor forces that increase efficiency and contribute to industrial and technological development, stay at the forefront of the global market (Barro, 2021). An established human capital attracts foreign direct investment, bolsters rising income levels, and enhances financial stability and living standards. Human capital is also attracting attention as an essential driver of economic growth. It increases the overall potential earnings and productivity level of the workforce (Barro, 2019). Human capital is also assessed by abilities, educations, ability to develop new products, and workforce experience. Economies can strengthen human capital through specialization, knowledge and division of labor, enhancing foundational skills, providing professional growth, promoting entrepreneurship, and creating business opportunities (Barro, 2019). It is also considered a critical element for the economy, helping to provide a highly skilled, capable and inventive workforce that can make efficient use of inadequate resources, increasing individual income level. Well-organized human capital also fascinates foreign direct investment and fosters financial development. Developed countries with well-established learning and health care systems, investment in human capital has led to substantial advancement in technology and increases in workforce productivity (Romer, 2019). Theory suggests that human capital is the primary driver of technological advancement, which in turn drives GDP. Barro (2021) analyzed that economies with higher

activities of human capital tend to practice faster economic growth. According to Zafar (2021), "trade openness refers to the extent to which a nation within an economy allows trade with other economies." Trade activities typically include FDI, exports, imports, capital repatriation, loans and borrowings from abroad (Zafar, 2021). Trade openness helps growth by bringing more investment and building better financial markets (Muhammad, 2021). It greatly benefits the nation's industrial sector through the development of new production methods and rises employment levels by generating more employment opportunities (Zafar, 2021). Empirical studies have been conducted on trade openness and human capital on economic growth (Muhammad, 2021; Zafar, 2021). All these studies determined that trade openness is positive and promote the economic growth of any nation. Trade openness participates in global trade, has long been identified as a major contributor to GDP. An open economy advantage from the trade of ideas, products, and services, which can lead to increased productivity, access to new industries and the introduction of new innovation and technologies. As major players in the worldwide economy, Pakistan has historically followed trade strategies that promote trade openness and incorporation with international markets (Government of Pakistan, 2023). The previous literature suggests that economies that are more practice to trade tend to develop faster than those economies that are not. This is due to openness allows nations to focus in the manufacturing of products and services in which they have a comparative benefit, leading to more effective allocation of resources and higher financial output (Sultana et al., 2022). Many studies have looked at how single factors affect economic growth. However, few studies have looked at how financial development, human capital, and trade openness work together to affect growth. This gap in the literature is predominantly troubling given the interrelated nature of these factors and their combined influence on growth dynamics in developed economies. As evidenced by recent challenges such as the 2009 global economic crisis and the

economic fallout from the corona virus pandemic, financial development in Pakistan is both a significant factor of economic growth and a source of economic susceptibility (Levine, 2022). There is a need to investigate how financial development interacts with other variables such as human capital, trade openness in influencing the overall economic growth route. Human capital is a crucial factor in economic growth, yet recent literature suggests that its nature can differ significantly. The rise of mechanization, artificial intelligence and digital platforms has formed new skills requirements that domestic and traditional learning systems may not be fully prepared to meet (Galor and Moav, 2023). In addition, demographic changes such as population aging are expected to put additional pressure on the stock of human capital, requiring innovative strategy responses to sustain economic growth (OECD, 2022). The opening of trade was often seen as an obstacle for development, but recent growths such as trade wars, import Restrictions and the emergency caused by the disease have led to assess of its role in emerging economies (Śledziwska and Pawlak, 2022). Even though trade continues to contribute positively to growth of developed economies, it also exposes these nations to external shocks, demonstrating the need for improved trade strategies (Śledziwska and Pawlak, 2022). A significant question is how to balance trade liberalization or openness with national economic priorities, such as defending key businesses and guarantying fair labor practices, without forgoing growth. In conclusion the existing literature has discovered the individual effects of financial enhancement, human capital, and trade openness on growth of economy. However, some studies have showed these factors in combination, particularly in the context of Pakistan. Understanding, how these variables effects and interacts with each other is crucial for developing effective economic policies focused on fostering long term, sustainable development. The current study seeks to complete this gap by giving comprehensive analytical data of the altogether effect of these factors on economic development, offering insights that are both

relevant to the policy and are timely. This study explores the intricate connection between development factors and economic growth. The results offer valuable insights for policymakers and officials, guiding them in crafting effective strategies to foster sustainable economic advancement. This aligns with global trends that emphasize enhancing economic frameworks, ensuring accountability and transparency, broadening trade opportunities, promoting tourism, and investing in human capital. It can also help officials and enterprises to enhance their reserves and deliberate initiatives, ensuring allocation of assets to areas with the maximum potential for encouraging economic growth. This study also helpful to fill gaps in the current literature and provides a basis for future study on the framework through which these constructs foster economic progress. Furthermore, the research provides practical implications for stakeholders and professionals, understanding the influences of FD, human capital, and openness on economic growth can inform decisions policies and strategies. This study offers practical understandings into how these constructs can be used to achieve better economic consequences in the framework of Pakistan.

1.2 Research Objective:

The objective of this research is to investigate the effect of Trade Openness (TO), Financial Development (FD) and Human Capital (HC) on the Economic Growth (EG) of Pakistan by using regression model. To fulfill the objective of this study the data has been taken for the study from authentic Sources such as The World Bank, and Human Development Index.

1.3 Research Questions:

The proposed study aims to answer the following research questions.

1. What is the impact of Financial Development on Economic Growth of Pakistan?
2. What is the impact of Human Capital on Economic Growth of Pakistan?
3. What is the impact of Trade Openness on Economic Growth of Pakistan?

Chapter # 2**Literature Review****2.0 Literature Review:**

This study investigates the most influencing factors that contribute to economic growth of Pakistan. This chapter contains a summary of previously done research on the subject mentioned earlier and intended to support the scholars and other readers to get comprehensive evidence about the discussed topic and examine theories to support the study hypothesis. Next, it reviews relevant literature on the most influential factors of progress that have a relationship to economic growth. The proposed theoretical framework and hypothetical concepts are discussed based on literature.

2.1. Underpinning Theory of the Study:

Romer (2019) explains that "Endogenous Growth Theory offers a broad view of how different domestic factors foster economic growth. Unlike traditional theories that attribute growth to diminishing returns or outside forces, it emphasizes the role of strategy, investment, and modernization in a country." Financial development is important to the Endogenous Growth Theory because it improves the effectiveness of the allotment of capital and investment. An economic system that can considerably influence economic growth by decreasing information inconsistencies and operating costs. According to Khan (2021), institutions play a significant role in accumulating investments and directing them to saving and Finance. Fabo (2022) examine how trade openness impacts economic growth, found to encourage productivity, increase effectiveness, specialization and facilitate the distribution of new innovation and technologies. By allowing domestic companies to compete globally, trade openness promotes modernization and productivity gains. Furthermore, trade openness helps economies incorporate into the worldwide economy and foster economic growth through greater access to global markets and developed technologies. This theory provides a powerful framework for examining the influence of independent factors on dependent variable. Steve

(2021) examine how trade openness impacts economic growth, found to encourage productivity, increase effectiveness, specialization and facilitate the distribution of new innovation and technologies. By allowing domestic companies to compete globally, trade openness promotes modernization and productivity gains. Furthermore, trade openness helps economies incorporate into the worldwide economy and foster economic growth through greater access to global markets and developed technologies. This theory provides a powerful framework for examining the influence of independent factors on dependent variable. By emphasizing on how these domestic variables relate and encourage growth, the theory provides key understanding into the framework that foster economic expansion. For the group of seven countries, accepting the role of these constructs can inform strategies and policy decisions aimed at stimulating long-term stability and GDP.

2.2. Empirical studies:

Earlier studies define human capital in different ways, including education, health, and training that make workers more productive (Sultana et al., 2022).

In the late 1900s, Romer (2019) introduced endogenous growth theory, which gave human capital more significance and disagreed with the old neoclassical theory. These authors argued that If resources are efficiently invested in human capital, the returns can remain constant., albeit diminishing with scale. Romer (2020) identified a model of long-term economic growth in which educational human capital serves as an input to production, thereby increasing marginal output and long-term growth. He also argues that a country with substantial human capital can grow much faster than one with limited human capital. Doré and Teixeira (2023) studied Brazil from 1822 to 2019 using ARDL model. They found that human capital helps growth over long periods. It also shows that structural shifts toward a more advanced industrial base significantly contribute to national growth. Vo et al. (2023) studied urbanization, human capital, and growth in Vietnam from 1980 to 2017. They used several

statistical methods to see which variables lead or follow others. Their results show that urbanization and economic growth enhance human capital at low and medium frequencies, while financial development negatively affects it. Granger causality indicates a unidirectional effect of human capital on economic growth and a bidirectional relationship with urbanization in the long run. The study suggests that Vietnamese policymakers should promote economic integration, encourage investment, and focus on FDI through sustainable innovation and technology. Silvia et al. (2018) examined the impact of human capital on economic growth. Their findings show that better health also has a positive and significant influence on GDP, as a healthy worker can increase their productivity. M. Sani (2023) reviewed the relationship between human capital, innovation, and economic growth in Central Asian countries, providing policy recommendations. Using interpretive phenomenological interviews with Iranian experts in technology, economics, and entrepreneurship, the study explores how advanced human capital can foster enterprise and growth in economies typically lacking innovation. It also highlights the potential impacts of modernization and human capital development within the Asian historical and cultural context. Teixeira and Queirós (2020) found that human capital is a key driver of economic growth and technological progress over 1961–2012, particularly in developed OECD countries. The positive relationship between structural change and human capital is evident, though recent studies have largely overlooked the role of human capital in fostering technological specialization. Using a growth theory that incorporates both demand- and supply-side factors, panel data analyses show that human capital and nations' technological specialization are crucial for economic growth. Structural shifts combined with human capital in highly specialized firms significantly affect national growth. However, the study also indicates that without technological systems to integrate skilled individuals efficiently, the impact of human capital via innovation can be negative. Sehrawat (2017) studied male and

female human capital separately in India. She found that female human capital helps development and labor productivity in both short and long term. Male human capital also has a positive effect, but surprisingly, its impact on overall economic growth is not statistically significant. The study further identifies long-term causal links between economic growth and physical capital, as well as between human capital of both genders. Odhiambo and Nyasha (2015) conducted a theoretical and empirical analysis of the relationship between banking and market-based financial development and economic growth in developed and emerging countries, concluding that the direction of this relationship largely depends on the specific characteristics of each country. Similarly, Jalles (2018) explained the importance and quality of financial organizations in the development process are attracting increasing attention. Corruption is the main hindrance to economic growth; reducing corruption or improving the quality of financial institutions promotes financial development and, consequently, economic growth. Mohamed Sghaier (2023) examines development initiatives need to be assessed by domestic-level reforms to guarantee the growth of national economic systems and to take full benefit of the technology transfer caused by global trade. Asteriou et al. (2024) explores the finance-development relationship and the performance of the economic framework examined by economic accessibility, competence, scope and impact of both financial sectors, that is, stock markets and institutions. They also study the role of fiscal strategy in relation to financial development performance in different time frames. They found that the association between financial-driven growth and stock markets is highly significant in normal times, but becomes less important in times of stress. Remarkably, evidence shows that financial organizations are highly effective in promoting development activities, and the notable influence of financial institutions on growth is influenced by macroeconomic uncertainties. Furthermore, there is indication of lower levels of symptoms compared to what has previously been shown in

the existing literature. This last outcome may be related to the different actions of financial organizations used and the effect of stress factors. The inability of the two economic divisions to improve financial activity appears to be indicative of determination from the turmoil of the worldwide economic issues to the recent inception of the corona virus pandemic. Hanry *et al.* (2023) have inspected the direction and inter-relationship of causality among macroeconomic factors such as financial development and economic growth by considering comprehensive financial growth indicators from 2013 to 1971 in India. The observed study is based on the primary factor analysis as technique to concept foreign direct investment FDI, Phillips-Perron tests and augmented technique of dickey fuller ADF as the stationary analysis and vector error correction (VEC) method for direction of cause effect relationship in the long term among financial development and economic growth. They analytically investigate energy-consuming factors in the framework of China's local and regional growth at both the empirical and theoretical levels. When control variables are included, GDP and trade openness decrease energy concentration. According to the findings of the study, GDP on energy efficiency is more pronounced. The consequences show a long-term connection between financial development and economic growth. This research also reveals a two-way causal relationship among the FD Index and GDP. A potential policy suggestion of this research is that initiating financial modifications to expand the scope of the economic framework will lead to advanced development. Furthermore, significant suggestion from this research is that trade openness does not affect both internal financial sector development and output development, so rather than concentrating on external aspects and trade in general. This means that it is better to invest resources in creating sustainable domestic demand. Chen and Wang (2022) examined energy concentration across 30 regions and provinces in mainland China from 2006 to 2019, providing a regulatory insight into the impact of study variables on China's power sector using a different statistical technique such

as dynamic group modeling approach. The increasing energy demand and the resulting environmental contamination pressures have received significant consideration from the Chinese régime. Decreasing energy consumption in sustaining progress will have a direct impact on China's future sustainable transformation. They analytically investigate energy-consuming factors in the framework of China's local and regional growth at both the empirical and theoretical levels. When control variables are included, GDP and trade openness decrease energy concentration. According to the findings of the study, GDP on energy efficiency is more pronounced. International trade primarily influences energy efficiency via exports, with imports having a negligible effect. Provincial variations in the influences of openness and GDP on energy consumption level are not significant in eastern and western side of China. Nam and Ryu (2024) investigated the role of imports, exports, GDP and trade openness in Namibia using various statistical methods, including ARDL and Johansen's approach. It was found that imports have a negative relationship with GDP, and vice versa with trade openness and exports. The results indicate that trade and export-driven development are vital for Namibia's economic progress.

Chapter # 3

Research Methodology

3.0 Introduction:

This chapter explains the techniques applied in this study. This explains the purpose of the study and the sources which are used for data collection. This section describes research purpose and approach, design, data size, region, measurements of variables, statistical techniques, variable definitions, and conclusion.

3.1 Research Approach:

Research can use qualitative, quantitative, or mixed methods. This study uses quantitative methods because it analyzes numerical data about Pakistan's economy. This study uses secondary data from World Bank and UNDP. Statistical techniques help examine how financial

development, human capital, and trade openness affect GDP growth. Quantitative methods provide more reliable results because they rely on data analysis rather than personal views. This study follows a deductive approach, where hypotheses are developed from existing theory and then tested using data. This study tests how financial development, human development index, and trade openness relate to GDP growth in Pakistan.

3.2 Research Purpose:

The purpose of research can be exploratory, descriptive, or explanatory. This study is explanatory because it explains relationships between variables. The goal is to examine how financial development, human development index, and trade openness impact Pakistan's GDP. Explanatory research tests existing theories. It also shows how changes in independent variables affect GDP growth.

3.3 Research Design:

This study uses correlational design to see if variables are positively related, negatively related, or not significantly related. This research explores how financial development, HDI, and trade openness connect with Pakistan's GDP growth.

3.4 Data Collection:

This study uses secondary data from reliable sources like World Bank and UNDP, covering 1999 to 2024. The variables are financial development, human development index, trade openness, and economic growth (GDP).

3.5 Research Model:

To examine the relationship between economic growth and the selected variables, the following regression model is used:

$$\text{LNGDP}_t = \alpha + \beta_1 t (\text{FD}) + \beta_2 t (\text{HDI}) + \beta_3 t (\text{TO}) + \epsilon_t$$

Where α is the constant, GDP is economic growth, FD is financial development, HDI is human development index, TO is trade openness, and ϵ_t is the error term.

3.6 Model Hypotheses:

Based on previous literature, the following hypotheses are developed:

H1: Financial development has a significant impact on economic growth.

H2: Human Capital has a significant impact on economic growth.

H3: Trade Openness has a significant impact on economic growth.

These hypotheses test whether the independent variables influence GDP growth.

3.7 Statistical Technique:

EViews software is used for data analysis and hypothesis testing, mainly through regression analysis. Regression analysis measures how independent variables affect GDP growth. The regression results show whether each variable significantly affects economic growth.

3.9. Variable Description and Measurements:

3.9.1 Gross Domestic Product:

GDP growth is the yearly percentage change in gross domestic product at constant prices. It measures real GDP growth adjusted for inflation, showing true economic expansion.

3.9.2 Financial Development:

Financial development is measured as private sector credit as a percentage of GDP, showing how much credit is available to businesses and people..

3.9.3 Human Capital:

Human capital means the skills, knowledge, and education that people build over their lives, making them more productive.

3.9.4 Trade Openness:

Trade openness shows how much a country participates in international trade.

Table: 3.0 Variables Description, Measurements, Sources

S/No	Indicators Name	Measurements	Source
1	Economic Growth	GDP per capita (Current US \$)	World Bank
2	Financial Development	Domestic credit to private sector (% of GDP)	World Bank
3	Human Capital	HDI Index	(UNDP)
4	Trade Openness	Trade (% of GDP)	World Bank

Chapter # 4

Data Analysis

4.0 Introduction:

Data analysis uses statistical techniques to evaluate data and understand relationships between variables. This chapter analyzes how independent variables predict GDP growth. This study uses four variables: GDP (economic growth), financial development, human capital (HDI), and trade openness to analyze Pakistan's

economic growth from 1999 to 2024. Descriptive statistics, unit root tests, and regression analysis are used.

4.1. Descriptive Statistics:

Descriptive statistics summarize the basic features of the data in a simple way. The results are shown below:

Table 4.0 shows descriptive statistics for all variables.

Table 4.0 Descriptive Statistics and Correlation Matrix

	GDP	FD	TO	HC
Mean	3.044032	19.59636	29.24188	0.508917
Median	3.084524	20.34061	30.24473	0.510000
Maximum	3.195717	25.68225	34.34896	0.550000
Minimum	2.778106	11.46608	22.71628	0.443000
Std. Dev.	0.129119	4.454684	3.696314	0.031672
Observations	26	26	26	26

Table 4.0 shows statistics for 26 years of data on GDP, financial development, trade openness, and human capital. Mean is the average value. Average GDP is 3.04, financial development is 19.60, trade openness is 29.24, and HDI is 0.51. Median is the middle value when data is arranged in order. Median values are 3.08 for GDP, 20.34

for financial development, 30.24 for trade openness, and 0.51 for HDI. Maximum and minimum values are also shown. Maximum values are 3.20, 25.68, 34.35, and 0.55, while minimum values are 2.78, 11.47, 22.72, and 0.44. Standard deviation measures how much values vary from the mean.

4.2. Stationary Properties:

Unit root tests check if data is stationary. Non-stationary data can cause false regression results because trends in the data make relationships seem significant when they are not. Stationary data shows true relationships between variables. If $p\text{-value} < 0.05$, we reject the null hypothesis

and conclude there is no unit root (data is stationary).

Non-stationary data has trends; stationary data does not. The Im, Pesaran and Shin (IPS) test is used. Decisions are based on t-statistics and p-values. Decision criteria:

$P\text{-value} > 0.05$ means non-stationary (trend exists).

Table 4.1. Stationary analysis

Stationary Test Results				
Variables	(Im, Pesaran and Shin)			
	At Level		First Difference	
	t-statistics	Prob	t-statistics	Prob
GDP	5.326	0.0000	-	-
FD	1.234	0.6412	4.3350	0.0000
TO	1.632	0.1011	5.7394	0.0000
HC	2.292	0.1845	6.7451	0.0000

Table 4.1 shows unit root test results from the IPS test. Financial development, trade openness, and human capital are non-stationary at level ($p > 0.05$) but become stationary after first differencing. GDP is stationary at level ($p < 0.05$).

dependent variable changes when an independent variable change by one unit. P-values show significance. Adjusted R-squared shows how much variation in GDP is explained by all independent variables together. F-statistic shows whether the overall model is significant.

4.3. Regression Analysis:

Regression analysis shows relationships between variables. Coefficients show how much the

**Table 4.1
Regression Analysis**

Variable	Coefficient	T-Statistic	Prob.
C	0.889503	12.19488	0.0000
FD	0.002642	2.427554	0.0248
TO	0.002812	2.104531	0.0482
HDI	3.970281	27.90060	0.0000
Adjusted R-squared	0.876138		
Prob(F-statistic)	0.0000		

Discussion:

The constant (0.8895) captures effects of variables not included in the model. FD coefficient is 0.002642 ($p = 0.0248 < 0.05$), showing positive significant effect on growth, consistent with Magazzino et al. (2018). Higher financial development leads to higher growth. Better financial systems support Pakistan's growth through stability, better resource use, and more investment. Asteriou et al. (2024) confirm that developed financial markets promote wealth. Trade openness coefficient is 0.002812 ($p = 0.0482 < 0.05$), showing positive significant relationship with growth. More trade activity increases growth (Fatima et al., 2020). When countries open to international trade and investment, they connect to the global economy, raising trade openness which significantly affects Pakistan's growth (Kim and Lee, 2018). This is supported by Hoang et al. (2019). Human capital coefficient is 3.970281 ($p = 0.0000$), showing

highly significant positive relationship. HDI has the strongest effect on GDP among the three variables (Sultana et al., 2022). Advanced knowledge and skill enhancement accelerate workers' efficiency, increase innovation, and boost a country's competitiveness in the international market. Human capital investment plays an important role in driving growth and securing long-term economic success. This is supported by Azizi et al. (2024). Adjusted R-squared of 0.8761 means the model explains 87.61% of GDP variation, showing good fit. The probability value of the F-statistic is 0.0000, which implies that all independent variables are jointly significant in explaining the dependent variable. Therefore, the model is suitable for further estimation. Overall, the regression results indicate that financial development, trade openness, and human capital have a positive and statistically significant impact on the economic growth of Pakistan.

4.2 Hypothesis Summary

H1	Financial development has a significant impact on economic growth.	Supported
H2	Trade Openness has a significant impact on economic growth.	Supported
H3	Human Capital has a significant impact on economic growth.	Supported

Chapter # 5

Conclusion

5.0 Conclusion:

The purpose of this study is to investigate the impact of financial development, trade openness and human capital on economic growth in Pakistan. Pakistan is considered a major developing country that has experienced economic growth, financial development, human development and expansion of trade activities in recent decades. These factors play an important role in affecting the country's economic stability. Data came from World Bank and UNDP sources. Statistical techniques analyzed relationships between variables. Descriptive statistics summarized the data, and regression analysis explored how the three variables affect growth. Results show all independent variables

positively and significantly affect Pakistan's growth. Financial and human capital development improve economic performance. Trade activities also promotes growth by more investment and better global competitiveness. These results show that investing in education, skills, and global integration helps developing countries prosper.

5.1 Future Implications:

The outcomes of this study confirm the significant influence of financial development, human capital, trade openness on the economic growth of Pakistan, offer significant perspectives for the future. Decision makers of Pakistan can use these findings to shape strategies that further drive their economies forward. Financial development is a significant driving force

assisting economic growth. To sustain and enhance this impact, must continue advancing their financial systems by expanding access to financial services, promoting technological innovation, and ensuring wider financial inclusion. Keeping the financial system stable and well-structured helps prevent possible disruptions and promotes sustainable growth. Moreover, human capital plays a vital role in economic development, funding in educational initiatives and skill enhancement is also significant. Decision Makers should work to expand the standard of education, especially in areas such as innovation, and technological skills, to keep their workforces competitive on the world stage. Furthermore, providing continuous knowledge, and retraining opportunities confirms that employees adapt to changing business needs and helps improve financial productivity. Trade openness is another significant factor of economic activity because it increases competition and market access. Subsequently, decision makers should aim to continue trade policies, expand existing agreements and emerging trade alliances. This method could open up new opportunities and further accelerate economic growth. In conclusion, the significant effect of all the independent constructs on economic growth provides clear understandings and opportunities for continued development in Pakistan. Governments must emphasis on these areas to ensure resilient and steady economic growth in the coming years.

5.2 Future Recommendations:

According to the analysis findings of this research, suggested that Decision makers must focus on more important or significant factors that may help to increase economic growth in their country such as financial integration by enhancing access to credit and banking facilities, particularly for small and medium-sized institutions. Promoting financial modernization, such as online banking and E-finance, will also help sustain development in a rapidly growing economy. Furthermore, by promoting technological education and vocational training, workforce remain competitive and progressing

labor force demands. To improve worldwide competitiveness, Pakistan should continue negotiating new trade arrangements, decreasing trade hurdles, and encouraging partnerships with developing nations. Policymakers should invest in research and development to foster modernization, particularly in developing skills such as bioengineering, artificial intelligence and sustainable energy. This will not only increase efficiency but will also put Pakistan at the leading edge of global technological development. This study is expected to add more different contributions related to this important topic. However, new researchers who evaluate this topic with additional methodologies and methods will be more helpful to this research. The more year data and more countries data can also describe the relation and significance of dependent and independent variables.

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