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The Impact of GDP on Foreign Direct Investment in Pakistan

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ABSTRACT

Foreign Direct Investment (FDI) is widely recognized as a catalyst for economic development, especially in emerging economies. However, in Pakistan, FDI inflows have remained inconsistent despite efforts to promote growth. This study investigates the relationship between Gross Domestic Product (GDP) and FDI in Pakistan to determine whether economic growth significantly attracts foreign investment. Using a dataset of 21 annual observations, the study applies correlation and linear regression analyses to assess the impact of GDP on FDI. The correlation coefficient between GDP and FDI is 0.1775, indicating a weak positive relationship. Regression analysis reveals that the coefficient for FDI is 0 (p = 0.243), suggesting that the effect of FDI on GDP is not statistically significant at the 5% level. The findings imply that while there is a weak association between GDP and FDI, other factors such as political stability, institutional quality, and infrastructure may play a more substantial role in influencing foreign investment decisions. The study concludes with policy recommendations focused on improving the investment climate beyond economic growth alone, in order to enhance FDI inflows sustainably.

Keywords: *GDP, FDI, Economic Growth, Pakistan, Policy Implications, Regression*

INTRODUCTION

Foreign Direct Investment (FDI) plays a vital role in promoting economic development, especially in developing countries like Pakistan. FDI brings not only capital but also modern technology, managerial expertise, and employment opportunities. It helps improve industrial capacity and enhances the competitiveness of the domestic economy. As a result, many countries actively work to create favorable conditions to attract foreign investors. One of the most important economic indicators influencing investor decisions is Gross Domestic Product (GDP). GDP measures the total value of goods and services produced within a country and reflects the overall strength of its economy. A rising GDP indicates economic growth and stability, which are key factors that attract foreign investors seeking profitable and secure environments. In Pakistan, the trends in FDI have closely followed fluctuations in GDP. Periods of economic growth have often

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been associated with increased FDI inflows, while political instability, weak infrastructure, and inconsistent policies have contributed to declines in investment.

Previous research has shown a positive relationship between economic growth and foreign investment. Borensztein, De Gregorio, and Lee (1998) found that FDI tends to flow into countries with higher levels of economic development and sound macroeconomic conditions. This suggests that countries like Pakistan must maintain stable and growing GDP levels to remain attractive to international investors. In recent years, Pakistan has undertaken several measures to improve its economic performance and encourage foreign investment. These include efforts to develop infrastructure, improve regulatory frameworks, and expand access to key sectors. As GDP grows, the investment environment becomes more appealing to foreign firms. Romer (1990) argued that continued economic growth supported by innovation and investment helps create a favorable climate for sustained FDI inflows. Understanding the relationship between GDP and FDI in Pakistan is essential for policymakers, economists, and development planners. A clearer understanding of this relationship can help guide effective strategies to increase foreign investment, which is critical for boosting long-term economic growth, reducing unemployment, and improving living standards in the country.

Research Problem

Despite Pakistan's potential as an investment destination, FDI inflows have remained inconsistent. While periods of economic growth often correspond with increased FDI, external challenges such as security concerns, policy uncertainty, and global economic trends have affected investor confidence (Khan & Kim, 1999). This study aims to investigate whether GDP growth is a primary determinant of FDI in Pakistan or if other factors play a more significant role.

Research Questions

i. How does GDP growth influence FDI inflows in Pakistan?
ii. What other economic and non-economic factors impact FDI in Pakistan?
iii. What policy measures can enhance FDI attraction in Pakistan?

Research Objective

The primary objective of this research is to examine the impact of GDP on FDI inflows in Pakistan. Additionally, the study aims to identify key barriers to foreign investment and propose policy recommendations to improve the investment climate in Pakistan.

Research Hypothesis

H1: There is a positive and significant relationship between GDP growth and FDI inflows in Pakistan. H0: There is no significant relationship between GDP growth and FDI inflows in Pakistan.

Significance of the Study

This study holds significance for policymakers, economists, and investors. By understanding the role of GDP in attracting FDI, the findings can guide economic policies and investment strategies. Additionally, insights from this research can help the government implement reforms to improve economic stability and investor confidence (World Bank, 2021).

CONCEPTUAL FRAMEWORK

This theoretical framework explains how a country's economic growth (measured by GDP) can affect the amount of foreign direct investment (FDI) it receives. GDP is the explanatory variable because it shows how strong and stable a country's economy is. When a country has a high or growing GDP, it means there is a big and healthy market. This attracts foreign investors who want to make profits in such economies. FDI is the explained variable because it is affected by the level of GDP. This idea is supported by Dunning's Eclectic Theory (OLI Model). According to Dunning (1980), one reason companies invest in a country is because of its location advantages, like a large market and strong economy. A higher GDP gives those advantages. So, when a country's GDP increases, it is likely to receive more FDI. This theory helps us understand why investors choose some countries over others.

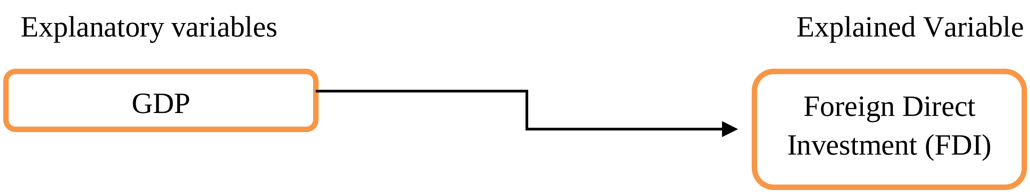

Figure 1: Theoretical Framework

LITERATURE REVIEW

The relationship between GDP and FDI has been widely explored in economic literature. Dunning (1993) argues that economic growth is a crucial factor in attracting FDI, as it provides a favorable environment for foreign investors. According to Borensztein, De Gregorio and Lee (1998), higher GDP growth rates create market opportunities, thereby increasing FDI inflows. Similarly, Zhang (2001) finds that FDI is more likely to be directed towards countries with strong economic growth. Empirical studies focusing on Pakistan confirm this positive relationship. Khan and Kim (1999) highlight that GDP is a significant determinant of FDI in Pakistan, but political instability and weak infrastructure can undermine investment confidence.

Further, Anwar and Afza (2017) assert that macroeconomic stability, including GDP growth, directly influences FDI inflows. Their study suggests that while GDP growth is a strong predictor, factors such as trade openness and regulatory quality also play crucial roles. Moreover, Bashir (2019) examines the impact of GDP growth on sector-specific FDI in Pakistan, finding that manufacturing and service industries attract the highest FDI during periods of economic expansion. This aligns with findings by Hymer (1976), who suggests that multinational corporations are more likely to invest in economies demonstrating sustained growth and stability.

While GDP is a primary factor, other researchers argue that non-economic factors also play a vital role. For instance, Alam and Shah (2020) emphasize that governance, corruption, and security conditions significantly affect FDI decisions. Similarly, Asiedu (2002) finds that while economic factors such as GDP growth attract FDI, policy consistency and political stability are equally important in maintaining investor confidence. In conclusion, existing literature suggests a strong and positive correlation between GDP growth and FDI inflows. However, additional factors such as regulatory environment, infrastructure, and political stability must be considered to create a holistic strategy for enhancing FDI in Pakistan.

RESEARCH METHODOLOGY

This study employs a quantitative approach, analyzing secondary data from the World Bank, State Bank of Pakistan, and Pakistan Bureau of Statistics. The time-series data spans two decades (2000-2020) and is assessed using correlation and regression analysis to determine the impact of GDP growth on FDI inflows. The study also reviews policy documents and government reports to contextualize the findings.

DISCUSSION AND ANALYSIS

The descriptive statistics provide a summary of the key characteristics of GDP and Foreign Direct Investment (FDI) over 21 observations, likely representing annual data. The average Gross Domestic Product (GDP) is approximately 217.03 billion, with a standard deviation of 85.30 billion, indicating a considerable spread in GDP values across the years. The minimum recorded GDP is 97.15 billion, while the maximum reaches 356.13 billion, reflecting substantial economic growth variation within the dataset. Similarly, the average FDI inflow is about 2.06 billion, with a standard deviation of 1.46 billion, suggesting moderate variability in foreign investment levels. The FDI ranges from a minimum of 0.31 billion to a maximum of 5.59 billion. These figures highlight notable fluctuations in both GDP and FDI, implying potential economic dynamics worth exploring further, such as the relationship between foreign investment and economic growth (see Table 1).

Table 1: Descriptive Statistics of GDP

Variable	N	Mean	Std. Dev.	Min	Max
GDP (Billions)	21	217.0294	85.29811	97.14562	356.1282
FDI (Billions)	21	2.057333	1.462624	.308	5.59

The correlation analysis reveals a weak positive relationship between GDP and FDI, with a correlation coefficient of 0.1775. This suggests that changes in foreign direct investment are associated with only slight movements in GDP. While the relationship is positive, indicating that increases in FDI may correspond with increases in GDP, the low strength of the correlation implies that FDI alone may not significantly explain variations in economic growth. Other factors might play a more prominent role in influencing GDP.

Table 2: Correlation between GDP and FDI

	GDP	FDI
GDP	1.0000	
FDI	0.1775	1.0000

The linear regression model assesses the relationship between Foreign Direct Investment (FDI) and Gross Domestic Product (GDP) using a dataset of 21 observations. The coefficient for FDI is 0, with a standard error of 0, a t-value of 1.21, and a p-value of 0.243, indicating that FDI has no statistically significant effect on GDP at the 5% level. This means that changes in FDI do not appear to have a meaningful impact on GDP in this model. The constant term (intercept) is estimated at 25.857 and is highly significant ($p < 0.01$), suggesting that when FDI is zero, GDP would be approximately 25.857 units (though the interpretation of the constant is limited if FDI cannot realistically be zero). The R-squared value is 0.071, which means that only 7.1% of the variability in GDP is explained by changes in FDI. The F-statistic is 1.455 with a corresponding p-value of 0.243, confirming that the overall model is not statistically significant. Additionally, the AIC (24.028) and BIC (25.073) values indicate the model's fit, but their interpretation is more relevant when comparing multiple models.

Table 3: Regression Analysis

loggdp	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
logfdi	0	0	1.21	.243	0	0	
Constant	25.857	.165	157.15	0	25.512	26.201	***

Mean dependent var	26.020	SD dependent var	0.435
R-squared	0.071	Number of obs	21
F-test	1.455	Prob > F	0.243
Akaike crit. (AIC)	24.028	Bayesian crit. (BIC)	25.073

**** p<.01, ** p<.05, * p<.1*

The analysis reveals a positive correlation between GDP growth and FDI inflows in Pakistan. Periods of economic expansion coincide with increased foreign investments, particularly in the manufacturing, energy, and services sectors. However, fluctuations in FDI are also influenced by factors such as political instability, regulatory challenges, and security concerns.

1. **Economic Growth as a Magnet for FDI:** Data indicates that during years of high GDP growth (e.g., 2004-2007 and 2016-2018), Pakistan experienced a surge in FDI. Foreign investors view economic growth as a sign of market stability and demand potential.
2. **Challenges Impacting FDI Despite GDP Growth:** Despite economic growth, inconsistent policies and security issues have deterred investors. The energy crisis in the early 2010s led to a decline in FDI despite moderate GDP growth.
3. **Policy Implications:** To enhance FDI inflows, Pakistan needs consistent economic policies, improved infrastructure, and political stability. Pro-business reforms and investment-friendly regulations can strengthen investor confidence.

CONCLUSION

This study investigated the relationship between Gross Domestic Product (GDP) growth and Foreign Direct Investment (FDI) inflows in Pakistan. The findings indicate that although there is a positive association between GDP growth and FDI, the relationship is statistically weak and not significant at conventional levels. This suggests that economic growth alone is insufficient to attract substantial foreign investment in Pakistan. Other critical determinants including political stability, quality of infrastructure, regulatory effectiveness, and institutional frameworks play a pivotal role in shaping FDI inflows. To fully leverage the potential benefits of FDI for sustainable economic development, policymakers must focus on creating a stable macroeconomic environment that enhances investor confidence.

This includes strengthening governance, improving infrastructure, simplifying regulatory procedures, and ensuring political stability. Such measures are essential to complement economic growth and provide an attractive investment climate. For future research, it is recommended to adopt a sectoral approach to understand how FDI impacts various industries differently within Pakistan’s economy. Additionally, examining the influence of external factors such as global economic fluctuations, exchange rate volatility, and regional trade agreements will provide a more comprehensive understanding of FDI determinants. Employing larger datasets, longer time series, and advanced econometric techniques could further improve the robustness of the findings and assist in developing targeted policy interventions to attract and sustain foreign investment.

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