



Check for updates

Research Article

Foreign Direct Investment, Trade Openness, Institutional Performance and Economic Growth in Pakistan

Bisma Amjad¹, Raima Nazar¹, Sajid Ali²

¹ Department of Economics, The Women University, Multan, Pakistan.

² School of Economics, Bahauddin Zakariya University, Multan, Pakistan.

ABSTRACT

The study aims to investigate how foreign direct investment, trade openness, and institutional performance affect economic growth in Pakistan for the period of 1990-2022. Statistical and econometric methods have been used to investigate the research empirically. Initially, we checked stationarity by using the augmented Dickey-Fuller unit root test and obtained mixed findings of the stationary in the result. Many relevant studies have been examined for this purpose and then the model is constructed by approaching economic growth as a dependent variable and trade openness, foreign direct investment, institutional performance, gross fixed capital formation and employed labor force as explanatory variables. To find short-run and long-run effects of economic growth. ARDL modeling approach was applied which is the most appropriate technique over some other techniques of integration after scrutinizing the stationarity of data through the ADF test. This study suggests that trade openness has a positive influence on economic growth. Trade is opened up foreign direct investment and economic growth both rise as a result of an increase in exports and imports that's why trade openness has a positive impact on economic growth.

Keywords: Foreign Direct Investment, Trade Openness, Institutional Performance, Economic Growth.



Correspondence

Raima Nazar
raimaawan427@gmail.com

Article History

Received: May 25, 2024
Accepted: June 28, 2024
Published: June 30, 2024



Copyright: © 2024 by the authors.
Licensee: Roots Press,
Rawalpindi, Pakistan.

This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license:

<https://creativecommons.org/licenses/by/4.0>

INTRODUCTION

Since the early seventies Pakistan has experienced macroeconomic volatility. Savings and private investment have been discovered due to the country's ongoing macroeconomic uncertainty, resulting in low aggregate investment and unstable output levels (Kumari, 2023). Pakistan is listed among the developing countries that typically have low income levels, low saving rates, rapid population growth, heavy external debt loads, low levels of industrialization, lack of capital, negative balance of payments, low levels of managerial and technical expertise, and a reliance on the export of basic goods. From 1997 and 2022, Pakistan showed an average of 156.36 USD million in direct investment, with a record high of 1262.90 USD Million in June 2008 and a record low of – 390.90 USD Million in October 2018. Both over the long term and the short term, foreign direct investment has a considerable positive impact on Pakistan's GDP growth. The ECM coefficient August convergence to the equilibrium path is even more significant. Throughout time, additional variables like population growth and inflation also have a substantial impact on GDP. Developments increase the need for attracting foreign indirect investment into Pakistan. Foreign direct investment is a significant long-term commitment and a part of the host economy itself.

Pakistan increased competition with other list developed countries. Foreign direct investment produced a positive effect on economic growth. From 1952. Pakistan is one of the 8 fastest-growing economies in the world, according to the federal minister for planning, department and while addressing the China Pakistan Economic Corridor (CPEC) investment conference, held in the Chinese capital Beijing. China has the largest investor in Pakistan. The research's major goal is to understand the importance of economic growth by looking at the effects of trade, foreign direct investment, and institutional performance. Demonstrate the study's benefits in understanding the Connection between trade, foreign direct investment, and institutional performance. It also offers a range of policy implications for both economic growth and trade openness. To give other studies in the field a perspective, this study will be helpful for future research. Using annual time series data from 1990 to 2022 and applying new and modern econometric methodologies, the overall objective is to examine the influence of trade openness, foreign direct investment, and institutional performance on economic growth. The objective of the study is to investigate the impact of foreign direct investment and trade openness on economic growth in Pakistan.

LITERATURE REVIEW

The literature review will help you think about and improve your reading and critique method. It will provide a current understanding of the topic area, and the research to progress.

Duodu and Baidoo (2020) Studied the quality of institutions that affect the impact of trade openness on the economic growth of Ghana. They studied this impact for the used annual time series data for the period of 1984 to 2018 by taking economic growth as the dependent variable while the growth rate of gross domestic product, financial development, inflation, imports, Capital stock, exports, and quality of institutions as independent variables. Empirically investigated by ARDL technique. Findings showed that in both the short run and long run trade openness and quality of institutions had a significant and positive impact on economic growth however interaction between trade openness and quality of institutions showed an insignificant impact on economic growth. The exchange rate had a significant and positive affected on economic growth in the long run and negatively affected in the short run. Capital stock had a significant negative affected on economic growth.

Baiashvili and Gattini (2020) examined the impact of Foreign direct investment on economic growth focusing on the role of country income levels and institutional strength. They studied this impact for the period of 1980 to 2014 through 111 countries by taking Gross domestic product as a dependent variable while foreign direct investment, inflation, human capital, physical capital gathering, government size, political rights, and trade openness as independent variables. GMM techniques were used for the panel data analysis. Findings showed that physical investment and market openness had a positive effect on growth. Inflation harmed growth and Foreign direct investment had a positive impact on growth. Found an inverted U-shaped relationship between the income level of the country and the impact of foreign direct investment on growth.

Baiashvili and Gattini (2020) examined the impact of Foreign direct investment on economic growth focusing on the role of country income levels and institutional strength. They studied this impact for the period of 1980 to 2014 through 111 countries by taking Gross domestic product as a dependent variable while foreign direct investment, inflation, human capital, physical capital gathering, government size, political rights, and trade openness as independent variables. GMM techniques were used for the panel data analysis. Findings showed that physical investment and market openness had a positive effect on growth. Inflation harmed growth and Foreign direct investment had a positive impact on growth. Found an inverted U-shaped relationship between the income level of the country and the impact of foreign direct investment on growth.

Omoke and Charles (2021) Examined trade openness and economic growth Nexus while exploring the role of institutional quality in Nigeria. They studied this from 1984 to 2017 by taking Gross domestic product as a dependent variable while Trade openness, Labor force, capital stock institutional quality, and financial development indicators were used as independent variables. Empirically investigated by the ARDL technique it was concluded that export trade had a positive and significant impact on economic growth while import Trade had a negative and significant impact on economic growth. The concluded result showed that the institutional quality of Nigeria decreased.

Akbar *et al.* (2021) Studied the impact of trade openness, public debt, and institutional performance on financial development evidence from Asian countries. GMM estimator was used by taking financial development as a dependent variable while Trade openness, public debt, and international performance other variables were used foreign direct investment, GDP per capita, and inflation as independent variables. Data collected from World Bank an

international country risk guide. It was concluded that trade openness and institutional performance showed positive and significant results while public debt showed a negative effect on financial development. Findings showed positive and significant results on financial development.

Qasim *et al.* (2021) examined institutional quality, trade openness, and economic growth in South Asian economies from panel data analysis for the period of 1984 to 2018 by taking real Gross domestic product as the dependent variable while trade openness, institutional quality labor force and economic growth as an independent variable. Data were collected from world development indicators. Empirically investigated by the fixed effect model technique. They showed a positive and significant impact of institutional quality on Economic growth and trade openness showed a negative impact on economic growth.

Xue *et al.* (2022) explored the Nexus between foreign direct investment, economic growth, industrialization, and engagement opportunities through empirical evidence from Pakistan they studied the 30 years of annual data for the period 1990 to 2019 Which data was collected from world development indicators by took employment opportunities as the dependent variable while foreign direct investment, gross capital formation, gross domestic income, economic growth, industrialization, population growth used as independent variable various techniques of data were employed estimated results showed that in the long run and short run Foreign direct investment, gross capital formation and industrialization showed a positive impact on employment opportunities and gross domestic income, economic growth and population growth showed a significant and negative impact on employment opportunities for long term and short term in Pakistan

Wang *et al.* (2022) Examined the effect of institutional quality and foreign direct investment on economic growth and Environmental Quality through evidence from African countries. They studied oil-producing and non-oil-producing African countries from 1999 to 2017 by taking Gross domestic product as a dependent variable while CO2 Emission, Trade openness, foreign direct investment, urbanization, and industrialization as independent variables. Various techniques of panel data were employed and data collected from the World Bank Database Divas concluded that institutional quality significantly promoted economic growth. and Environmental Quality improved in the known oil-producing countries while improved Environmental Quality in oil-producing countries. Therein investment significantly impacted economic growth and Environmental Quality.

THEORETICAL FRAMEWORK

This section will discuss the theoretical evidence which is related to foreign direct investment, trade openness, institutional performance, and economic growth in Pakistan. In foreign direct investment discuss the related types and theories. On the other side trade openness, institutional performance, and economic growth will be discussed. Foreign direct investment is to control the manufacturing, distribution, and other operations of the company in another Nation, presidents of one country purchase ownership of property else. Were through a strange method that is known as foreign direct investment introduced in the industrial policies announcement of 1980 and 1982 followed by the technology statement of 1983 were the first steps in government liberalization of foreign direct investment between 1980 to 1991. One of the earliest ideas to explain the rationale for a company's international development is the capital market theory, which is a subset of portfolio investment theory. This method holds that the interest rate and the value of the currency of the host country are the major factors affecting indirect investment. Selling and exchanging goods, whether within a country or between nations, is referred to as trade. There are two main categories of trade, each country has various resources, regulations, and cultures. Trade openness is measured as the ratio of trade to GDP. It is an estimation of how significant foreign trade is to a nation's economy. It is computed by dividing the sum of imports and exports for a given period by the same period's gross domestic output. According to Adam Smith's work "An Inquiry into the Nature and Sources of National Wealth," Adam Smith developed the absolute benefit theory. He contends that a nation will only create and export those commodities so that it has a clear competitive advantage over other nations. The comparative cost theory was developed by David Ricardo. The book which is written by David Ricardo in 1817 "Principles of political economy". In this book, he presented the theory of comparative cost which is related to international trade.

DATA AND METHODOLOGY

This study is being conducted to find out how Pakistan's economic growth is affected by foreign direct investment, trade openness, institutional performance, and economic growth. The time series data was gathered from a variety of

sources, including the World Development Indicator (WDI) and institutional performance variables collected from the International Countries Guide (ICRG). The World Development Indicator provides data on foreign direct investment, trade openness the employed labor force, and gross fixed capital formation are all only if by the world development indicator. Data collected from the centuries 1990 to 2022 are used for the variables. Numerous variables are allied with the study and have varying effects on economic growth, Foreign Direct Investment, and trade openness however, only a small number of variables to determine whether they are positive or undesirable. Affiliation with economic growth. In this model, the researcher used to follow the idea from Solow Swan Model Theory. Which is consistent with the work of Zekarias (2016).

$$LEG = \alpha_0 + \alpha_1 LTR + \alpha_2 LFI + \alpha_3 LLF + \alpha_4 LCF + \alpha_5 LINQ + \mu_t$$

Where EG shows economic growth, TR is trade openness, FI is Foreign direct investment, LF is labor force, CF shows Fixed capital formation and INQ shows institutional performance.

RESULTS AND DISCUSSION

The descriptive statistics of the variables play an important role in the thesis work. It gives all the quantitative analysis of variables. Proceeding to econometric values comprehensive descriptive examination is achieved. Descriptive statistics consists of procedures used to summarize and describe the characteristics of a set of data. The given table shows the average values, standard deviation, skewness, kurtosis, and J. Bera values of the selected variables. Presented table

Table 1. Descriptive Statistics

	LEG	LTR	LFI	LLF	LCF	LINQ
Mean	25.9483	23.7603	20.7724	17.7412	24.1210	0.69522
Median	25.9906	23.7408	20.9201	17.772	24.143	0.6931
Maximum	26.505	25.4838	22.4442	18.0784	24.6097	0.84509
Minimum	25.3237	22.0448	19.3178	17.2826	23.7211	0.56267
Std. Dev.	0.36854	0.87486	0.90611	0.26884	0.25475	0.06507
Skewness	0.13585	0.31802	-0.06365	-0.36882	0.23587	0.34574
Kurtosis	1.77213	2.79540	1.93081	1.74825	1.95131	3.52703
Jarque-Bera	1.58148	0.44642	1.15936	2.11099	1.32227	0.75592
Probability	0.45350	0.79994	0.56007	0.34801	0.51626	0.68525

Source: Authors own calculations by using Eviews-9

Economic growth, foreign direct investment, employed labor force, and gross fixed capital formation are platykurtic. J.B test statistic evaluates the normality of the dissemination and specifies that all variables are normally distributed as shown by their P values

Table 2. Correlation Matrix

	LEG	LTR	LFI	LNL	LCF	LINQ
LEG	1					
LTR	0.5049	1				
LFI	0.78286	0.27821	1			

LNL	0.98905	0.52097	0.74898	1		
LCF	0.94574	0.42118	0.85133	0.89727	1	
LINQ	0.31512	0.16515	0.29839	0.22628	0.37457	1

Source: Authors own calculations by using Eviews-9

Table 3. ADF Test with Level and Difference

	At Level		At 1 st Difference		Result
	Intercept	Trend and Intercept	Intercept	Trend and Intercept	
LEG	-0.923 (0.7659)	-2.967 (0.1579)	-2.880 (0.0599)	-2.859 (0.1894)	I(1)
LTR	-2.687 (0.2579)	-4.151 (0.0162)	-4.806 (0.0006)	-4.706 (0.0041)	I(0)
LFI	-1.724 (0.4092)	-1.850 (0.6547)	-4.461 (0,0014)	-3.820 (0.0323)	I(1)
LLF	-2.712 (0.836)	-1.026 (0.9998)	-1.126 (0.6902)	-3.830 (0.0291)	I(1)
LCF	-1.554 (0.4921)	-4.827 (0.0033)	-4.532 (0.0016)	-4.400 (0.0099)	I(0)
LINQ	-2.676 (0.0907)	-2.614 (0.2771)	-3.331 (0.0237)	-3.233 (0.0000)	I(1)

Source: Authors own calculations by using Eviews-9

The results of ADF show that it's a mixture of variables that are stationary at level and first difference therefore ARDL is the most suitable technique of estimation. In the first step, the existence of the long-run relationship among the variables is needed. The researcher used Bound Testing Approach to examine the long-run relationship which shows the presence of long run relationship among the variables. To conclude short-run economic growth purpose through the ECM analysis remained completed with wanted lags and consequences for short-period coefficients have been stated in the table below:

Table 4. Coefficient of Short-Run Relationship

Variable	Coefficient	Std. Error	t-statistics	Probability
D(LTR)	0.0155	0.0018	-8.2907	0.0000
D(LFI)	0.0000	0.0029	0.0016	0.9987
D(LLF)	0.2254	0.0665	3.3872	0.0044
D(LCF)	0.0584	0.0235	2.4863	0.0261
D(LINQ)	0.0367	0.2270	1.6181	0.1279
CointEq(-1)	-0.2124	0.0639	-3.3224	0.0050

Source: Authors own calculations by using Eviews-9

Our findings are consistent with the work of Cuadras (2001) and Zekarias (2016). The tabulated values show that the coefficient of foreign direct investment is positive and statistically significant and shows that due to a 1 percent increase in foreign direct investment, economic growth will increase by 0.0284 percent. FDI refers to the direct infusion of capital into a nation's economy by foreign investors, which can be used to boost infrastructure, increase production capacity, and promote economic growth. The increasing levels of economic activity and the resulting economic growth are caused by the increased investment. The speed of adjustment towards the long run equilibrium

is 0.21. The long-run estimates of the model are reported in the below table. The dependent variable is economic growth in log form whereas, foreign direct investment, trade openness, gross fixed capital formation, employed labor force, and institutional performance are independent variables.

Table 5. Coefficient of Long-Run Relationship
Dependent variable: LN EG

Variable	Coefficient	Std. Error	t-Statistics	Probability
LN TR	0.0730	0.0231	-3.1514	0.0071
LN FI	0.0284	0.0094	-3.0230	0.0091
LLF	1.0613	0.0367	28.8711	0.0000
LCF	0.5323	0.0559	9.5150	0.0000
LINQ	0.1729	0.0835	2.0691	0.0575
C	-3.3365	0.6952	-4.7988	0.0003

Source: Authors own calculations by using Eviews-9

The results show that almost all independent variables play a positive and significant role in enhancing the economic growth of Pakistan during the period of estimation.

CONCLUSION AND POLICY IMPLICATION

This section explains the overall summary of the study, which will provide an overview of the study. With the time series data, this study examines the effect of foreign direct investment, trade openness, and institutional performance on economic growth in Pakistan. From 1990 to 2022, time series data is used. The Augmented Dickey Fuller unit root test and other economic techniques are used to determine the data's stationarity. The estimation is done using the augmented dicky fuller unit root test. The dependent variable is economic growth in the log while the explanatory variables are foreign direct investment, trade openness, employed labor force, gross fixed capital formation, and institutional performance. It suggests that trade openness has a positive influence on economic growth. Trade is opened up foreign direct investment and economic growth both rise as a result of an increase in exports and imports that's why trade openness has a positive impact on economic growth. Also, all variables have a positive influence on economic growth. Foreign direct investment has a favorable impact on economic growth. Because as a result of foreign direct investment. Investment rises economy has increased production have A positive association. In the case of Pakistan's economy, it is vital to investigate the benefits and drawbacks of trade openness and foreign direct investment, and institutional performance and economic growth.

The following are the Important policy implications:

- The exports of the country should be promoted then the economy will be boosted up and developed Investment in production, businesses in a country for expanding goods and services and provided it into other countries
- Increase tax income, reduce spending money on benefits it provide unemployment benefits.

REFERENCES

- Akbar, M., Fakher, A., & Nazar, R. (2021). Impact of Trade Openness, Public Debt and Institutional Performance on Financial Development: Evidence from Asian Countries. *Pakistan Journal of Social Sciences (PJSS)*, 41(1). PP.97-108.
- Baiashvili, T., & Gattini, L. (2020). *EIB Working Papers 2020/02-Impact of FDI on economic growth: The role of country income levels and institutional strength (Volume 2020/2)*. European Investment Bank.
- Duodu, E., & Baidoo, S. T. (2020). How does the quality of institutions affect the impact of trade openness on the economic growth of Ghana?. *Cogent Economics & Finance*, 8(1), 1812258.
- Khan, I., Xue, J., Zaman, S., & Mehmood, Z. (2023). Nexus between FDI, economic growth, industrialization, and employment opportunities: empirical evidence from Pakistan. *Journal of the Knowledge Economy*, 14(3), 3153-3175.

- Kumari, R., Shabbir, M. S., Saleem, S., Yahya Khan, G., Abbasi, B. A., & Lopez, L. B. (2023). An empirical analysis among foreign direct investment, trade openness and economic growth: evidence from the Indian economy. *South Asian Journal of Business Studies*, 12(1), 127-149.
- Omoke, P. C., & Opuala–Charles, S. (2021). Trade openness and economic growth nexus: Exploring the role of institutional quality in Nigeria. *Cogent Economics & Finance*, 9(1), 1868686.countries. *Economic Research-Ekonomska Istraživanja*, 35(1), 4065-4091.
- Qasim, H. M., Majid, A., & Jadoon, A. (2021). Institutional quality, trade openness and economic growth in South Asian Economies: Some new insights from a panel data analysis. *South Asian Studies*, 36(01), 17-38.
- Wang, M. L., Sarkodie Ntim, V., Yang, J., Zheng, Q., & Geng, L. (2022). Effect of institutional quality and foreign direct investment on economic growth and environmental quality: Evidence from African countries. *Economic research-Ekonomska istraživanja*, 35(1), 4065-4091.