

The Impact of Foreign Direct Investment, Financial Development, and Trade Openness on Economic Growth Emerging Markets

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ABSTRACT: *This study aims to analyze the effect of foreign direct investment (FDI), financial development (FD), and trade openness (TO) on the economic growth of emerging markets. The method used is Autoregressive Distributed Lag (ARDL) to identify the short-term and long-term effects between variables. The estimation results show that in the long term FDI, FD and TO show positive and significant values on economic growth while in the short term FDI shows positive but not significant values on economic growth, only FD and TO show positive and significant values on the economic growth of Emerging Markets countries. Therefore, it is expected that countries that are members of Emerging Markets take strategic steps to improve the financial sector and international trade between developing countries.*

KEYWORDS—*Foreign Direct Investment, Financial Development, Trade Openness, Economic Growth*

I. INTRODUCTION

Finance has a crucial role in driving economic development and advancing the financial system as a whole. Indicators such as credit circulation stability, increasing commercial banking assets, and net profit reflect the level of financial development achieved. Therefore, strengthening the financial sector is needed to be able to channel funds more effectively to productive sectors in the economy. (Hunjra et al., 2024). Achieving financial development through indicators of credit circulation stabilization, commercial banking assets, and net profit (Dwumfour & Ntow-Gyamfi, 2018).

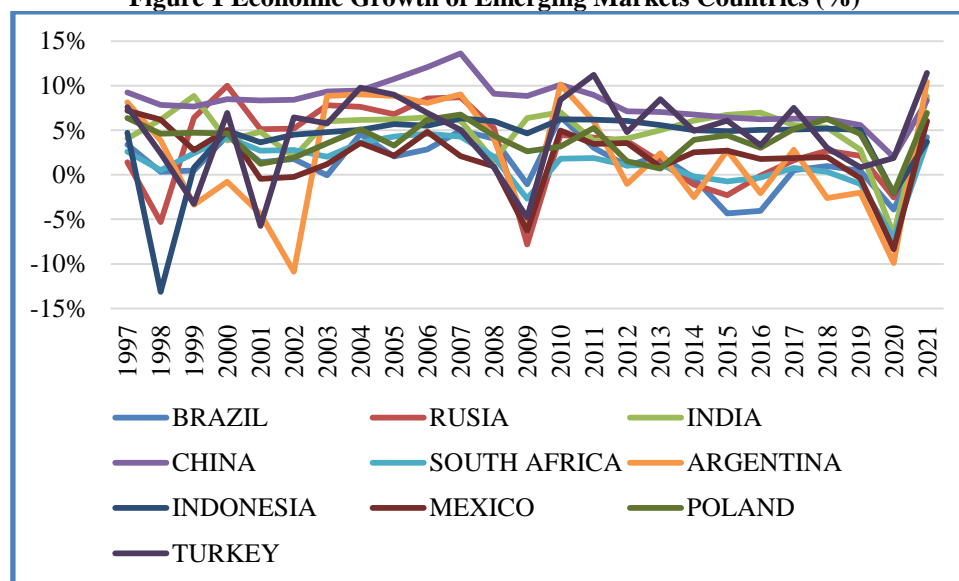
One of the indicators that plays an important role in driving the growth of a country's Gross Domestic Product (GDP) is foreign investment which can occur through various mechanisms. Foreign investment not only brings significant capital flows, but also creates jobs, increases exports, and introduces new technologies and managerial skills. The long-term characteristics of foreign investment make it more stable than portfolio foreign investment, so it can support sustainable foreign investment in the recipient country. The sustainability of this foreign investment contributes to increasing capital, creating jobs, reducing unemployment, and improving the quality and capabilities of human resources (Rahmadiani et al., 2023).

Trade openness has been recognized as a key element that supports economic activity and drives economic growth. Through international trade, countries can open access to foreign markets, increase competition, expand markets, and facilitate technology transfer. This encourages production efficiency, increases productivity, and creates synergies that support economic growth. can then lead to an increase through trade openness and economic growth into liberation in developed and developing countries. (Onafowora & Owoye, 2024).

Emerging Market Countries refer to countries or economies that are quite significant and characterized by strong growth potential including economic wealth, finances, and even political institutions. Emerging markets are countries such as Brazil, Russia, India, China, Turkey, Indonesia, and Mexico that are experiencing favorable demographics and showing economic strengthening (Kumar, R 2014). Other emerging market countries such as Argentina, Poland, and South Africa (Duttagupta & Pazarbasioglu, 2021).

The economic growth of emerging market countries is generally faster than that of developed countries. In the Asian region, countries such as China and India, have recorded high levels of Gross Domestic Product (GDP). This difference reflects the dynamics of the global economy, where emerging market countries, especially in Asia, play an important role in driving world economic growth (Priyajati & Haryanto, 2020).

Figure 1 Economic Growth of Emerging Markets Countries (%)



Source: World Bank, 2024

Data from 2017 to 2021 is economic growth data from ten developing countries reflecting the complexity of global economic dynamics, influenced by various domestic and international factors, including the significant impact of the Covid-19 pandemic in 2020. Before the pandemic, most countries showed a relatively stable growth trend despite moderate fluctuations. For example, India recorded growth of 5.5% in 2017 and 5.3% in 2018, making it one of the countries with the highest growth before the pandemic. China also showed stability with growth of around 6% during the period. However, in 2020, all countries experienced sharp economic contractions due to the pandemic and restrictions on economic activity. Argentina experienced the deepest contraction of -9.9%, followed by Mexico at -8.3% and South Africa at -7.1%.

Indonesia experienced an economic contraction of 2.1% in 2020 due to the COVID-19 pandemic. However, this decline was milder compared to several other developing countries. In 2021, many countries began to show signs of economic recovery. Argentina recorded growth of 10.3%, while Turkey experienced a growth surge of 11%, making it the highest among these countries. India and Russia recorded growth of 8.8% and 4.7% respectively, indicating a fairly rapid recovery from the previous crisis. China, although not experiencing a contraction in 2020, still recorded growth of 8% in 2021, reflecting the resilience of its economy. The economic recovery journeys in these developing countries show a variety of responses to global challenges, influenced by domestic policies, the resilience of economic sectors, and the fiscal and monetary support implemented by each government.

The role of the financial sector in emerging market countries needs to be continuously developed and implemented so that the financial system becomes the center of success in the country.(Yu et al. 2024). Developing countries experience a very large flow of trade, where most of the foreign investment and trade between these countries makes their economic growth develop more rapidly and sustainably.(Ullah et al., 2023).China excels in exporting finished goods, while India excels in exporting semi-finished goods. The competitive relationship between India and China as developing countries increases the competitiveness of the economy in the global market.(Ismail & Ahmed, 2022). As a country that has global influence, income in India is much higher than China. India is one of the countries with the highest levels of inequality despite being one of the fastest growing economies in the world.(Kumar, N. 2024).

Emerging Markets countries are a major group of developing countries that have shown rapid economic growth and adopted policies that support trade expansion and openness.Banday et al. (2021)states that the increasing economic activity in these countries drives the level of trade openness, because they tend to have higher technological advancements than other developing countries, thus having a greater trade capacity. In addition to being strategic actors in the global economy, Emerging Markets countries also make significant contributions to the world's Gross Domestic Product (GDP) and contribute the largest proportion of the global population. With the wealth of natural resources they have, research on the efficiency of resource utilization and its sustainability, both from an environmental and economic perspective, is very important. So that the

development of the financial sector and trade openness are key factors that need to be strengthened to support the stability and resilience of the economy of each country

As stated Özkan et al., (2024) that financial development and growth have variations between countries and provide positive contributions in the short and long term. The importance of this research is to find the influence of financial development and trade openness on growth in *Emerging Markets* as a group of developing country economies with high growth rates.

This study discusses the problem of the influence of foreign direct investment (FDI), financial development and trade openness on the economic growth of emerging markets. Based on this, the purpose of this study is to analyze the influence of foreign direct investment (FDI), financial development and trade openness on the economic growth of emerging markets.

II. LITERATURE REVIEW

2.1. Foreign Direct Investment

Foreign Direct Investment or (FDI) is an investment activity carried out by foreign investors and aims to do business in a country. Investments can use all foreign capital or participate in domestic capital. PMA is a way for foreign investors to invest in companies and buy the total purchase or acquisition of the company. Foreign Investment (PMA) can be interpreted as an investment by the private sector of the country of origin of the capital owner or as an investment in other countries on behalf of the capital government (Putri et al., 2022). Measurement in viewing the level of PMA in the study using Foreign direct investment, net inflows (USD).

2.2. Financial Development

Financial development is a process for a country to improve and enhance the financial sector so that it can increase access to financing and increase the efficiency of resource allocation. Measuring financial development is very important to assess the development of the sector and understand the impact of financial development on economic growth. The framework in identifying a well-functioning financial system is measured using the depth with financial institutions in the Private Sector Credit (Credit Sector Banks USD) (Horvath et al., 2024).

2.3. Trade Openness

Trade openness is seen in a country's international trade activities to create a more efficient global market, increase competition, and encourage production so that it can increase welfare and economic growth. Trade openness also provides easier access to technology and broad innovation for each country so that it can reach cheaper prices for consumers due to greater competition. (Charlos Sibarani et al., 2023). The openness of a country's trade can be seen from the level of international trade (Trade USD) whose database is taken from the World Bank as the largest research center in the world.

2.4. Economic growth

According to Burn & Palindangan, (2021) Economic growth means the development of production of goods and services in a country as well as an increase in the amount of industrial production and infrastructure development.

Based on the explanation above, the hypothesis in this study is:

H1: Foreign direct investment (FDI) has an impact on economic growth.

H2: Financial development has an impact on economic growth

H3: Trade openness has an effect on economic growth

H4: Foreign direct investment (FDI), financial development and trade openness have an impact on economic growth.

III. METHOD

In this study, the population in this study is Emerging Markets countries including Brazil, Russia, India, China, South Africa, Argentina, Indonesia, Mexico, Poland, and Turkey. The sample in this study consists of data on foreign investment, public sector credit, and international trade in Emerging Markets countries for the period 1997 to 2021. This study uses a model approach, namely Autoregressive Distributed Lag (ARDL) to determine short-term and long-term relationships. The model in this study is to see the relationship between Foreign Direct Investment (FDI), financial development and trade openness in influencing economic growth

IV. RESULTS AND DISCUSSION

4.1. Classical Assumption Test

4.1.1. Stationarity Test

Table 1. Stationarity Test Results

Var	Augmented Dickey Fuller				Philips Perron			
	Level	Prob.**	1st diff	Prob.**	Level	Prob.**	1st diff	Prob.**
GDP	17.56	0.61	60,269	0.00	12.15	0.91	131,794	0.00
FDI	34,701	0.02	132,975	0.00	65,760	0.00	735.103	0.00
FD	26.69	0.14	102.212	0.00	22.63	0.30	97,948	0.00
TO	24.80	0.20	115.38	0.00	32,047	0.04	235.63	0.00

Based on the results of the stationarity test conducted, it can be seen that most of the research variables are not stationary at the level level but become stationary in the first difference level test. The test results show that the economic growth variable (GDP) is not stationary at the level level but is stationary at the first difference level. PE has a Statistic value of 60.269 with an Augmented Dickey Fuller (ADF) prob value of $0.0000 < 0.05$, which means that the economic growth variable data is stationary at the first difference level which is also proven in the Philips Perron (PP) statistical test of 131.794 with a prob value of $0.0000 < 0.05$.

The FDI variable also shows that it is stationary at the level level in the ADF and PP tests with a statistical value of 34.701 and a probability value of $0.02 < 0.05$. In the FD variable, the ADF test is stationary at the first difference level and the PP test with statistical values of 102.212 and 97.948 with a prob value of $0.0000 < 0.05$. Then the TO variable is stationary at the level level in the PP test with a statistical value of 32.047 and a prob value of $0.0428 < 0.05$.

4.1.2. Cointegration Test

Table 2. Cointegration Test Results

	t-Statistic	Prob.
ADF	-1.180080	0.0190
Residual variance	0.001764	
HAC variance	0.002274	

The results of the cointegration test using the Kao Residual Cointegration Test by looking at the probability value in the ADF of $-1.1800 < 0.05$, which is less than 0.05 ($\alpha = 5\%$) so it can be concluded that there is cointegration (long-term equilibrium relationship) in the variables.

4.1.3. Cross-Section Dependence (CD) Test

Table 3. Cross-Section Dependence (CD) Test Results

Test	Statistics	df	Prob.
Breusch Pagan LM	228.7944	45	0.0000
LM scaled message	19.37363		0.0000
CD Order	2.570629		0.0102

Based on Table 3 shows the Cross-Section Dependence (CD) test that there is significant cross-dependence between cross-section units in the model. The null hypothesis stating that there is no cross-dependence is strongly rejected based on the very small p-value in all Cross-Section Dependence (CD) tests. In the Breusch-Pagan LM test, the test statistic value is 228.7944 with a prob value of 0.0000 indicating significant cross-dependence. The scaled LM and CD Pesaran tests also provide similar results with test statistics of 19.37363 and 2.570629 respectively, both of which also have Prob values of 0.0000 and 0.0102 indicating significant correlation between cross-session units.

4.2. Model Criteria Selection

Table 4. Model Criteria Selection

Model	LogL	AIC*	BIC	HQ	Specification
2	606.266405	-4.778689	-3.494246	-4.259940	ARDL(1, 2, 2, 2)
1	575.282016	-4.769699	-3.949512	-4.438450	ARDL(1, 1, 1, 1)
3	582.534271	-4.744605	-3.769667	-4.350856	ARDL(2, 1, 1, 1)
4	611.537168	-4.735499	-3.296304	-4.154251	ARDL(2, 2, 2, 2)

Based on table 4, it is known that the model with the lowest AIC value is the most optimal to use because it produces the best trade-off between the fit in its model. It is known that the model with ARDL specifications (1,2,2,2) shows the lowest AIC value of -4.778 then with a BIC value of -3.494 and an HQ value

of -4.259 making this model the most suitable for use in this analysis. The second best model with ARDL specifications (1,1,1,1) which is also a reference shows an AIC value of -4.769, a BIC value of -3.949 and an HQ value of -4.438.

Table 5. Panel Autoregressive Distributed Lag (ARDL) Estimation Results

Dependent variable = D (GDP) Selected Model: ARDL (1,2,2,2)				
Variables	Coeff.	Std. Error	t-Stat.	Prob
Long-term				
lnFDI	0.0358**	0.0176	2.0269	0.0444
lnFD	0.1805***	0.0323	5.5835	0.0000
lnTO	0.6327***	0.0520	12.1551	0.0000
Short-term				
C	0.1162***	0.0465	2.4955	0.0136
Δ lnFDI	0.0024	0.0046	0.5172	0.6057
Δ lnFD	0.1020***	0.0386	2.6408	0.0091
Δ lnTO	0.1633***	0.0435	3.7530	0.0002
Δ ECT	-0.0872**	0.0381	-2.2855	0.0236

Note: *, **, and *** indicate significance levels at the 10%, 5% and 1% levels.

Based on table 6, the results of the ARDL model estimation show that in the long term, FDI has a significant positive effect on GDP with a coefficient value of 0.035, which means that every 1 percent increase in FDI will increase GDP by 3.5 percent. This can be interpreted for the FD variable that in the long term, an increase in FD has a positive sign and a significant effect on GDP with a coefficient value of 0.1805, which means that a 1 percent increase in FD will increase GDP by 18 percent. Then TO also shows a significant positive effect with a coefficient value of 0.63, which means that a 1 percent increase in TO will increase GDP by 63 percent in the long term.

In the long term, the positive and significant influence shown by the variables FDI, FD and TO on GDP indicates that both factors have a very important role in driving economic growth in Emerging Markets countries. This confirms that FD and FDI, the entry of foreign direct investment, are able to increase production capacity, expand employment opportunities, and encourage technology transfer and economic efficiency.

While the results of the short-term ARDL model estimation show a constant (C) with a positive value and a significant effect, the results indicate that when all independent variables in the model are constant or zero, GDP will have a positive value of 0.1162. This shows that without any changes in FDI, FD and TO at the basic level, GDP will have a significant positive value.

Furthermore, the short-term results of FDI show a positive but insignificant value where the coefficient value is 0.0024 with a probability of $0.6057 > 0.05$. The short-term results of FD show similarities with the long-term results where FD has a significant positive effect with a percentage increase of 1 percent FD can increase GDP by 10 percent. Then the same results on TO which also has a positive coefficient value of 0.1633. This means that an increase of 1 percent in the short term will have an effect of increasing GDP by 16 percent.

Then the Error Correction Term (ECT) has a negative value of -0.0872 and is very significant at the 5 percent level, indicating that the error correction mechanism in the model where about 8 percent of the long-term equilibrium deviation is corrected in each period. In other words, the model has the ability to return to long-term equilibrium slowly after a short-term shock.

V. CONCLUSION

Based on the research results found, it can be concluded that first, foreign investment has a significant positive impact in the long term and an insignificant positive impact in the short term. Second, financial development has a significant positive long-term impact and a positive and significant short-term impact on the economic growth of Emerging Markets. Through private sector credit in financial development can increase competition in the market with the hope of reducing credit costs for both individuals and companies. The contribution of financial institutions can create more profitable foreign investment and increase GDP in economic growth. Third, the research findings also show that trade openness has a positive impact both in the long term significantly and in the short term significantly on economic growth in Emerging Markets countries. The positive influence of trade openness can be caused by increased production that benefits industry and companies.

This study has several limitations that need to be considered. First, the data used is limited to a certain time period and certain countries, so the results of the study cannot necessarily be generalized to all countries or different time periods. Second, the variables of foreign investment, financial development, and trade openness used in this study are measured by a certain indicator that may not fully reflect the real dynamics in the field. Third, this study is quantitative and does not explore qualitative factors such as political stability, institutional quality, and government policies that can also affect the relationship between these variables. Therefore, further research is needed with a wider data coverage and a more diverse methodological approach to obtain a more comprehensive understanding.

REFERENCES

- [1]. Bakar, A., & Palindangan, J. (2021). Analysis of the Influence of Economic Growth Rate and Human Development Index (HDI) on Unemployment Rate in Mimika Regency. *CRITICAL JOURNAL*, 5(1).
- [2]. Bandy, U. J., Murugan, S., & Maryam, J. (2021). Foreign Direct Investment, Trade Openness and Economic Growth in BRICS Countries: Evidence from Panel Data. *Transnational Corporations Review*, 13(2), 211–221. <https://doi.org/10.1080/19186444.2020.1851162>
- [3]. Charlos Sibarani, J., Prabowo, A., & Purba, B. (2023). The Role of Classical Theory in the Formation of Modern Economic Thought. *Madani: Multidisciplinary Scientific Journal*, 1(11), 246–252. <https://doi.org/10.5281/zenodo.10251158>
- [4]. Duttagupta, R., & Pazarbasioglu, C. (2021). Emerging Markets Must Balance Overcoming The Pandemic, Returning to More Normal Policies, and Rebuilding Their Economies.
- [5]. Dwumfour, R. A., & Ntow-Gyamfi, M. (2018). Natural Resources, Financial Development and Institutional Quality in Africa: is There a Resource Curse? *Resources Policy*, 59, 411–426. <https://doi.org/10.1016/j.resourpol.2018.08.012>
- [6]. Horvath, R., Horvatova, E., & Siranova, M. (2024). The Determinants of Financial Development: Evidence from Bayesian Model Averaging. *Economic Systems*, 101274. <https://doi.org/10.1016/j.ecosys.2024.101274>
- [7]. Hunjra, A.I., Azam, M., Verhoeven, P., Taskin, D., & Dai, J. (2024). The Impact of Geopolitical Risk, Institutional Governance and Green Finance on Attaining Net-Zero Carbon Emission. *Journal of Environmental Management*, 359. <https://doi.org/10.1016/j.jenvman.2024.120927>
- [8]. Kumar, N. (2024). Natural resources and Economic Growth: Examining the Role of Globalization, Financial Development, and Digitalization in India. *Resources Policy*, 97. <https://doi.org/10.1016/j.resourpol.2024.105260>
- [9]. Kumar, R. (2014). Stock Markets, Derivatives Markets, and Foreign Exchange Markets. In *Strategies of Banks and Other Financial Institutions* (pp. 125–164). Elsevier. <https://doi.org/10.1016/b978-0-12-416997-5.00005-1>
- [10]. Onafowora, O. A., & Owoye, O. (2024). Trade Openness, Governance Quality, and Economic Growth in Latin America and the Caribbean. *International Economics*, 179. <https://doi.org/10.1016/j.inteco.2024.100527>
- [11]. Özkan, O., Popescu, I.A., Destek, M.A., & Balsalobre-Lorente, D. (2024). Time-Quantile Impact of Foreign Direct Investment, Financial Development, and Financial Globalization on Green Growth in BRICS Economies. *Journal of Environmental Management*, 371. <https://doi.org/10.1016/j.jenvman.2024.123145>
- [12]. Priyajati, HA, & Haryanto, T. (2020). The Relationship of Logistics to Economic Growth: A Case Study of 9 Emerging Markets Asia Countries. *Media Trend*, 15(1), 133–146. <https://doi.org/10.21107/mediatrend.v15i1.6637>
- [13]. Putri, JK, Fhon, T., Arifin, N., Syavira, R., Nur, ZR, Nasution, M., & Qolbiah, A. (2022). The Role of Foreign Investment in Building the Economy in Indonesia. *JOSR: Journal of Social Research* February, 2022(3), 201–212. <http://https://ijsr.internationaljournallabs.com/index.php/ijsrhttp://ijsr.internationaljournallabs.com/index.php/ijsr>
- [14]. Rahmadiani, A., Nairobi, N., & Darmawan, A. (2023). The Influence of Government Effectiveness and Foreign Direct Investment on GDP in South Asian Countries. *Journal of Economic Research*, 3(3), 147–159. <https://doi.org/10.23969/jrie.v3i3.77>
- [15]. Ullah, A., Raza, K., & Mehmood, U. (2023). The Impact of Economic Growth, Tourism, Natural Resources, Technological Innovation on Carbon Dioxide Emission: Evidence from BRICS Countries. *Environmental Science and Pollution Research*, 30(32), 78825–78838. <https://doi.org/10.1007/s11356-023-27903-4>

- [16]. Yu, W., Gan, Y., Zhou, B., & Dai, J. (2024). Revisiting the Economic Policy Uncertainty and Resource Rents Nexus: Moderating Impact of Financial Sector Development in BRICS. *International Review of Financial Analysis*, 94. <https://doi.org/10.1016/j.irfa.2024.103324>

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