Proceedings Series on Proceedings of Multidisciplinary Sciences, Volume 2, No. 1
International Conference of Business, Education, Health, and Scien-Tech (ICBENS)
ISSN: -

The Role of Foreign Direct Investment in Driving Indonesia's Economic Growth: A Review from 1983 to 2023

Jibria Ratna Yasir[1*], Madris[2], Ikbal Lutfi[3], Bahrul Rusydi[4]

[1]Institut Agama Islam Negeri Palopo, Indonesia
[2]Universitas Hasanuddin, Indonesia
[3]OJK, Indonesia
[4]Universitas Islam Negeri Alauddin, Indonesia

Corresponding Author Email: jibria_ratnayasir@iainpalopo.ac.id

Abstract

This article explores the role of Foreign Direct Investment (FDI) in driving Indonesia's economic growth from 1983 to 2023. FDI has become a crucial pillar of Indonesia's economic development strategy, contributing to increased production capacity, technology transfer, and job creation. However, Indonesia's Investment Law tends to be cumbersome, making it difficult for investors to obtain permits, which can hinder investment. This study uses secondary data from various official sources to analyze the relationship between FDI flows and economic growth. The Vector Error Component Model (VECM) analysis method is used to analyze the effect of FDI on economic growth in Indonesia. The test results indicate that increased FDI does not have a positive impact on Indonesia's economic growth. This means that Indonesia's economic performance is negatively affected by foreign investment, while domestic investment (PMTB) is beneficial to the Indonesian economy. These findings are expected to provide insights for policymakers and investors, as well as encourage efforts to improve the investment climate and be more effective in formulating policies and maximizing the potential for future economic growth.

Keywords: Foreign_Direct_Investment; Vector_Error_Component_Model; Economic_ growth

1. Introduction

One indicator of the success of a country's economic development can generally be measured through its economic growth rate. Comprehensive economic growth, reaching all levels of society, can impact domestic income, both aggregate and per capita. Thus, it is hoped that problems of unemployment, poverty, and unequal income distribution can be addressed through a trickle-down effect (Todaro and Smith 2006). Investment is a key component in accelerating economic development. In developing countries, foreign direct investment (FDI) is generally considered an instrument for stimulating economic growth. Therefore, governments strive to encourage foreign direct investment in various ways.

FDI is considered capable of addressing capital challenges in developing countries because it is less volatile and can supply capital in the long term.defined as a broad capital flow where a company or corporation is in one country that aims to expand or produce subsidiaries in other countries through control acquisitions and resource transfers (Mun et al. 2009). In an effort to build the country's economy, Indonesia continuously

makes efforts so that foreign investors are willing to invest capital in the form of FDI in Indonesia. Economists and policymakers believe that FDI provides benefits to the host country's economy in terms of increasing investment, managerial capabilities, encouraging innovation and the availability of employment and output from companies in the investor country, both in companies that receive FDI (through direct effects and in companies working in the same industry (through direct spillover effects) which will have an impact on overall GDP growth (Szkorupova, 2015).

The development of investment in Indonesia began with a policy, namely the enactment of Law No. 1 of 1967 concerning Foreign Investment (Law No. 1/1967 PMA). This was then amended to become Law No. 25 of 2007, which was expected to encourage FDI inflows into Indonesia. The significant increase in FDI flows began in 1987, likely due to the fact that, when the law was first enacted, the investment and business climate in Indonesia was not yet conducive, and the Indonesian market was not yet highly attractive to foreign investors.

Indonesia was also affected by the 1997 Asian financial crisis. The Indonesian economy contracted, followed by negative growth, and the business sector plummeted by as much as -13%. The crisis also caused the decline in foreign investment in Indonesia, which occurred from 2.16 percent to -0.25 percent in 1998, and the decline continued until 2001. The depreciation of the rupiah exchange rate from Rp. 2,000 per US dollar to Rp. 15,000 per US dollar was one of the main triggering factors for the decline of the Indonesian economy during the crisis.

The Indonesian government addressed the consequences of the crisis by restoring various aspects related to investment. The government collaborated with the IMF through structural reform programs, financial sector restructuring, and macroeconomic policies to restore foreign investor confidence and stabilize the rupiah exchange rate. Furthermore, the government removed various restrictions on attracting FDI, streamlined the bureaucratic system, and established the Investment Coordinating Board (BKPM) as a one-stop shop for investment. This is to provide greater assurance to foreign investors. In January 2000, Indonesia entered into bilateral investment agreements with other countries. Indonesia has signed investment agreements with 52 countries (Agreement Investment Guarantees).

Neo-classical growth theory explains that developing countries that have low levels of capital stock will be able to achieve high levels of growth. *marginal rate of return.*

Higher productivity and increased growth if adequate capital injections are provided. Gross Fixed Capital Formation (GFCF) is one element of the expenditure side of Gross Domestic Product (GDP), which also serves as a parameter of the level of investment in the economy (Rajni 2013). Gross Fixed Capital Formation includes spending by the private and government sectors on additional fixed assets in the economy such as residential and non-residential buildings, other buildings such as roads and airports, and machinery and equipment. In Indonesia, GFCF is a key component in driving the economy through efforts to equalize inequality between regions, which in turn can create an expansion of the economy of scale. GFCF is often an important instrument to stimulate the economy with capital injections when the Indonesian economy is still growing but slowing. Based on this, FDI is a component capable of stimulating the Indonesian economy. Research conducted in various countries shows varying effects of FDI on the economy.

According to Hossain (2016), there is a positive relationship between FDI and economic growth in 79 developing countries analyzed in previous research. This is in line with the research of Yosoff and Nuh (2015). FDI is the most important component in determining GDP per capita in Thailand; the high economic growth rate in Thailand attracts foreign investors to invest their capital. Hussain and Haque (2016) also stated that foreign investment is significant and has a long-term relationship to GDP per capita in Bangladesh. Long-term growth caused by increased FDI through income levels and openness of employment is able to reduce poverty rates in Bangladesh.

FDI does not always have a positive impact on a country's economic growth, According to research conducted by Azman-Saini et al. (2010), FDI itself is negatively related to economic growth. The effect of FDI depends on the level of economic freedom in the host country. FDI also has a negative effect in Latin America (Alvarado et al. 2017), Pakistan (Saqib et al. 2013), and Vietnam (Anwar and Nguyen 2010). FDI is considered unable to meet the minimum achievement for economic growth, and it was even found that FDI causes a trade deficit in Vietnam.

This description has explained the controversy surrounding the influence of FDI on the economy; therefore, the problems analyzed in this research are:How does Foreign Direct Investment and other variables contribute to Indonesia's economic growth in 1983-2023? This study analyzes the contribution of Foreign Direct Investment and other variables to Indonesia's economic growth in 1983-2023.

2. Methodology

This study uses secondary data in the form of annual time series covering the period 1983 to 2023. The data types used include GDP per capita, exports, imports, trade openness, FDI, and domestic investment. The data source is the World Bank. This study also analyzes the problem using a literature review from journals, articles, and various other relevant literature.

The analysis method that The Vector Error Correction Model (VECM) used in this study is because the data in this study is known to be stationary and integrated in first difference. The analysis tool used is Microsoft Excel 2010 to group the data, which is then processed using Eviews 10.

Vector Error Correction Model(VECM)

The VECM is a restricted VAR model used for variables that are non-stationary but have the potential to cointegrate. Additional restrictions are applied to the VECM due to the existence of non-stationary forms and data at the level but which can be cointegrated. Information regarding the existence of these cointegration restrictions is then incorporated into the VECM model specifications. The general VECM model specifications are as follows:

$$\Delta\, yt = \mu_{0x} + \mu_{1x}t + \Pi_x\, yt - 1 + \Sigma rix\Delta y_{t-1} + e_t$$

Where:

Δyt = yt – yt-1

Yt = Vector containing the variables analyzed in the study

μ0x = Intercept vector

μ1x = Regression coefficient

vector t= time trend

Πx = axβ' where b' has a long-run cointegration equation Yt-1 =in-level variables

Σri = regression coefficient

matrix k-1 = VECM order of VAR

et = error term

Impulse Response Function (IRF)

The response given by an endogenous variable in the model to face shocks within the variable itself or other endogenous variables can be demonstrated by IRF analysis. The Impulse Response Function can also be used to estimate shocks from one variable to another and the time required for them to affect the variable. The response of an endogenous variable in a model to shocks within the variable itself or other endogenous variables can be demonstrated by IRF analysis.

The method and model in this study refer to research conducted by Ahmed Abdulrahman Khder Aga (2014). The method used is the Vector Autoregressive (VAR/Vector Error Correction Model (VECM) as described below:

$$\begin{bmatrix} \Delta LGDPt \\ \Delta FDIt \\ \Delta DINt \\ \Delta TRADEt \end{bmatrix} = \begin{bmatrix} \alpha_{10} \\ \vdots \\ \alpha_{40} \end{bmatrix} + \begin{bmatrix} \alpha_{11} & \cdots & \alpha_{14} \\ \vdots & \ddots & \vdots \\ \alpha_{41} & \cdots & \alpha_{44} \end{bmatrix} \begin{bmatrix} \Delta LGDPt-1 \\ \Delta FDIt-1 \\ \Delta DINt-1 \\ \Delta TRADEt-1 \end{bmatrix} + \begin{bmatrix} e_{1t} \\ \vdots \\ e_{4t} \end{bmatrix}$$

Where:

LGDP : Natural logarithm of GDP per capita (US dollars)

FDI :*Foreign Direct Investment FDI Inflows*(% of GDP)

DIN : Domestic investment (*Gross Fixed Capital Formation*(% of GDP)) TRADE : Trade Openness (exports + imports) (% of GDP)

3. Result and Discussion

Condition of Indonesia's Gross Domestic Product (GDP) per capita

Increased economic growth in a country is often used as a benchmark for the government's success in improving the welfare of its people.*Gross Domestic Product*(GDP) per capita is an indicator of a country's economic growth which is obtained from dividing the total national GDP by the number of residents in that country.

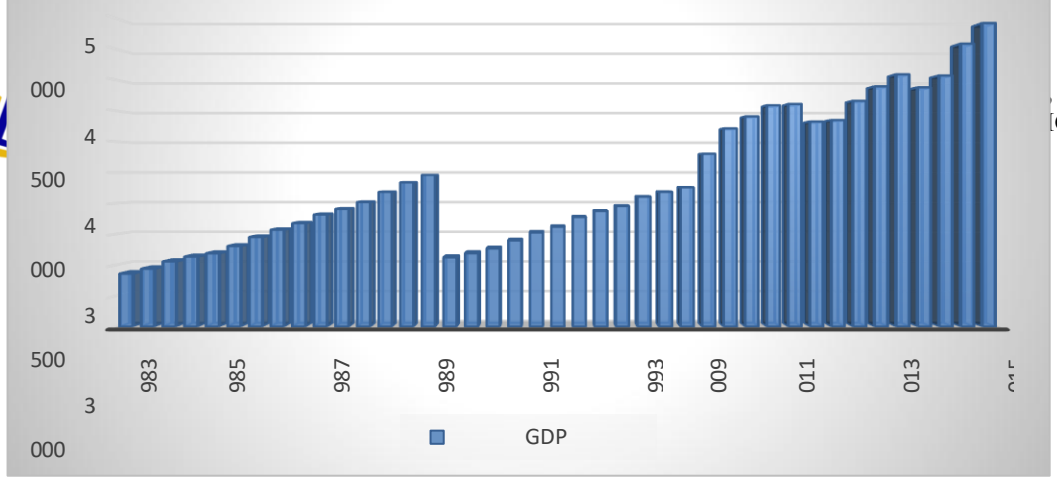

Figure 1 Gross Domestic Product per capita of ndonesia 1983-2023

Source: World Bank, 2024 (processed)

Figure 1 shows Indonesia's GDP per capita data in dollars from 1983 to 2023. Indonesia's GDP per capita experienced steady growth before the 1998 economic crisis, but this multidimensional crisis caused GDP per capita to plummet from US$1,063.71 in 1997 to US$463.95 in 1998. In the following years, Indonesia's GDP per capita continued to strengthen, showing an upward trend until 2012. This achievement was achieved through government policy reforms, specifically through a strong macroeconomic framework. The largest contributor came from household consumption demand, along with increased domestic consumption, which led to continued domestic economic growth.

Increasingly improving labor market conditions and increasingly effective poverty alleviation programs have helped increase income and public confidence. The external sector also plays a significant role, particularly through global demand for commodity exports (OECD Survey 2015). However, the pace of reform has slowed, perhaps partly due to the recent slowdown in growth. National GDP per capita declined in 2014–2015 as global crude oil prices fell to below US$30 per barrel. It then increased again in 2016–2019 as the domestic economy grew.

FDI Development Against Total Investment

FDI is considered a crucial instrument for explaining economic development in developing countries because it combines capital, technology, marketing, and managerial skills. Furthermore, FDI can aid the recovery of various economic sectors that require an abundance of funds and a large workforce, as FDI is considered a key driver of economic growth and a relatively stable investment in the long term. Furthermore, the level of capital

inflows into a country depends on the confidence of foreign investors in investing their capital and conducting economic activities there (Aprianto, et al. 2018).

Figure 2 Realization of FDI and Total Investment in Indonesia 2013-2023
Source: Investment Coordinating Board (BKPM) 2025 (processed)

Figure 2 shows the amount of realized FDI against total investment. The amount of realized FDIFrom 2013 to 2019, investment in Indonesia consistently increased annually, but declined in 2020 and 2021 due to the global impact of the COVID-19 pandemic. The increase was again seen in 2022 and 2023. In addition to 2020 and 2021, the percentage of realized FDI to total investment was consistently above 50%. This indicates that Indonesia prioritizes increasing FDI over domestic investment. Furthermore, Indonesia's performance in terms of FDI's contribution to GDP is already quite high. However, according to a World Bank survey, policies for conducting business in Indonesia tend to be complicated. These include labor regulations that arise during the recruitment process. Furthermore, the minimum wage policy is considered burdensome for the private sector, as every 10 percent increase in the minimum wage reduces the average employment rate in a given province by 0.8 percent.

Vector Error Variance Decomposition (VECM) Estimation Results

In this study, the relationship between long-term and short-term variables is explained through the results of the VECM model estimation. The significance of each variable with other variables analyzed in this study is assessed at the 5 percent significance level. In the VECM estimation, the endogenous variables consist of GDP per capita, FDI,and domestic investment. Meanwhile, the trade openness variable is used as an exogenous variable. The VECM is able to estimate the long-term relationship of the endogenous variables in the model so that they converge to their cointegration relationship, while still allowing for short-term dynamics.

Table 1 VECM Estimation Results

Long-term		
Variables	Coefficient	T statistics
FDI (-1)	-1.007904	[2.3671]*
DIN (-1)	0.681261	[-5.33582]*

Note: an asterisk (*) indicates a significant coefficient at the five percent level of significance.

Source: Eviews output (processed)

In the short term, the VECM estimation results did not reveal any significant variables affecting GDP per capita. Table 1 shows that in the long term, the influential variables are FDI and domestic investment. The FDI variable has a negative effect on GDP per capita, meaning that a one percent increase in FDI will result in a 1.007904 percent decrease in GDP per capita, with other variables held constant. The VECM results suggest that increasing FDI inflows into a country will actually reduce its economic growth. This situation is based on the fact that investment conditions in Indonesia often fluctuate. Furthermore, the ranking of ease of doing business or*ease of doing business*(EoDB) Indonesia continues to be in 73rd position out of 115 countries in the world.

Investment regulations in Indonesia are often a major issue due to their perceived complexity and overlapping nature. This can slow down improvements in the investment climate. A conducive and competitive investment climate provides the foundation for FDI inflow and increases the potential for economic growth in Indonesia as a host country.

However, improvements in growth rates will only occur if Indonesia...capable of absorbing the technology provided by FDI. Countries receiving FDI funds must possess several specific qualifications to benefit from FDI flows, including superior human capital, efficient financial markets, and international trade policies. Research conducted by Ray (2012) also found similar results, namely that FDI does not contribute significantly to economic growth in India. The absorptive capability of the recipient country appears to be the main key to the weak or negative relationship between FDI and economic growth (Azman-Saini et al. 2010).

The domestic investment variable has a significant positive effect on GDP per capita, meaning that a one percent increase in domestic investment will increase GDP per capita by 0.6812161 percent. This result aligns with the initial hypothesis that domestic investment has a positive effect on economic growth. Gross fixed capital formation, used as a proxy for domestic investment in this study, is indicated to boost economic growth through increased accumulation of capital goods that can support production activities.

4. Conclusion

This paper discusses the relationship between foreign direct investment(FDI), Domestic investment (PMTB), and trade openness with economic growth (GDP) during the period 1983-2023. Foreign direct investment significantly negatively impacts economic growth, with increasing FDI actually lowering Indonesia's economic growth. Meanwhile, domestic investment, as indicated by the gross fixed capital formation/GDP ratio, significantly positively impacts economic growth in Indonesia.

5. Reference

Aprianto R, Asmara A, Sahara. 2018. Determinants of Foreign Direct Investment Inflows to Low-Income Countries: A Panel Data Analysis. Journal of Development Economics and Policy, Vol. 7.

Azman-Saini WNW, Baharumshah AZ, Law SH. 2010. Foreign direct investment, economic freedom and economic growth: International Evidence. Econ. Model. 27(5):1079–1089.doi:10.1016/j.econmod.2010.04.001.

Alvarado R, Iñiguez M, Ponce P. 2017. Foreign direct investment and economic growth in Latin America. Econ. Anal. Policy. 56:176 187. doi:10.1016/j.eap.2017.09.006.

Anwar S, Nguyen LP. 2010. Foreign direct investment and economic growth in Vietnam. Asia Pac. Bus. Rev. 16(1–2):183 202. doi:10.1080/10438590802511031.

Hossain MdS. 2016. Foreign Direct Investment, Economic Freedom and Economic Growth: Evidence from Developing Countries. Int. J. Econ. Finance. 8(11):200.doi:10.5539/ijef.v8n11p200.

Hussain M, Haque M. 2016. Foreign Direct Investment, Trade, and Economic Growth: An Empirical Analysis of Bangladesh. Economies. 4(4):7.doi:10.3390/economies4020007.

Todaro, MP and SC Smith. 2006. Economic Development. Volume I. 9th Edition. Haris Munandar [translator]. Erlangga, Jakarta.

Mun HW, Lin TK, Man YK. 2009. FDI and Economic Growth Relationship: An Empirical Study on 1(2):p11.doi:10.5539/ibr.v1n2p11.

OECD. 2015. OECD Economic Surveys: Indonesia, OECD Publishing.

Szkorupová Z. 2015. Relationship between Foreign Direct Investment and Domestic Investment in Selected Countries of Central and Eastern Europe. Procedia Econ. 5671(15)00350-0.

Saqib DN, Masnoon M, Rafique N. 2013. Impact of Foreign Direct Investment on Economic Growth of Pakistan. :11.

Rajni P. 2013. Linkages between Export, Import and Capital Formation in India. International Research Journal of Social Sciences Vol.2(3), no. 16-19.

Ray S. 2012. Impact of foreign direct investment on economic growth in India: A co-integration analysis. Advances in Information Technology and Management, 2(1), pp.187-201.

Yusoff MB, Nuh R. 2015. Foreign Direct Investment, Trade Openness and Economic Growth: Empirical Evidence from Thailand. Foreign Trade Rev.