



# The Effect of International Economic Variables on Singapore Foreign Direct Investment in Indonesia

Reni Novianti Sari<sup>(✉)</sup> and Syamsul Amar

Faculty of Economics, Universitas Negeri Padang, Padang, Indonesia  
reninovianti83@gmail.com

**Abstract.** This study aims to examine the long-term and short-term relationship between international economic variables and Singapore's foreign direct investment in Indonesia. This study uses a quarterly time from 2006 to 2020, using the *Error Correction Model* (ECM) analysis. There are three important findings in this study. First, in the long-term relationship, Singapore's foreign direct investment in Indonesia is influenced by Singapore's economic growth, Singapore's inflation, domestic investment and economic openness. Second, in the short-term relationship, Singapore's foreign direct investment in Indonesia is affected by economic openness. Third, Indonesia's economic growth, Indonesia's inflation, the BI Rate and the exchange rate have no effect on Singapore's foreign direct investment in Indonesia in the long and short term.

**Keywords:** Foreign Direct Investment · Economic Growth · Inflation · BI Rate · Domestic Investment · Exchange Rate · Economic Openness · Error Correction Model (ECM)

## 1 Introduction

The economic progress of a nation cannot be separated from the role of investment. Investment can theoretically boost a country's economic growth, but not all countries have the ability to fund all project developments by relying on existing domestic economic resources. In this case, developing countries including Indonesia will be trapped in a situation of lack of capital because of the low level of savings. The low private savings is caused by the low level of income, where people only have enough income to meet their daily needs. This condition can certainly hinder the country's efforts to catch up with other countries that are more developed. According to economic theory there is a close relationship between economic growth and investment. High economic growth will cause most of the income to be saved, thus making investment even greater. Likewise, if a country's investment is getting bigger, the level of economic growth that will be achieved will also be even greater.

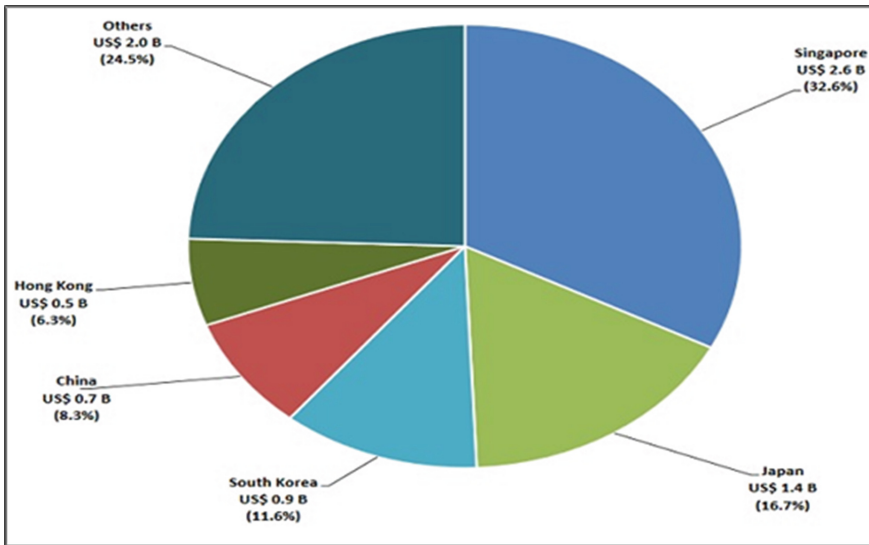
Foreign investment as well as domestic investment is the first step of development activities and economic growth. However, in reality Indonesia is still experiencing difficulties in terms of providing sufficient capital to carry out development. Indonesia cannot

rely solely on foreign loans to obtain capital. As a form of long-term capital flow and relatively not vulnerable to economic turmoil, it is hoped that foreign direct investment (FDI) can help encourage sustainable investment growth in a country. Direct investment in the form of FDI is also preferred over portfolio investment. Singapore is one of the countries that has the largest investment in Indonesia.

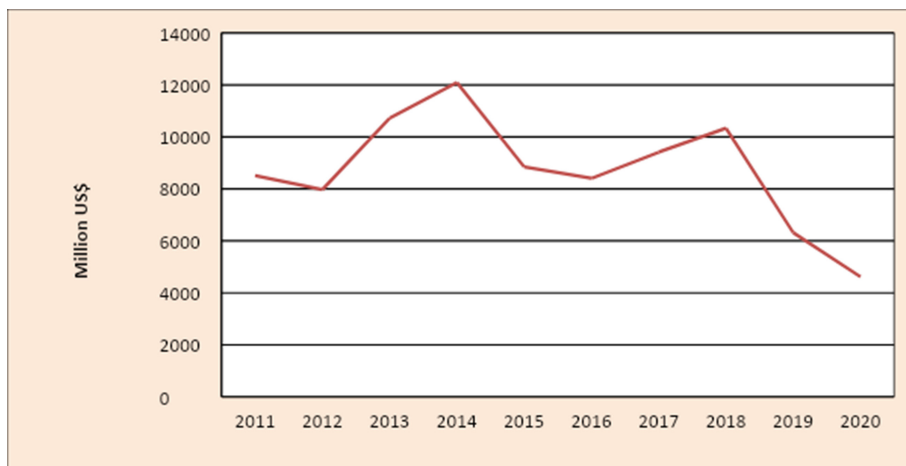
Where Singapore’s investment reaches a third of the total foreign direct investment that enters Indonesia. Singapore is a small country, but many international giant companies are headquartered there. Include the property, telecommunications, plantation, transportation, food, hotel and restaurant sectors. According to the Head of the Investment Coordinating Board (BKPM) Indonesia, investment through the Singapore unit has increased significantly since early 2018 (Indonesia-investments.com, accessed 16 February 2021).

Figure 1 shows the realization of FDI in Indonesia by country of origin in early 2018, where the largest FDI came from Singapore, reaching US\$2.6 billion or 32.6%. With 4,381 Singapore investment projects. In second place is Japan with 16.7%. Japanese investors invested as many as 2,731 projects. Then South Korea 11.6% or 1,265 projects. Then fourth is China with 8.3 with 1,000 projects, and Hong Kong with 6.3% with 2,160 projects. While the remaining 24.5% is investment from other countries.

Figure 2 shows the number of Singapore’s FDI flows in Indonesia in 2011–2020 which experienced fluctuations. Singapore’s highest FDI occurred in 2014 amounting to 12,090.08 million US\$. A significant decrease in FDI occurred in 2015 which was US\$ 8847.1 million or -26.823%. Meanwhile, in 2018 the number of FDI had increased, but in 2019 it experienced a significant decrease, which was 6315.98 million US\$ or decreased by -38.883%. The decline in FDI occurred because it was still in the process



**Fig. 1.** Development of Foreign Direct Investment in Indonesia. Source: Capital Investment Coordinating Board (BKPM) Indonesia, 2021



**Fig. 2.** Singapore FDI in Indonesia 2011–2020. Source: Bank Indonesia, 2021 (data processed)

of recovering from the impact of the trade war. But slowly the confidence to invest will begin to grow. In addition, it may also be due to the impact of the Corona Virus-19 Pandemic which has occurred since 2019 until now.

Many things are considered for investors in investing. According to Malik (2013) [1] stated that FDI inflow is influenced by the macroeconomic performance of a country. The ability of investors to understand and predict future macroeconomic conditions is very useful in making profitable investment decisions. One of the main factors determining the flow of FDI to the host country is related to macroeconomic variables such as economic growth (Blonigen & Piger, 2014) [2], labor force and human capital (Blomstrom, Kokko, & Mucchielli, 2003) [3], value exchange (Bevan & Estrin, 2004) [4], inflation (Asiedu, 2002) [5], international trade (Liu et al., 2001) [6], financial developments (Hermes & Lensink, 2003) [7] and infrastructure development (Armah & Fosu, 2018) [8].

There are several factors that can affect Singapore's foreign direct investment in Indonesia, namely Singapore's economic growth, Singapore's inflation, Indonesia's economic growth, Indonesian inflation, BI Rate interest rates, domestic investment, exchange rates and economic openness. From the things that have been mentioned previously, the authors are interested in conducting research with the title "The Effect of International Economic Variables on Singapore's Foreign Direct Investment in Indonesia".

## 2 Review of Literature

Foreign Direct Investment (FDI) is an international flow of capital where companies from one country establish or expand their companies in other countries, where there is not only a transfer of resources, but also the exercise of control over companies abroad (Krugman, 2005:214) [9].

### **Effect of Singapore's Economic Growth on Singapore's Foreign Direct Investment in Indonesia**

GDP is a measure of a country's total production of goods and services, where rapid GDP growth is an indication of economic growth. If economic growth improves, people's purchasing power will increase and it is an opportunity for companies to increase their sales. With the increase in the company's sales, the company's opportunity to earn profits will also increase. So that investors will be interested in investing in other countries (Tandelilin, 2010: 342) [10].

### **The Effect of Singapore's Inflation on Singapore's Foreign Direct Investment in Indonesia**

According to MC Kinnon in (Nanga, 2001:253) [11], inflation tends to change from real interest rates, causing an imbalance in the capital market. This will cause the supply of funds for investment to decrease so that the balance level of private investment is depressed to the bottom, which causes a limited supply of funds that can be loaned. Therefore, when inflation declines towards low real interest rates and capital market imbalances, inflation can reduce both foreign and domestic investment.

### **Effect of Indonesia's Economic Growth on Singapore's Foreign Direct Investment in Indonesia**

The economic growth of a country indicates a growth in market size, which affects the inflow of foreign direct investment (FDI). The larger the market size in a host country, the higher the FDI inflow (Saleem et al., 2018 [12]; Ibrahim and Abdel Gadir, 2015) [13]. In addition, the increase in economic growth results in an increase in investment, because the increased output indicates a passion in the economy so that investment will be better (Nanga, 2001) [11].

### **Effect of Indonesian Inflation on Singapore's Foreign Direct Investment in Indonesia**

Inflation significantly affects investors' decisions, namely stable inflation encourages investors with the aim of getting higher profits, according to Malik (2012) there is a negative relationship between inflation and foreign direct investment. Because for investors, inflation is a risk that at any time undermines their investment performance which will eventually roll over their entire investment. For the industrial sector, prolonged inflation can destroy all factors of production, especially production that relies heavily on imported raw materials and components.

### **Effect of Interest Rate (BI Rate) on Singapore's Foreign Direct Investment in Indonesia**

The domestic interest rate policy is part of the government's efforts to increase capital

accumulation in various development sectors. Letarisky (2014) [14], also reveals that the recent increase in capital to developing countries is a result of low interest rates in developed countries. Another opinion is that the higher the interest rate, the more expensive the investment costs. As a result, investors' interest in investing is decreasing (Rahardja and Manarung, 2008:78) [15].

### **Effect of Domestic Investment on Singapore's Foreign Direct Investment in Indonesia**

According to Tandelilin 2010:344) [10], the increase in private investment/domestic investment is a positive signal for investors. Where the increase in private investment/domestic investment will increase GDP, so that it can increase consumer income.

### **Effect of Exchange Rate on Singapore's Foreign Direct Investment in Indonesia**

Another theory explains the exchange rate, namely the Interest Rate Parity Theory according to Brigham and Houston (2006:374–375) [16]. This theory assumes that an investor will earn the same rate of return on investment in all countries after adjusting for risk. This theory also says that the overall rate of return on investment will be higher if the currency of the country where the investment is made appreciates against the value of the currency of the investor's home country.

### **The Effect of Economic Openness on Singapore's Foreign Direct Investment in Indonesia**

Economic openness shows the level of restrictions on trade activities made by the host country. A more open economy will increase the inflow of foreign direct investment (FDI) because it reflects a country's willingness to accept foreign investment (Aziz, 2016 [17]; Ravinthirakumaran et al., 2015 [18]; Liargovas, 2012 [19]; Carlos, 2010) [20]. The openness of a country's economy will be a positive indication for foreign investors to be able to benefit and make it easier to invest.

### **Methodology**

The type of research used is associative and descriptive. The type of data used is secondary data using time series data from 2006 Q1 to 2020 Q4. This study uses an *error correction model* (ECM) analysis tool with the following equation:

$$\begin{aligned} DFDI_t = & \alpha_0 + \alpha_1 DGDP\_SGP_t + \alpha_2 DINF\_SGP_t + \alpha_3 DGDP\_IND_t + \alpha_4 DINF\_IND_t \\ & + \alpha_5 DBI\_RATE_t + \alpha_6 DDI_t + \alpha_7 DER_t + \alpha_8 DOP_t + \alpha_9 ECT_t + e_{1t} \end{aligned}$$

where:

- FDI = Foreign direct investment
- GDP\_SGP = Singapore's economic growth
- INF\_SGP = Singapore inflation
- GDP\_IND = Indonesia's economic growth
- INF\_IND = Indonesian Inflation
- BI RATE = BI interest rate
- DI = Domestic investment

ER = Exchange rate  
 OP = Economic openness  
 et = residual variable

Singapore's Foreign Direct Investment in Indonesia (FDI) is Singapore's foreign direct investment that enters Indonesia. Data from SEKI Bank Indonesia 2021. Singapore's economic growth (GDP\_SGP) is the increase in added value generated by each sector of the Singapore economy or the percentage change in Singapore's annual GDP. Data from the World Bank 2021. Singapore inflation (SGP\_INF) is a general and continuous increase in prices, where the indicator used to measure inflation is the CPI. The annual change is calculated from the average CPI. Data from the World Bank 2021.

Indonesia's economic growth (GDP\_IND) is a change in the process of increasing value added output carried out by the economic sector from year to year. Data obtained from the World Bank 2021. Indonesian inflation (INF\_IND) can be interpreted as a general and continuous increase in prices and annual changes are calculated from the average CPI. Data from the World Bank 2021. Interest rate (BI\_Rate) is the interest rate determined by Bank Indonesia (BI Rate). Data from SEKI Bank Indonesia 2021.

Domestic investment (DI) is the amount of realized domestic investment by economic sector (23 sectors). Data from the Indonesian Central Statistics Agency 2021. Exchange rate (ER) is the real exchange rate of rupiah against the dollar (US\$) which is measured in Indonesian rupiah units. Data from the World Bank 2021. Economic Openness (OP) is economic openness which is the ratio of total exports and imports of goods and services to the Gross domestic product of a country. Data obtained from IMF 2021.

### 3 Results

This research was conducted to find out at what level of differentiation all the variables were stationary. In this study, the degree of integration test also used the Augmented Dickey-Fuller (ADF) test. Variables that are not stationary at the level level, will be tested up to the level of the first degree (1st difference). The following are the results of the Unit Root Test with the ADF test:

Based on Table 1, it can be seen that the interest rate variable (BI rate) is stationary at the level level. This is indicated by a probability value of  $0.0161 < 5\%$ . Foreign direct investment (FDI), Singapore's economic growth (GDP\_SGP), Singapore's inflation (INF\_SGP), Indonesia's economic growth (GDP\_IND), Indonesia's inflation (INF\_IND), domestic investment (DI), exchange rate (ER) and economic openness (OP) has a probability  $< 5\%$ . This means that all research variables used are stationary at the first degree level (1st difference).

#### Cointegration Test Results

From Table 3, it can be seen from the results of the cointegration test using the Augmented Dickey Fuller (ADF) method that the above equation is stationary at the level level. This is indicated by a probability value of  $0.0000 < 0.05$  and a coefficient value of  $-1.197543$ , which is already negative. This is one of the requirements to be able to test the Error Correction Model (ECM). Meanwhile, the ECT(-1) result is significant, which is indicated by a probability value of  $0.0000 < 0.05$ . This means that there is a long-term

**Table 1.** Results of unit root with ADF method

| Variable | ADF Test       | Prob.  | Stationary |
|----------|----------------|--------|------------|
| FDI      | 1st difference | 0.0000 | Yes        |
| GDP_SGP  | 1st difference | 0.0137 | Yes        |
| INF_SGP  | 1st difference | 0.0438 | Yes        |
| GDP_IND  | 1st difference | 0.0360 | Yes        |
| INF_IND  | 1st difference | 0.0324 | Yes        |
| BI RATE  | Level          | 0.0161 | Yes        |
| DI       | 1st difference | 0.0289 | Yes        |
| ER       | 1st difference | 0.0177 | Yes        |
| OP       | 1st difference | 0.0000 | Yes        |

Source: *Eviews 9 Results, 2021*

relationship between international economic variables and Singapore's foreign direct investment in Indonesia.

### **Error Correction Model (ECM) Regression Results**

The Error Correction Model (ECM) is a technique for correcting short-term imbalances towards long-run equilibrium. In this study, ECM is used to estimate the equality of Singapore's foreign direct investment in Indonesia.

The estimation results of Singapore's foreign direct investment equation in Table 4 show that ECT (-1) is significant. This is indicated by a probability value of  $0.0000 <$

**Table 2.** Long-Term OLS Test Results

| Variable | Coefficient | Std. Error | t-Statistic | Prob.  |
|----------|-------------|------------|-------------|--------|
| C        | -7381.619   | 2434.406   | -3.032206   | 0.0038 |
| GDP_SGP  | 0.018336    | 0.005956   | 3.078315    | 0.0033 |
| INF_SGP  | -182.6271   | 86.03212   | -2.122778   | 0.0386 |
| GDP_IND  | -0.000535   | 0.000783   | -0.683103   | 0.4976 |
| INF_IND  | 112.5289    | 110.3402   | 1.019836    | 0.3126 |
| BIRATE   | 42.97332    | 135.9418   | 0.316116    | 0.7532 |
| DI       | -0.009517   | 0.002536   | -3.752386   | 0.0004 |
| ER       | 0.149555    | 0.205021   | 0.729461    | 0.4691 |
| OP       | 0.088954    | 0.029701   | 2.995001    | 0.0042 |

Source: *Eviews 9 Results, 2021*

**Table 3.** Cointegration Test Values with the ADF Method at the Level

|  |             | t-Statistic | Prob.*      |        |
|--|-------------|-------------|-------------|--------|
| Augmented Dickey-Fuller test statistic |             | -9.172.860  | 0.0000      |        |
| Test critical values:                  | 1% level    | -3.546.099  |             |        |
|  | 5% level    | -2.911.730  |             |        |
|  | 10% level   | -2.593.551  |             |        |
| Variable                               | Coefficient | Std. Error  | t-Statistic | Prob.  |
| ECT(-1)                                | -1.197.543  | 0.130553    | -9.172.860  | 0.0000 |
| C                                      | -8.462.823  | 8.163.088   | -0.103672   | 0.9178 |

Source: *Eviews 9 Results, 2021*

**Table 4.** ECM Results

| Variable   | Coefficient | Std. Error | t-Statistic | Prob.  |
|------------|-------------|------------|-------------|--------|
| C          | -109.2349   | 216.3778   | -0.504834   | 0.6159 |
| D(GDP_SGP) | 0.032673    | 0.022924   | 1.425273    | 0.1604 |
| D(INF_SGP) | -250.0064   | 228.2902   | -1.095125   | 0.2788 |
| D(GDP_IND) | -0.000271   | 0.000487   | -0.556195   | 0.5806 |
| D(INF_IND) | 176.0177    | 167.9083   | 1.048297    | 0.2996 |
| D(BIRATE)  | 115.0399    | 259.4970   | 0.443319    | 0.6595 |
| D(DI)      | -0.004235   | 0.018438   | -0.229669   | 0.8193 |
| D(ER)      | 0.410098    | 0.746383   | 0.549447    | 0.5852 |
| D(OP)      | 0.114216    | 0.028610   | 3.992151    | 0.0002 |
| ECT(-1)    | -1.256098   | 0.148372   | -8.465849   | 0.0000 |

Source: *Eviews 9 Results, 2021*

0.05. The ECT coefficient value (-1) is -1.256098 and is negative, meaning that the ECM specification model used in this study is valid.

**Statistical Test Results**

a. *Short Term Model*

See Table 5.

b. *Long Term Model*

See Table 6.



**Table 5.** Short-term Effects of International Economic Variables on FDI

| Variable   | Prob.  | Results         |
|------------|--------|-----------------|
| D(GDP SGP) | 0,1604 | Not significant |
| D(INF SGP) | 0,2788 | Not significant |
| D(GDP IND) | 0,5806 | Not significant |
| D(INF IND) | 0,2996 | Not significant |
| D(BI RATE) | 0,6595 | Not significant |
| D(DI)      | 0,8193 | Not significant |
| D(ER)      | 0,5852 | Not significant |
| D(OP)      | 0,0002 | significant     |

Source: *Eviews 9 Results, 2021*

**Table 6.** Long-Term Effects of International Economic Variables on FDI

| Variable   | Prob.  | Results         |
|------------|--------|-----------------|
| D(GDP SG)  | 0,0033 | Significant     |
| D(INF SG)  | 0,0386 | Significant     |
| D(GDP IND) | 0,4976 | Not significant |
| D(INF IND) | 0,3126 | Not significant |
| D(BI RATE) | 0,7532 | Not significant |
| D(DI)      | 0,0004 | Significant     |
| D(ER)      | 0,4691 | Not significant |
| D(OP)      | 0,0042 | Significant     |

Source: *Processed Results Eviews 9, 2021*

### **Coefficient of Determination ( $R^2$ )**

The long-term processed product  $R^2$  value is 0.690387. This means that the variables of Singapore's economic growth, Singapore's inflation, Indonesia's economic growth, Indonesia's inflation, BI Rate interest rates, domestic investment, exchange rates, and economic openness, have an influence or contribution to Singapore's foreign direct investment in the long term by 69%, while the rest is equal to 31%. 31% possibility of being influenced by other variables outside the model. Meanwhile, in the short term, the value of  $R^2$  is only 61 percent.

## 4 Discussion

### **The Effect of Singapore's Economic Growth on Singapore's Foreign Direct Investment in Indonesia**

Based on the processed ECM results in Table 4, the test results show that Singapore's economic growth in the short term has no significant effect on Singapore's foreign direct investment in Indonesia. This is in line with Jansen and Stokman (2004) [21], who studied foreign direct investment and the joint movement of the international business cycle. The results show that GDP does not have an insignificant effect in the short term because GDP in the short term does not fully reflect changes in the total conditions for all economic sectors, so that foreign investors who invest their capital do not have an effect.

The results of the analysis of the long-term relationship in Table 2 show that Singapore's economic growth has a significant positive effect on Singapore's economic growth on Singapore's foreign direct investment in Indonesia. This is in line with the research of Ibrahim et al. (2015) [13], which discusses the motives and determinants of FDI in Oman with VECM analysis. The results show that economic growth has a significant effect on Oman's foreign direct investment. Where when there is an increase in the economic growth of a country, it means an increase in market size, which will affect the flow of foreign direct investment to the host country.

### **The Effect of Singapore's Inflation on Singapore's Foreign Direct Investment in Indonesia**

Singapore's inflation variable in the estimation of the ECM equation in Table 4 has no significant effect on Singapore's foreign direct investment in Indonesia in the short term. This is in accordance with the research of Nizia et al. (2012) which states that there is a negative relationship between inflation and FDI in a country. Because an increase in inflation can increase the risk that is borne by investors on the return of their capital.

The long-term processed results in Table 2 show that Singapore inflation has a significant effect on Singapore's foreign direct investment in Indonesia in the long run. These findings are also consistent with the research conducted by Rashid et al. (2015) [22] which analyzed the determinants of FDI in the agricultural sector of high-income countries. The results show that there is a relationship between inflation and FDI in the agricultural sector in high-income countries.

### **The Effect of Indonesia's Economic Growth on Singapore's Foreign Direct Investment in Indonesia**

The estimation results in Table 4 show that in the short term Indonesia's economic growth variable has no significant effect on Singapore's foreign direct investment in Indonesia. Meanwhile, the results of data processing in the long term of Indonesia's economic growth have no significant effect on Singapore's foreign direct investment in Indonesia.

In line with the research of Choong (2010) [23] which discusses the determinants of Singapore's foreign direct investment in Malaysia. The results of the study indicate that economic growth can disrupt the balance of Malaysian foreign direct investment

because foreign investors tend to see the long-term prospects of the market potential to invest in the form of foreign direct investment.

### **The Effect of Indonesian Inflation on Singapore's Foreign Direct Investment in Indonesia**

The ECM estimation results show that in the short term Indonesian inflation does not have a significant effect on Singapore's foreign direct investment in Indonesia. Meanwhile, in the long term, inflation in Indonesia does not have a significant effect on Singapore's foreign direct investment in Indonesia. In line with the research conducted by Kolstad (2008), which analyzed the determinants of foreign direct investment in services. The results showed that political stability, economic growth and inflation did not have a significant relationship with foreign direct investment in services.

### **The Influence of the BI Rate on Singapore's Foreign Direct Investment in Indonesia**

The BI Rate variable in the ECM estimation in the short term does not have a significant effect on Singapore's foreign direct investment in Indonesia. Meanwhile, in the long term, the BI Rate does not have a significant effect on Singapore's foreign direct investment in Indonesia.

In line with the research conducted by Onuorah (2013) [24], which analyzed FDI and macroeconomic identification in Nigeria. The results show that the macroeconomic variables of interest rates and inflation have no effect on foreign direct investment in Nigeria. So it can be concluded that when the BI Rate increases, it does not have a significant impact on Singapore's foreign direct investment in Indonesia, both in the short term and in the long term.

### **The Effect of Domestic Investment on Singapore's Foreign Direct Investment in Indonesia**

The ECM estimation results show that in the short term domestic investment has no significant effect on Singapore's foreign direct investment in Indonesia. So it can be concluded that when domestic investment increases, it does not have a significant impact on Singapore's foreign direct investment in Indonesia. Meanwhile, from the results of ECM processing in the long term, domestic investment has a significant effect on Singapore's foreign direct investment in Indonesia.

This is in line with the research of Nibret (2018) [25], the results of the study show that private investment is significantly negatively related to public investment, foreign aid, and business taxes. So it can be concluded that domestic investment in the short term does not have a significant impact on Singapore's foreign direct investment in Indonesia, while in the long term domestic investment has a significant impact on Singapore's foreign direct investment in Indonesia.

### **The Effect of Exchange Rates on Singapore's Foreign Direct Investment in Indonesia**

The results of the short-term ECM analysis show that the exchange rate does not have a significant effect on Singapore's foreign direct investment in Indonesia. Meanwhile, in the long term, the OLS estimate shows that the exchange rate does not have a significant effect on Singapore's foreign direct investment in Indonesia. In line with Eliza

(2013) [26], who analyzed the effect of macroeconomic variables on foreign investment in Indonesia. The results showed that the rupiah exchange rate did not have a significant effect on foreign investment in Indonesia.

### **The Effect of Economic Openness on Singapore's Foreign Direct Investment in Indonesia**

The results of the short-term ECM analysis of the variable economic openness have a significant positive effect on Singapore's foreign direct investment in Indonesia. The variable of economic openness in the long-term OLS estimation has a positive significant effect on Singapore's foreign direct investment in Indonesia.

The results of this study are in line with research on the determinants of foreign direct investment in several countries from 1995 to 2007. Using panel data using the fixed effects estimator and GMM system estimator methods. The results show that economic openness has a positive and significant effect on foreign direct investment (Carlos, 2010).

## **5 Conclusion**

Based on the results of research that has been conducted on the effect of international economic variables on Singapore's foreign direct investment in Indonesia, the following conclusions can be drawn:

Singapore's economic growth in the short term has no significant effect on Singapore's foreign direct investment in Indonesia. Meanwhile, in the long term, it has a significant effect on Singapore's foreign direct investment in Indonesia. Singapore's inflation in the short term has no significant effect on Singapore's foreign direct investment in Indonesia. Meanwhile, in the long term, it has a significant effect on Singapore's foreign direct investment in Indonesia. Indonesia's economic growth in the short and long term has no effect on Singapore's foreign direct investment in Indonesia.

Indonesia's inflation in the short and long term has no effect on Singapore's foreign direct investment in Indonesia. The BI Rate interest rate in the short term and long term has no effect on Singapore's foreign direct investment in Indonesia. Domestic investment in the short term has no significant effect on Singapore's foreign direct investment in Indonesia. Meanwhile, in the long term, it has a significant effect on Singapore's foreign direct investment in Indonesia. Exchange Rates in the short term and long term have no effect on Singapore's foreign direct investment in Indonesia. Economic openness in the short and long term has a significant influence on Singapore's foreign direct investment in Indonesia.

## **References**

1. Malik, Saifullah dan Malik, Qaisar Ali. Empirical Analysis of Macroeconomic Indicators as Determinants of Foreign Direct Investment in Pakistan. IOSR Journal International ISSN; 2278-487X. Volume 7. PP 77-82. 2013.
2. Blonigen, B. A., & Piger, J. Determinants of foreign direct investment. Canadian Journal of Economics/Revue canadienne d'économie, 47(3), 775-812. 2014.

3. Blomstrom, M., Kokko, A., & Mucchielli, J.-L. The economics of foreign direct investment incentives. In *Foreign direct investment in the real and financial sector of industrial countries* (pp. 37-60): Springer. 2003.
4. Bevan, A. A., & Estrin, S. The determinants of foreign direct investment into European transition economies. *Journal of Comparative Economics*, 32(4), 775-787. 2004.
5. Asiedu, E. (2002). On the determinants of foreign direct investment to developing countries: is Africa different? *World development*, 30(1), 107-119.
6. Liu, X., Wang, C., & Wei, Y. (2001). Causal links between foreign direct investment and trade in China. *China Economic Review*, 12(2-3), 190-202.
7. Hermes, N., & Lensink, R. (2003). Foreign direct investment, financial development and economic growth. *The Journal of Development Studies*, 40(1), 142-163.
8. Armah, M. K., & Fosu, P. (2018). Infrastructure and Foreign Direct Investment Inflows: Evidence from Ghana. *Management and Economic Journal*, 93-106.
9. Krugman, Paul. R dan Maurice Obstfeld. 2005. *Ekonomi Internasional: Teori dan Kebijakan*. Jakarta: Indeks.
10. Tandelilin, Eduardus. 2010. *Portofolio dan Investasi Teori dan Aplikasi Edisi Pertama*. Yogyakarta: Kanisius.
11. Nanga, Muana. 2001. *Makro Ekonomi: Teori, Masalah dan Kebijakan*. Jakarta: PT. Raja Grafindo Persada.
12. Saleem, Hummera, Wen Jiandong, Muhammad Bilal Khan & Bashir Ahmad Khilji. 2018. Reexamining the determinants of foreign direct investment in China: Transnational Corporations Review, DOI: <https://doi.org/10.1080/19186444.2018.1436654>.
13. Ibrahim, Omer Ali, and Sufian Eltayeb Mohamed Abdel-Gadir. 2015. "Motives and Determinants of FDI: A VECM Analysis for Oman." *Global Business Review* 16 (6): 936-46. <https://doi.org/10.1177/0972150915597596>.
14. Letarisky, dkk. 2014. "Pengaruh Indikator Fundamental Makroekonomi terhadap Foreign direct investment di Indonesia 2004-2013". *Jurnal administrasi bisnis*. Vol. 15, No. 2. Diakses pada (studentjournal.uib.ac.id)
15. Rahardja Prathama, Mandala Manarung. 2008. Pengantar Ilmu Ekonomi (Mikroekonomi dan Makroekonomi), Edisi ketiga. Fakultas Ekonomi Universitas Indonesia
16. Brigham, E.F., & Houston, J.F. 2006. *Dasar-dasar Manajemen Keuangan: Edisi 10 Buku 2*. Jakarta: Salemba Empat.
17. Ravinthrakumaran, K., E. A. Selvanathan, S. Selvanathan, and T. Singh. Determinants of Foreign Direct Investment in Sri Lanka. *South Asia Economic Journal* 16 (2) 233-56. 2015.
18. Liargovas, Panagiotis G., and Konstantinos S. Skandalis. 2012. "Foreign Direct Investment and Trade Openness: The Case of Developing Economies." *Social Indicators Research* 106 (2): 323-31. <https://doi.org/10.1007/s11205-0119806-9>.
19. Carlos, Nuno. "Foreign Direct Investment : The Canadian Experience" 2 (4): 82-88. 2010.
20. Jansen, W. J., & Stokman, Ad C.J. 2004. Foreign Direct Investment and International Business Cycle Co-movement. ECB Working Paper Series, 401.
21. Rashid, Intan Maizura Abdul, et. al. 2016. Determinants Of Foreign Direct Investment (FDI) In Agriculture Sector Based On Selected High Income Developing Economies In OIC Countries: An Empirical Study On The Provincial Panel Data By Using Stata, 2003-2012: *Procedia Economics and Finance* 39 (2016) 328-334.
22. Choong, Chee-Keong, and Siew-Yong Lam. 2010. "The Determinants of Foreign Direct Investment in Malaysia: A Revisit." *Global Economic Review* 39 (2): 175-95. <https://doi.org/10.1080/1226508X.2010.483837>.
23. Onuorah. Chi., A. Analysis of Foreign Investment and Identified Macroeconomic Measures in Nigeria. *Journal of Economics and Sustainable Development* Vol.4, No.2. 2013.

24. Nibret, Habtu. (2018). Analysis on the Determinants of Private Investment in Ethiopia A Time Series Analysis (1992–2016). *Journal of Economics and Sustainable Development* Vol.9, No.21.
25. Eliza Messayu dan Ismail Muhammad. 2013. “ Analisis Pengaruh Variabel Makroekonomi terhadap Investasi Asing di Indonesia (Tahun 2000:1- 2011:4)”. Universitas Brawijaya, Malang.

**Open Access** This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter’s Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter’s Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

