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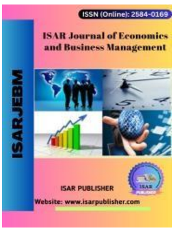

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ANALYSIS OF FACTORS AFFECTING FOREIGN DIRECT INVESTMENT IN ASEAN COUNTRIES

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Abstract: *This study aims Analysis Of Factors Affecting Foreign Direct Investment In Asean Countries In 2016-2021. This type of research is explanatory research. Furthermore, the approach used in this study is a quantitative methodology approach that uses secondary data from 2016-2021. This data is used as information to be used in research and obtained from the official website of the worldbank for 2016-2021. The sample of this study is 5 countries with the highest value of foreign investment and limited data consisting of Singapore, Indonesia, Malaysia, Vietnam, and Thailand. This study used panel data regression analysis tools. The results of this study found that partially economic growth has a significant positive effect on foreign direct investment, inflation has a significant positive effect on foreign direct investment and interest rates have a significant positive effect on foreign direct investment. Based on test F, it was obtained that the variables of economic growth, inflation and interest rates simultaneously had a significant positive effect on foreign direct investment with an Adj.R-Square value of 93.79 percent. These results show that 6.21 percent of foreign direct investment is explained by other variables outside the model.*

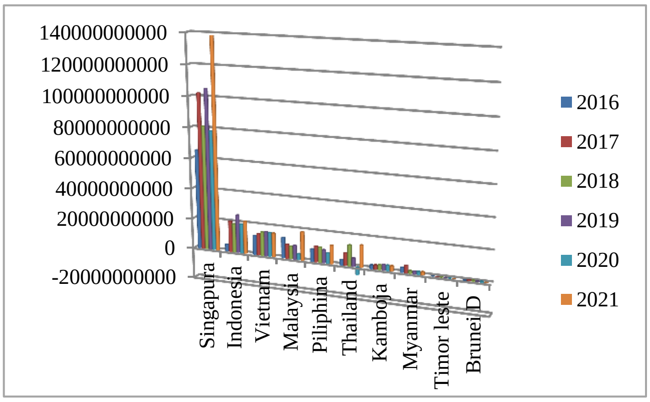
Keywords: *Foreign Direct Investment, Economic Growth, Inflation, Interest Rate.*

Introduction

Investment is an important capital that is the key to turning the wheels of a country's economy. Foreign direct investment is one of the sources of capital formation for developing countries and even developed countries. Capital formation can also be interpreted as the formation of expertise or skills because expertise is always there can be said to be one of the determining factors of capital formation in a country (Jhingan, 2000). In economic development, capital flow or capital formation becomes a driving factor for the establishment of a policy. Foreign direct investment needed by a country varies because each country has its own character, looking at whether the country is a developed country or a developing country.

Looking at the difference in capital flows needed by developed and developing countries, developed countries usually have relatively fewer foreign capital or foreign direct investment needs when compared to the needs of foreign capital flows or foreign direct investment in developing countries. According to Todaro (2004), there are benefits from foreign direct investment, among others, which can complement the lack of capital obtained from within the country, increase foreign exchange reserves, increase revenue obtained by the government, and of course improve and expand knowledge and managerial in the economy in countries receiving foreign direct investment (Rekagriya et al 2021).

Graph 1. development of foreign direct investment in 10 ASEAN countries 2016-2021 (Billion US$)



Source : WorldBank

Based on the Graph 1 image, it can be seen, During this period Singapore recorded a number of investment trends that increased very sharply among 10 other countries, Indonesia and Vietnam had a fairly stable uptrend, while Malaysia had a downward trend, Thailand recorded a very unstable trend so that it reached -4.845358538 in 2020. On the other hand, the Philippines, Cambodia, Myanmar, Timor-Leste, and Brunei showed fluctuating trends. The impact of falling levels of foreign direct investment can affect the level of welfare of people in ASEAN countries. This is due to differences in per capita income that occur in ASEAN countries.

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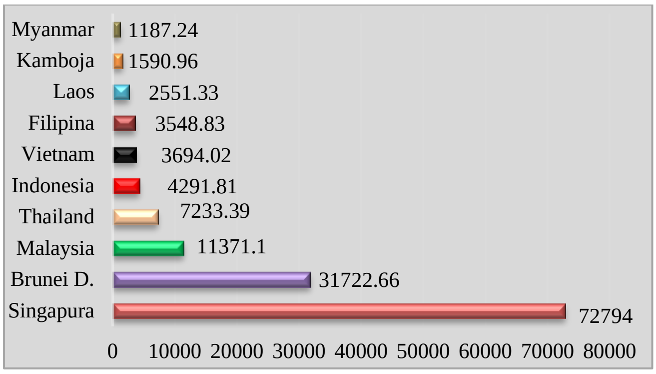
Graph 2. ASEAN Country Per Capita Income (US$ Billion)



Source: Databoks.com

Based on Graph 2, the World Bank reports that GDP per capita in ASEAN countries has a very large difference between Singapore and other ASEAN countries. This vast range is a benchmark for the value of savings/investments that vary greatly in ASEAN. Most studies assess that FDI positively impacts host country economies especially in developing countries, but its effect on social justice, including income inequality, is inconsistent. The impact of FDI on income inequality is a concern for many reasons. First, income inequality negatively affects economic growth (Rahmadi and Parmadi, 2019 Based on Graph 2, the World Bank reports that GDP per capita in ASEAN countries has a very large difference between Singapore and other ASEAN countries. This vast range is a benchmark for the value of savings/investments that vary greatly in ASEAN. Most studies assess that FDI positively impacts host country economies especially in developing countries, but its effect on social justice, including income inequality, is inconsistent. The impact of FDI on income inequality is a concern for many reasons. First, income inequality negatively affects economic growth (Rahmadi and Parmadi, 2019) Second, increasing income inequality can hinder progress in poverty reduction. Lastly, people concerned with relative income often have a desire to live in an equal society (Figini and Gor, 2011). Therefore, if FDI increases income inequality, its positive effects on economic growth will be replaced by lower growth rates as well as other negative socioeconomic effects. This is of great concern to developing countries, which rely heavily on FDI. In these countries, social stability plays a key role in economic development.

The high and low value of foreign direct investment in a country is influenced by several factors including economic growth. Strong economic growth also indicates that foreign investors will receive more returns on their increased investments (Kurniasih, 2020). The high income of a country indicates that its market potential is also strong. The increase in state revenue also shows that public revenue is increasing, and along with high public acceptance, the demand for commodities and services also increases. The high corporate profit will result from the large demand for goods and services, which will attract investors to the country (Renaldo, 2020).

Furthermore, based on Keynes's theory it is said that interest rates are a factor that affects a person's desire to invest. In this case, changes in interest rates can have an impact on how foreign investors see a country and whether they are interested in investing their money there in the context of the global economy. If interest rates in a country rise, investors will tend to keep their money in banks rather than invest. Conversely, if interest rates fall in a country, investors will decide whether to invest by weighing the potential rewards (Aminda et al, 2022).

The next factor that affects foreign direct investment is inflation, if in a country the inflation rate is high, it explains that the economy in the country is unstable which can be said that the government cannot balance the economy. This is in accordance with the quantity theory proposed by Irving Fisher. This theory states that an increase in the amount of money circulating in society will cause an increase in the price of goods and services. The amount of inflation of a country is also believed to have an influence on the amount of foreign direct investment into the economy (Anwar, 2016).

The macroeconomic fundamentals of each country are one of the most important factors in increasing foreign direct investment inflows in a country. In a release issued by the Global Competitiveness Index (GCI) shows that one of the determinants of foreign direct investment is macroeconomic fundamentals in each country (Prasetyo et al., 2016). In this case, of course, investment there are different factors that affect the level of investment in each country. Therefore, it is necessary to know what factors affect foreign direct investment in ASEAN countries.

Methods

This type of research is explanatory research. Furthermore, the approach used in this study is a quantitative methodology approach that uses secondary data from 2016-2021. This data is used as information to be used in research and obtained from the official website of the worldbank for 2016-2021. The sample of this study is 5 countries with the highest value of foreign investment and limited data consisting of Singapore, Indonesia, Malaysia, Vietnam, and Thailand.

This study used panel data regression analysis tools. The equation model used in this study is:

$$FDI_{it} = \beta_0 + \beta_1 EG_{it} + \beta_2 INF_{2it} + \beta_3 IR_{3it} + \varepsilon_{it}$$

Information :

FDI is Foreign Direct Investment

EG is Economic Growth

INF is Inflation

IR is Interest rates

β_0 is Intercept/Constant

β_1, β_2, β_3 is variable regression coefficient economic growth, inflation, and interest

i is unit cross section (5 ASEAN countries)

t is period of time (2016-2021)

ε is Error term

The methods offered by panel data regression can be selected with several tests to determine which of the CEM, FEM, or REM models is most appropriate. The tests carried out to determine the right model are the chow test, hausman test, and lagrange multiplier test.

Results and Discussions

In this study there are three analysis models that can be used to analyze panel data in this study, namely Common effect model, Fixed effect model, and Random effect model. In order to find out which analysis model is most appropriate to be used in this study, comparative testing will be carried out first, namely the Chow Test, Hausman Test, and Lagrange Multiplier Test. The selected model is Fixed Effect Model.

Table 1. Best Model Results (Random Effect Model)

Variable	*Coefficient*	*Std. Error*	*t-Statistic*	Prob.
C	1.461711	0.154702	9.448547	0.0000
EG	0.123981	0.032650	3.797273	0.0010
INF	0.520264	0.045941	11.32463	0.0000
IR	0.072733	0.027758	2.620272	0.0156

R^2 : 0.9529
Adjusted R-Square : 0.9379
F-statistic : 6364.602
Prob (F-Statistic) : 0.000000

Source : Results of data processing with eviews (2023)

Based on table 4.7, the results of panel data calculations using the Fixed Effect Model regression model are obtained and interpreted as follows:

$$FDI = 1.461711 + 0.123981 EG + 0.520264 INF + 0.072733 IR$$

Based on table 1, the R-Square value of 0.937971 shows that 93% of foreign direct investment variables can be explained by economic growth, inflation, and interest rate variables. While the remaining 7% was explained by other variables that were not included in this research model. Then Based on the result F, the result of prob. (F-Statistic) of 0.000000 is less than 0.05, which means that economic growth, inflation, and interest rates together affect the variable of foreign direct investment. While the results of the t test show the results of the t-value of calculating the economic growth variable of 3.797273 > t table which is 2.048407142 and the probability value of economic growth of 0.0010 < of 0.05, then Ha is accepted and Ho is rejected, meaning that the economic growth variable affects foreign direct investment. Furthermore, in the inflation variable, a calculated t value of 11.32463 > t table is 2.048407142 and an inflation probability value of 0.0000 < of 0.05, then Ha is accepted and Ho is rejected, meaning that the inflation variable affects foreign direct investment. Then in the variable interest rate (X3) obtained a calculated t value of 2.620272 > t table, which is 2.048407142 and the probability value of the interest rate is 0.0156 < of 0.05, then Ha is accepted and Ho is rejected, meaning that the variable interest rate has an effect against foreign direct investment.

Discussion

Based on the results of the t test, an economic growth probability value of 0.0010 is obtained. The results of this research show that economic growth has a significant positive influence on foreign direct investment in ASEAN-5 countries. This research is in accordance with the hypothesis that economic growth has a positive and significant effect on foreign direct investment in ASEAN. Which means that when economic growth increases, foreign direct investment also increases and has a unidirectional relationship. Economic growth is an important factor in the development of foreign direct investment in terms of attracting investor confidence to invest in each recipient country. The results of the research conducted from 2016 to 2021 are in line with previous research by Putri et.al (2021), Barorah et al (2019), Anwar et al (2016), Ruth and Syofyan (2014) which stated that economic growth variables have a positive and significant influence on foreign direct investment in ASEAN countries. The results of this study are in accordance with the Harrod-Domar theory, which explains that with a state of economic growth that is followed by a lot of investment climate as well. This reflects that the increasing economic growth of a country also makes foreign direct investment in ASEAN countries increase. According to Septriani (2023), the measure of GDP value is the value of goods and services produced by a region in a given year using the factors of production it has. The GDP value will show the level of development of each of these regions. An economy is said to grow or expand when there is growth in real output, the total real output of an economy can also remain constant or decrease. According to Pasaribu and Septriani (2020), economic growth is a change in a country's economic condition for the better in a certain period. Increasing economic growth seen from GDP or products that can be produced domestically, ASEAN is considered capable and has good economic competitiveness, and is trusted by investors to invest their money in the country. This is also in accordance with data that has been analyzed that when economic growth increases by 0.12 percent, foreign direct investment also increases by 1 percent.

Meanwhile, for the effect of inflation on foreign direct investment, a calculated t value of 11.32463 and an inflation probability value of 0.0000 were obtained. This result shows that variable inflation has a significant positive effect on foreign direct investment in ASEAN countries. Based on data analysis, when inflation rose by 0.52 percent, foreign investment also increased by 1 percent. Inflation in this ASEAN country is classified as low inflation, which is less than 10% per year. Inflation in ASEAN countries has positive effects and negative effects, depending on the severity of inflation. If inflation is mild, it has a positive influence on promoting a better economy, namely increasing national income and making people eager to save, work, and invest. On the other hand, when inflation is severe or hyper inflation, the economy will become chaotic, and the economy will feel depressed, People become less eager to work, save or invest and production because the price level increases rapidly. According to Chairani and Septriani (2023), in theory, if the inflation rate is high, it can cause several negative impacts on economic conditions, including productive investment will decrease, the level of economic activity will also decrease, unemployment will increase and domestic product cannot compete in the international market. High inflation can be an indicator of economic instability. High inflation rates can disrupt economic activity as consumers and companies feel uncertain about an unstable economic future. As well as reducing the level of economic activity as a whole. Therefore, because in this study the inflation experienced by 5 ASEAN countries is mild inflation, so that inflation has a positive impact on investment.

This is in line with the research of Anindita et.al (2021), Putri et al (2021), Rizkiyani et al (2022), Megasari and saleh (2021), and Anyanwu (2018) in Syarkani (2021), inflation has a strong detrimental influence on foreign direct investment, this study shows that inflation variables have a positive and significant effect on foreign direct investment. Therefore, if inflation increases over time due to rising consumer prices, it is likely that demand for goods and services also increases in the destination country of the investor investing, and ultimately the investor's profits increase. According to data analysis studies that have been explained that currently inflation has an impact on foreign direct investment. To attract investors to invest in ASEAN-5 countries, it is imperative to boost economic development and keep inflation in check. This condition contradicts the theory explained by Mishkin (2008) that the inflation rate will have an indirect impact on investment. The direction of parameters that do not match the theory is likely to occur investment. When inflation occurs, prices including factors of production will rise. When production prices rise, companies tend to reduce investment leading to a decrease in investment. Investors see inflation as a sign of macroeconomic stability when deciding where to put their money.

Furthermore, in the variable interest rate, a calculated t value of 2.620272 > t table is 2.048407142 and an interest rate probability value of 0.0156 < of 0.05, then Ha is accepted and Ho is rejected, meaning that the variable interest rate has a positive effect on foreign direct investment. This shows that when interest rates rise, foreign direct investment will rise, on the contrary, when interest rates fall, foreign investment also falls. This is due to the same trend. This is contrary to the results of this research data analysis, interest rates have a positive and significant influence on foreign direct investment in ASEAN. It can be concluded that foreign direct investment can be significantly affected by interest rates. Which means that increasing interest rates will increase foreign investment markedly. This shows that the interest rate and the amount of Foreign Direct Investment in ASEAN are directly proportionalIt can be concluded that foreign direct investment can be significantly affected by interest rates. Which means that increasing interest rates will increase foreign investment markedly. This shows that the interest rate and the amount of Foreign Direct Investment in ASEAN are directly proportional.

This research is in line with research conducted by Septifany et al (2015) which explains that interest rates have a positive and significant effect on foreign direct investment. This is also in line with Astuti & Siregar (2018), according to them interest rates have a positive but not significant relationship to FDI. The results of this study contradict the classical theory which states that there is a negative relationship between interest rates and investment levels. This means that if interest rates are high, the amount of investment will decrease, while low interest rates will encourage more investment Sukirno (2010) in Septifany et al (2015). This difference could occur because interest rate movements are not followed by interest rate movements of commercial banks in the country. In addition, it is suspected that the rate of return on capital enjoyed by investors is still greater or equal to the interest rate that investors must pay to banks. This causes rising interest rates to positively affect Foreign Investment in ASEAN-5 Sukirno (2010) in Septifany et al (2015). In this case, interest rates are one indicator in determining whether someone will make an investment or choose for saving. If low interest rates will cause investment to increase, this is in accordance with the research of Dewi & Triaryati (2015), according to them interest rates have a negative and significant relationship with investment. The higher the interest rate in a country will cause investors to be less interested in investing.

Conclusions

Based on the results of research analysis that has been conducted in ASEAN countries, it can be concluded that partially economic growth has a significant positive effect on foreign direct investment, inflation has a significant positive effect on foreign direct investment and interest rates have a significant positive effect on foreign direct investment. Likewise Based on test F, it was obtained that the variables of economic growth, inflation and interest rates simultaneously had a significant positive effect on foreign direct investment with an Adj.R-Square value of 93.79 percent. These results show that 6.21 percent of foreign direct investment is explained by other variables outside the model.

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