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Determinants of foreign direct investment in Southeast and South Asian countries

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ABSTRACT

The purpose of this study is to describe the Foreign Direct Investment (FDI) determinants of 6 countries, each of which is 3 countries from Southeast Asia and South Asia. Foreign Direct Investment (FDI) shows capital flows in 6 countries (Indonesia, Philippines, Malaysia, India, Pakistan and Bangladesh) that are affected by inflation, wage, Exchange Rate, Market Size and Trade Openness. The research method used is the regression of panel data for the period 2004-2019 from 6 countries in Southeast Asia obtained from the World Bank database. The results showed simultaneously and partially variable wage, exchange rate, market size and trade openness had a significant relationship with FDI inflows, except for variable inflation at $\alpha = 10\%$. Of the several variables studied, the dominant variable affecting the inflow of FDI in a country is the size of the market and followed by the wage level. In addition, of the 6 countries studied by countries that have great potential as recipients of FDI is Philippines.

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1. Introduction

The challenges faced by many countries today are facing various crises, such as economic crises, health crises and others that have an impact on a country's economic growth. The World Bank is ready to provide support with various solutions, because the World Bank is one of the largest sources of funding in the world for many countries. The World Bank Group is the International Bank for Reconstruction and Development (IBRD), International Development Association (IDA), International Finance Corporation (IFC), Multilateral Investment Guarantee Agency (MIGA), International Centre for the Settlement of Investment Disputes (ICSID) all of which provide assistance in the form of loans. Group is ready to provide support in the form of a joint commitment to reduce poverty, improve mutual welfare, and carry out sustainable development in many countries. In addition to the lack of loan funds from the World Bank in overcoming the problem of lack of funds in achieving economic growth and development, many countries use Foreign Direct Investment (FDI). Foreign Direct Investment (FDI) has a big role in complementing domestic investment needs. FDI can improve production capabilities and become a medium of technology transfer from abroad to within the country. In addition, the presence of foreign investment in the form of FDI can also increase the competitiveness and advantages of domestic products. This can be seen from the flow of foreign direct investment (FDI) acceptance of a country will lead to the establishment of new factories and the transition of technology. From the establishment of new factories and the transition of technology will increase output / Gross domestic product, exports and employment opportunities. This flow is a positive effect of the existence of Foreign Direct investment (FDI). Research that states that Foreign Direct investment (FDI) affects economic growth was conducted by Dinh et al. (2019) and Appiah et al., (2019), Quoc and Thi (2018).

In 2020, Foreign Direct Investment (FDI) is under severe pressure as a result of the Covid-19 pandemic. Foreign Direct Investment (FDI) inflows into developing countries have been particularly hard hit, as the average investment is export-oriented. Among them are exports of the most seriously affected commodities. According to United Nations Conference on

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Trade and Development (UNTAD) in the annual report 'World Investment Report 2020; Uncertainty over the evolution of the COVID-19 pandemic will cut global economic growth and is projected to decrease by 5-10% Foreign Direct Investment (FDI) in 2021. According to the United Nations Conference on Trade and Development (UNCTAD) on January 24, 2021, FDI collapsed in 2020 to about US\$ 859 billion, down to 42% from US\$ 1.5 trillion in 2019. And according to the 'FDI in Figures' report published on April 30, 2021 by the Organization for Economic Co-operation and Development (OECD), FDI inflows to G20 countries decreased by 28%. The COVID-19 pandemic has seen a decline in a country's economic growth and to increase that economic growth in the future requires more foreign investment. The 10 largest countries receiving FDI flows according to the Organization for Economic Co-operation and Development (OECD) before and after the Covid-19 pandemic are as follows:

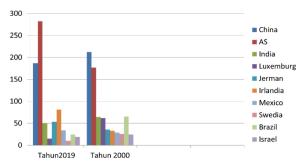


Fig. 1. Largest foreign direct investment (FDI) inflow from 2019 to 2020

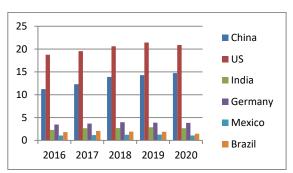


Fig. 2. Gross domestic product (GDP) 6 out of the 10 largest FDI recipient countries by OECD (2016-2020 Trillion US dollar)

Source: World Bank

Source: Statistics Organization for Economic Co-operation and Development (OECD)

Based on Fig. 1 above, in 2020 there was a decrease in FDI inflows to the United States (US) by 37.35%, Germany by 34.20%, Ireland by 58.89 and Mexico by 14.70%. Of the largest decline in inflows was Ireland. While the increase in inflows under the pressure of this pandemic is the largest is Luxemburg followed by Brazil, Sweden, Israel, India and China. Gross Domestic Product (GDP) is a proxi of the market size of a country and is one of the determinant indicators of the FDI-giving country. Based on Fig. 2 above, it can be seen that the GDP value of the United States (US) is the largest and followed by China. In 2020, GDP growth from these 6 countries was negative except China, which was 2.25%. This condition shows that all countries in the world are experiencing pressure due to the Covid 19 pandemic. For the 4 more countries that received the largest FDI flow according to the Economic Co-operation and Development (OECD) is Luxembourg, Ireland, Sweden and Israel, the value of GDP is below 1 trillion US \$. Another factor that affects the inflow from FDI to one country is Inflation. Some researchers stated that an increase in inflation will cause capital flows into a country to increase, meaning that the relationship that occurs is positive. This increase in inflation is certainly within limits that do not cause people's purchasing power to decrease. The inflation value of the 10 countries receiving FDI inflows is given in Fig. 3 as follows:

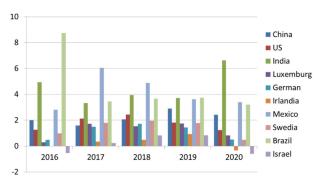


Fig. 3. Inflation/consumer price index for 10 countries receiving the largest FDI over the period 2016-2020 Source: World Bank

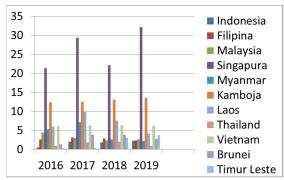


Fig. 4. Foreign direct investment net inflow percentage of Southeast Asian coutries from 2016 to 2020 Source: World Bank

Fig. 3 above shows that India's inflation rate is higher than that of its country and followed by China. In 2020, there are two countries that have decreased prices, including Ireland and Israel. Based on the above, the determining factors of Foreign Direct investment (FDI) are widely carried out by researchers including: Danish and Akram (2014), Fornah and Yuehua (2017), Bobenič et al. (2018), Syantini et al. (2020), Hlophe and Emenike (2020), and Megasari (2021). The factors affecting Foreign Direct investment (FDI) are Electric power consumption (kwh per capita), total foreign debt, Total debt

service (percentage of GDP), inflation, Domestic gross fixed capital formation (percentage of GDP), exchange rate, exports, interest rates, corruption control, Political stability Index, Trade Openness and others. In addition, Foreign Investment (FDI) is also believed to be one of the instruments to reduce the gap between rich and poor countries. Based on the researchers' research above, the author's desire to discuss what factors affect Foreign Direct investment (FDI) in Southeast Asian and South Asian countries.

The conditions of Foreign Direct Investment (FDI) in Southeast Asia and South Asia are as follows:

1. The FDI picture of countries that are members of the Association of Southeast Asian Nations (ASEAN) on GDP is as follows:

Fig. 4 above illustrates the large number of Foreign Direct investment (FDI) of GDP for each country that is members of the Association of Southeast Asian Nations (ASEAN). The country with the largest comparison between FDI and GDP is Singapore and followed by Cambodia, while the lowest number of FDI compared to its GDP for 2019 is Thailand. The value of FDI above reflects the amount of FDI contributing to the economic activity of a country.

2. The FDI of countries incorporated in South Asia to GDP is as follows:

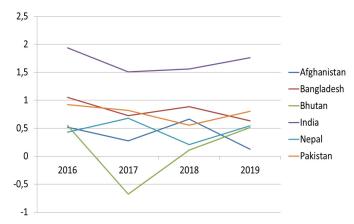


Fig. 5. Foreign direct investment, net inflow of 6 south Asian countries (% of GDP)

Source: World Bank

Fig. 5 above shows the amount of FDI (% of GDP) in each country. And it can be seen that FDI India contributes the most to GDP and is followed by Bangladesh and Pakistan. This study uses FDI data from 6 countries that are members of Southeast Asia and South Asia. The countries chosen to be the object of research are Indonesia, the Philippines, Malaysia for Southeast Asia and India, Pakistan, Bangladesh for South Asia. The study has three objectives: (i) To identify and discuss the main factors affecting FDI, (ii) To determine how much influence the factors studied have on FDI, (iii) to determine the policies of FDI recipients in developing countries.

2. Literature review

2.1 Foreign direct investment (FDI)

According to Tandellin (2001), investment is a commitment to a number of funds or other resources made at this time with the aim of obtaining a number of profits in the future, while Jogiyanto (2003), states that investment is a delay in consumption now to be used in efficient production processes over a period of time. While Sukirno (2010) stated that investment activities will increase economic activity. Investments can be divided into two, namely investments in financial assets and investments in rill assets. Investments in financial assets can be divided into direct investments and indirect investments. In addition, the source of investment can be from abroad and within the country. Direct investment originating from abroad is often known as Foreign Direct investment (FDI)." According to the Organization for Economic Co-Operation and Development (OECD), Foreign Direct investment (FDI) is a source of economic development and modernization, income growth and employment. In addition, the OECD also stated that the existence of FDI according to some studies will trigger an abundance of technology, help the formation of human resources, contribute to the integration of international trade, help create a more competitive business environment and improve company development. In addition, according to Dorozynska and Dorozynski (2015), FDI is an important factor in driving economic growth, increasing capital to increase productivity, employment, innovation and technology. And according to Soltanpanah and Karimi (2013), FDI entering a country collectively contributes to the country's macro environment through taxes. Taxes are state revenues and are used for infrastructure in supporting the economic activities of companies and others. Meanwhile, according to Appleyard et al. (2014), FDI has a bad impact on a country including increasing instability in the balance of payments and exchange rates, creating local and other monopolies. Meanwhile, the existence of FDI in poor countries will have an impact on growth and development through knowledge transfer, investment fund accrual and even improved labor standards (Farla et al., 2016).

2.2 Inflation

According to Yolanda (2017), Inflation is an economic phenomenon and also a macroeconomic variable can have a bad influence on the level of people's welfare. According to Milton Friendman, "Inflation can happen anywhere and is a monetary phenomenon". Venieris and Sebold (2005) define inflation as the tendency to increase the general price level continuously over time. Inflation can be divided on the basis of its nature, namely creeping inflation, galloping inflation and hyperinflation (Nopirin, 2000). The calculation of inflation can be from the Consumer Price Index, wholesale price index and Implicit Price Index (Rahardja & Manarung, 2008). The results of research by Kumari and Sharma (2017), Hong and Ali (2020), Wijaya et al. (2020) stated that the inflation rate had a significant effect on FDI, while Karim et al. (2018) declared positive and insignificant.

2.3 Wage

Wages under article 1 of the 1949 International Labour Organization (ILO) Convention in Geneva are rewards or income established by mutual agreement or by national laws or regulations, which must be paid under a written or unwritten employment contract by the employer to its workers. While the ILO Convention of June 29, 1951 established wage equality between male and female workers for equal-value work, referring to the value of wages set without discrimination based on gender. While Sugiyurso and F. Winarni (2005) stated that wages are rewards given to workers who do work and payments are set on a daily basis or based on the completed work unit. According to Ashyadie (2007), wage fixing can be based on the theory of Normal Wages (David Ricardo), the teori of the Iron Wage Act (Ferdinand Lassalle), the Wage Fund teori (Stuart Mill Senior) and the Ethical Wage Theory. In addition, other wage determinations are based on the growth of marginal products (Neo Classical), minimum life requirement limits (Adam Smith), corporate finances and labor demand and supply. The determination of wages will differ between one country and another because of differences in economic diversity that occur in each country. According to Sasana and Fathoni (2019), upah has a significant and negative influence on FDI. at the level of 10 percent.

2.4 The exchange rate

The exchange rate, according to Fabozzi and Modigliani (2002) is a sum of money from a particular currency that can be exchanged with one unit of another country's currency. Olivier Blanchard (2006) stated that the exchange rate is the price of domestic currency against foreign currency. According to Abimanyu (2004), the exchange rate system adopted by a country includes (a) fixed exchange rate, (b) free floating exchange rate, (c) Winder Band, (d) Managed Float, (e) Crawling Peg, and (f) Ajustable Peg. This system is used depending on the amount of intervention and foreign exchange reserves basically very much owned by the central bank of a country. While there are several types of exchange rates that can be used by a country, namely (a) the selling rate, (b) the buy rate and (c) the middle rate. These three types of exchange rates are different from each other. According to Sasana and Fathoni (2019) and Hong and Ali (2020) the exchange rate relationship with FDI is a significant and negative influence and Benson et al., (2019) and Okonkwo et al. (2021) stated positive and significant. While Chowdhury and Wheeler (2008) are export oriented investors will relatively do more FDI in countries whose exchange rates depreciate.

2.5 Size of the market

The size of the market can be indicated by economic conditions or potential domestic production demand of a country. The economic condition or domestic production potential of a country is reflected by Gross Domestic Production (GDP) or the value of income per capita of the population. The size of a country's market is one of the important elements in decision making by the FDI-giving country. In research the market size is projected from GDP. Researchers who produce market size with GDP include Economou and Hassapis (2015), Meidayat (2017), Olayemi and Temitope (2018), Grace (2019) and Sodik *et al.*, (2019). The relationship of market size to FDI is positive and significant expressed by many researchers.

2.6 Trade openness

Trade Openness for a country is to provide opportunities for countries to export and import goods. According to Yanikkaya (2003) in the experience of economic openness there are two flows of movement, namely trade (goods and services) and financial openness internationally. Countries that move goods, services and finance internationally, the economy is already open. The opening of trade will open economic channels between countries and also open opportunities for U.S. investors to enter a country. That makes foreign investors prefer to invest in countries that have a high level of trade openness. According to Mankiw (2006), an open economy is an economy that can interact freely with other economies in various

parts of the world. Trade openness is calculated based on the amount of exports and imports divided by GDP (Bibi & Rashid, 2014). The relationship of trade openness has a positive and significant effect on FDI (Rachdi et al., 2016).

3. Research methods

The empirical analysis covered the period 2004 to 2019, using panels from 6 countries in Southeast and South Asia. This research uses a panel data model that combines cross-section data and time-series data. The type of panel data used in this study is a balanced panel, where each cross section unit has the same number of observations. According to Hsiao (2007), the analysis data panel has advantages over some other analytical techniques, where data samples are more diverse than cross data and time series so that the degree of freedom will be higher. Attachments in static panel regression models, i.e. 1) Common Effect Model (CEM), 2) Fixed Effect Model (FEM), 3) Random Effect Model (REM). To choose the most appropriate model for the test: 1) Chow Test, is a test to determine whether FEM or CEM is best used in estimating static panel data, 2) Hausman Test is a test to determine whether FEM or REM is best used to estimate static panel data, and 3) Lagrange Multiplier test determines whether REM or CEM is best used in evaluating static panel data. Data processing in this study used E-views 9. The model form of regression equations from the above panel data is as follows:

```
Y = \alpha + \beta_1 X_{1t} + \beta_2 X_{2t} + \beta_3 X_{3t} + \beta_4 X_{4t} + \beta_5 X_{5t} + \varepsilon_t
```

```
Y
                                     Foreign Direct Investment net (BoP Current Billion US $)
X_1
             Inflation
                                     Inflation, consumer prices (annual %)
X2
             Wage
                                     Wage and salaried workers, total (% of total employment)
X3
      =
             Exchange rate
                                     Price level ratio is the ratio of a purchasing power parity (PPP)
X4
             Market size
                                     GDP/ Income per Capita (Current Billion US $)
      =
X5
                                     Trade is the sum of exports and imports of goods and services measured as a share
             Trade Open
                                     of gross domestic product
             Constant
εt
             Term error
                                     Variable Regression Coefficient
\beta_1 \beta_2 \beta_3 \beta_4 \beta_5
```

The hypotheses in this study are:

- 1. There is a significant influence between inflation, wage, exchange rate and open trade on Foreign Direct Investment (FDI) 6 countries in Southeast and south Asia simultaneously.
- 2. There is a significant influence between inflation, wage, exchange rate and trade open on Foreign Direct Investment (FDI) 6 Countries in Southeast and south Asia partially.

To find out how the effect of independent variables simultaneously on dependent variables using the F-test, ask to find out how the influence of partially independent variables has an influence on dependent variables used t-test. And to find out how much variation is described in the model used is to use a coefficient of determination (R2).

4. Results and discussion

The profiles of countries studied in this study are Indonesia, Malaysia, the Philippines (countries found in Southeast Asia) and India, Pakistan and Bangladesh (countries contained in South Asia). Indonesia has an area of 1,904,569 km2, a population of 270 million people (as of September 2020), GDP of 1,058,423.84 (million US\$), economic growth of 5.018 percent in 2019 and minus 2.07 percent in 2020. Malaysia as of 2020 the number of population reached 37 million more people, the area reached 330,000 Km2, the GDP value of 337,006.07 (million US\$) with economic growth of 4,439 percent in 2019 and minus 5.647 percent in 2020. The Philippines with an area of 300,000 Km2, the population as of 2020 amounted to more than 109 million people, the GDP value of 361,489.33 (million US\$), economic growth of 6.119 percent in 2019 and minus 9,573 in 2020. India with the capital city of New Delhi has an area of 3,280,000 km², a population of 1.38 billion in 2020, a GDP value of 2,623 (trillion US\$) with economic growth of 4.119 percent in 2019 and in 2020 of minus 7,252 percent. Pakistan has an area of 881,913 km², a population of 220 million, a GDP of 263.7 (billion US\$) and economic growth of 5.836 percent in 2019 and minus 0.935 percent in 2020. While Bangladesh has an area of 148,460 Km2, a population of 164.7 million in 2020, the GDP value is 323,057 (Billion US\$) with economic growth of 8.153 percent in 2019 and 2020 of 3,509 percent. From the above explanation, economic growth by every country is in freefall, except Bangladesh is not up to minus.

The Gambaran Foreign Direct investment (FDI) for the last 10 years of the research object is as follows:

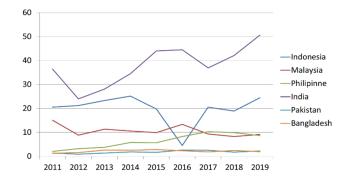


Fig. 6. Foreign direct investment net inflow of six Southeast and South Asian countries(Billion US\$) Source: World Bank

Based on Fig. 3 above, it can be seen that Foreign Direct investment (FDI) net inflow for 6 countries in Southeast and south Asia above can be seen that India received the most FDI followed by Indonesia and Malaysia even though Indonesia in 2016 went down with dates. For Malaysia in 2017 and 2018 it is under the Philippine. The Philippines, Pakistan and Bangladesh are not much different. The increase and decrease in FDI growth according to the researchers is caused by inflation, market growth / openness of trade and cheap labor / wages, market size / GDP, supplier certainty, business environment, expertise, and access to capital markets from the destination country of the FDI giving country. But in this study the determining factors of FDI are inflation, wages, Exchange Rate, Market size and trade openness. Based on the results of the study after conducting the chow test, Hausman test and Lagrange Multiplier (LM) test, the selected model is a fixed effect model as follows:

Table 1

Fixed Effect Model

rixed Effect Model				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
С	21.74691	3.795008	5.730398	0.0000
LN _{X1}	0.204904	0.184827	1.108626	0.2707
LN _{X2}	-3.997267	1.235409	-3.235581	0.0017
X3	-7.115118	3.077507	-2.311975	0.0232
LN _{X4}	2.732027	0.49725	5.494273	0.0000
LN _{X5}	-0.995034	0.557502	-1.784808	0.0779
Fixed Effects (Cross)				
_INDONESIAC	0.57626			
PHILIPINESC	1.702462			
MALAYSIAC	-1.869717			
INDIAC	-1.38119			
PAKISTANC	0.19475			
BANGLADESHC	0.777436			
	Effects Specification			
Cross-section fixed (dummy variables)	-			
R-squared	0.819821	F-statis	tic	38.67523
Adjusted R-squared	0.798623	Prob(F-statistic) 0		

Source: processed

Table 1 above shows that the equations that occur are:

LnY = 21.74691 + 0.204904 LnX1 - 3.997267 LnX2 - 7.115118X3 + 2.732027 LnX4 - 0.995034 LnX5

Based on the above equation can be explained:

- 1. The constant value indicates a positive and significant relationship (probability $< \alpha = 0.05$) with a coefficient value of 21. 74691. The coefficient value indicates that if there is no relief from Inflation, wages, exchange rate, market size and trade openness then the FDI that occurs is 21.74691.
- 2. Inflation ($\bar{X}1$) with FDI (Y) shows a positive and insignificant relationship that is attributed by nail probability of 0. 2707 (prob > α = 0. 05). The form of the relationship that occurs is in elastic (coefficient value β < 1) which means that the movement up /down the inflation rate does not affect the development of FDI. This is in line with the results of research from Karim et al. (2018).
- 3. Wage (χ_2) with FDI (Y) indicates a negative and significant relationship (probability = 0. 0017 < α = 0.05) with a β of 3. 997267. The β coefficient—value indicates that the relationship that occurs between wage and FDI is elastic. This shows that changes in wage increases will have a great influence on the decline of FDI or vice versa.

- 4. The Exchange Rate (X3) with FDI (Y) shows a negative and significant relationship with a probability value of 0.0232 (prob $< \alpha = 0.05$). The coefficient of the exchange rate and FDI is -7. 115118 which means that the treatment of the exchange rate of one unit will have an impact on the decline in the value of FDI by 7. 12 units. The form of this relationship is elastic and negative. This research is in line with research from Hadi Sasana and Salman Fathoni (2019), Hong and Ali (2020).
- 5. Market size (X4), expressed in the form of income value of the population. The relationship of market size with FDI(Y) is positive and significant. Assess the coefficient of β by 2. 732027 that reflects the elastic form of the relationship. The value of the β explains the treatment of the rise / fall of the market size of one unit will bring up / down FDI by 2. 7 units.
- 6. Trade openness, in this study showed a negative and significant relationship (at $\alpha = 0.10$ or 10%). The form of sub supposition that occurs between trade openness and FDI is inelastic (coefficient $\beta < 1$) which means that an increase of one unit of trade openness will have a decrease of 0. 99 against FDI.

The elastic form of the relationship explains that small changes of independent variables (Inflation, Wage, Exchange Rate, Market Size and Trade Open) will have a large impact on FDI. While the inelastic form of the relationship explains that large changes of independent variables (Inflation, Wage, Exchange Rate, Market Size and Trade Open) have only a small influence on changes in FDI. From the table above it can also be explained that simultaneously the relationship between inflation, wage, Exchange Rate, Market Size and Openness of trade is positive and significant with a coefficient of determination 0.798623. This value indicates that the variation of the variable is independent of the dependent variable 79.9% and the remaining 19.1% is influenced by other variables that are not studied. In addition, the variable that contributes greatly to Foreign Direct Investment (FDI) is market size and the lowest is inflation, where the relationship is not significant. Another thing that can be explained from table 1 above is the potential recipients of FDI in each country without changing the independent variables as follows:

Table 2
Foreign Direct Investment (FDI) Potential of 6 Southeast and South Asian Countries

	()			
No	Country	Interception	Constant	Potential
1	Indonesian	0.57626	21.74691	22.32327
2	Philippines	1.70246	21.74691	23.44937
3	Malaysia	-1.86972	21.74691	19.87719
4	India	-1.38119	21.74691	20.36572
5	Pakistan	0.19475	21.74691	21.94166
6	Bangladesh	0.77744	21.74691	22.52435

Source: processed

Table 2 above can explain that the countries most likely to receive the largest FDI are the Philippines and followed by Bangladesh and Indonesia. While the lowest FDI potential of the 6 countries studied is Malaysia. From Table 2 can be made multiple regression equations from each of the countries studied as follows:

$Y_{Indonesian} \\$	=	$22.32327 + 0.204904 LnX_{1} - 3.997267 LnX_{2} - 7.115118X_{3} + 2.732027 LnX_{4} - 0.995034 LnX_{5} - 0.0012118X_{1} - 0.0012118X_{1} - 0.00121118X_{1} - 0.0012111X_{1} - 0.00121118X_{1} - 0.0012111X_{1} - 0.0012111X_{1} - 0.001211X_{1} - 0.001211X_{1} - 0.001211X_{1} - 0.001211X_{1} - 0.001211X_{1} - 0.001211X_{1} - 0.00121X_{1} - 0.001$
$Y_{Philippines}$	=	$23.44937 + 0.204904 Ln X_1 - 3.997267 Ln X_2 - 7.115118 X_3 + 2.732027 Ln X_4 - 0.995034 Ln X_5 - 0.0012 Ln $
$Y_{Malaysia}$	=	$19.87719 + 0.204904 Ln X_1 - 3.997267 Ln X_2 - 7.115118 X_3 + 2.732027 \ Ln X_4 - 0.995034 Ln X_5$
Y_{India}	=	$20.36572 + 0.204904 Ln X_1 - 3.997267 Ln X_2 - 7.115118 X_3 + 2.732027 \ Ln X_4 - 0.995034 Ln X_5$
$Y_{Pakistan}$	=	$21.94166 + 0.204904 \ LnX_1 - 3.997267 LnX_2 - 7.115118X_3 + 2.732027 \ LnX_4 - 0.995034 LnX_5$
$Y_{Bangladesh}$	=	22.52435 + 0.204904 LnX ₁ - 3.997267LnX ₂ -7.115118X ₃ +2.732027LnX ₄ - 0.995034LnX ₅

5. Conclusion

The purpose of this study was to identify the determinants of FDI in 6 countries incorporated in Southeast Asia and South Asia, especially on inflation rates, wage rates, exchange rates, market size and trade openness from the period 2010 to 2019. The results explained that simultaneously the variables Inflation, Wage, Exchange Rate, Market Size and Trade Open had a significant effect on Foreign Direct Investment (FDI) with an influence of 79.9% and the remaining 19.1% was influenced by other variables not studied. The variables Wage, Exchange Rate, Market Size and Trade Open have a significant effect with Foreign Direct Investment (FDI) at $\alpha = 5\%$, while inflation has a positive and significant effect on $\alpha = 10\%$. The results also showed that the relationship between wage rate, Exchange Rate, and Trade Open respectively with Foreign Direct Investment (FDI) is negative. This relationship shows that an increase in each wage rate, Exchange Rate, and Trade Open variable will lead to a decrease in the value of Foreign Direct Investment (FDI). In addition, the variable that contributes the most to FDI is Market Rate and followed by wage rate.

The driving factor of the country giving FDI to a country is the market size owned by the recipient country of FDI, this is in accordance with the results of research by the Organization for Economic Co-operation and Development (OECD) in figure 1 above, that the countries that receive the largest FDI flows are the countries with the largest population and at the same time the most vulnerable markets. Meanwhile, wages occur due to the balance of demand and supply of work in a country and also the value of wages has the most direct and real effect on the daily lives of workers. If the demand is not proportional to the supply will cause the value of the wage to be problematic. And this will cause problems for FDI-changing countries, because high wages will affect production costs, especially for the industry at work. Thus, wages are one of the determining indicators for investors to determine their investments, so it is necessary to handle the level of wages by the government of a country that can encourage Foreign Direct Investment (FDI). Thus, according to the Organization for Economic Co-operation and Development (OECD), FDI can encourage international economic integration, if with the right policy framework, so as to provide financial stability, encourage economic development and improve people's welfare.

References

- Abimanyu, A. (2004). Understanding Foreign Exchange Rates. Jakarta: FE-UI, p.36.
- Appiah, M., Li, F., & Korankye, B. (2019). Foreign investment & growth in emerging economies: panel ARDL analysis. *Journal of Economic Business Accounting Venture*, 22, 274-282.
- Appleyard, D., Field, A., & Cobb, S. (2014). International economics. New York: The McGraw-Hill series economics.
- Ashyadie, Z. (2007). Employment Law: Labor Law in the Field of Employment Relations. (Jakarta: PT RajaGrafindo Persada, 2007), p. 69.
- Benson, E., Ike, E.C., & Alhasan, Y. (2019), Effect of Exchange and Interest Rates on Foreign Direct Investment in Nigeria 2006-2018. *International Journal of Contemporary Research and Review*, 10(7), 21572-21585.
- Bibi, S., and Rashid, H. (2014). Impact of Trade Openness, FDI, Exchange Rate and Inflation on Economic Growth: A Case Study of Pakistan. *International Journal of Accounting and Financial Reporting*, 4(2), 236.
- Bobenič, H. A., Bruothová, M., Kubíková, Z., & Ručinský, R. (2018). Determinants of foreign direct investment inflows: A case of the Visegrad countries. *Journal of International Studies*, 11(2), 222-235.
- Chowdhury, A. R., & Wheeler, M. (2008). Do Real Exchange Rate Volatility Affect Foreign Direct Investment? Evidence From Four Developed Countries. *The International Trade Journal*, 22(2), 218-245.
- Danish, R. Q., & Akram, A. (2014). Determinants of FDI in Pakistan: An empirical analysis. *Journal of International Business and Economics*, 2(2), 61-70.
- Dinh, T. T. H., Vo, D. H., The Vo, A., & Nguyen, T. C. (2019). Foreign direct investment and economic growth in the short run and long run: Empirical evidence from developing countries. *Journal of Risk and Financial Management*, 12(4), 176.
- Dorozynska, A., & Dorozynski, T. (2015). Human capital and FDI in central and eastern Europe. *Managing Global Transitions*, 13(2), 151-170.
- Economou, F., & Hassapis, C. (2015). Foreign direct investment inflows determinants in four South European economies. *Investment management and financial innovations*, 12(3), 182-189.
- Fabozzi, F.J., & Modigliani, F. (2002). Day Trading Foreign Exchange.
- Farla, K., De Crombrugghe, D., & Verspagen, B. (2016). Institutions, foreign direct investment, and domestic investment: crowding out or crowding in?. *World Development*, 88, 1-9.
- Fornah, S., & Yuehua, Z. (2017). Empirical Analysis on the Influence of Interest Rates on Foreign Direct Investment in Sierra Leone. *International Journal of Research in Business Studies and Management*, 4(12), 28-35.
- Grace, G. (2019). Factors Affecting Inward Foreign Direct Investment: Case Of Asean Countries. *Journal of Info Artha*, 3(2), 119-13
- Hlophe, N. P., & Emenike, K. O. (2020). Relationship between Financial Indicators and Foreign Direct Investment in Eswatini. *Financial Review*, 3(1), 14-24.
- Hong, T.Y., & Ali, D.H.A. (2020). The Impact of Inflation Towards Foreign Direct Investment in Malaysia And Iran. *International Journal of Academic Research in Business and Social Sciences, 10*(6), 201-216.
- Hsiao, C. (2007). Panel data analysis-advantages and challenges. *Mathematics Subject Classification*. Retrieved May 2, 2020, from https://link.springer.com/article/10.1007/s11749-007-0046-x
- Jogiyanto (2003). Portfolio Theory and Investment Analysis. III, cet, BPFE, Yogyakarta, p. 5.
- Karim, B. A., Karim, Z. A., & Nasharuddin, M. N. (2019). Corruption and Foreign Direct Investment (FDI) in ASEAN-5: A panel evidence. *Economics and Finance in Indonesia*, 64(2), 145-156.
- Kumari, R., & Sharma, A. (2017). Determinants of foreign direct investment in developing countries: A panel data study. *International Journal of Emerging Markets*, 12(4), p.658-682.
- Megasari, T. (2021). The Determinant of FDI Inflows in OIC Countries. *International Journal of Islamic Economics and Finance (IJIEF)*, 4(1), 31-50,
- Meidayati, A. W. (2017). Impact of telecommunication infrastructure, market size, trade openness and labor force on foreign direct investment in ASEAN. *JDE (Journal of Developing Economies)*, 2(2), 76-86.
- Nopirin (2000). Monetary Economics. BPFE, 10th Print, p.27
- Okonkwo, J. J., Osakwe, C. I., & Nwadibe, E. (2021). Exchange Rate and Foreign Direct Investment in Nigeria 1981-2018. International Journal of Academic Research in Business and Social Sciences, 11(1), 214-232.

- Olayemi, J. O., & Temitope, D. J. (2018). Market size and foreign direct investment in sub-Saharan Africa: the role of education. *Jurnal Perspektif Pembiayaan dan Pembangunan Daerah*, 6(1), 21-30.
- Quoc, C. H., & Thi, C. D. (2018). Analysis of foreign direct investment and economic growth in Vietnam. *International Journal of Business, Economics and Law*, 15(5), 19-27.
- Rachdi, H., Brahim, M., & Guesmi, K. (2016). Determinants Of Foreign Direct Investment: The Case Of Emerging Markets. *The Journal of Applied Business Research*, 32(4), 134-1039.
- Rahardja, P., & Manarung, M. (2008). Macroeconomic Theory an Introduction to the Fourth Edition, (Jakarta: Publishing Institute of the University of Economics, University of Indonesia, 2008), 173-174.
- Sasana, H., & Fathoni, S. (2019). Determinant of Foreign Direct Investment Inflows in Asean Countries. *JEJAK: Jurnal Ekonomi dan Kebijakan*, 12(2), 253-266.
- Sodik, J., Sarungu, J., Soesilo, A., & Rahayu, S. A. T. (2019). The Determinant of Foreign Direct Investment Across Provinces in Indonesia: The Role of Market Size, Resources, and Competitiveness (Penentu Pelaburan Langsung Asing Mengikut Daerah di Indonesia: Peranan Saiz Pasaran, Sumber, dan Daya Saing). *Jurnal Ekonomi Malaysia*, 53(3), 141-152
- Soltanpanah, H., & Karimi, M. S. (2013). Accumulation of human capital and foreign direct investment (FDI) inflows in ASEAN-3 countries (Malaysia, Thailand, Indonesia). *African Journal of Business Management*, 17(7), 1599-1605. doi:10.5897/AJBM11.1681
- Sugiyarso, G., & Winarni, F. (2005). Financial Management. Yogyakarta: Media Pressindo, p. 95
- Sukirno, S. (2010). Macroeconomics Theory Introduction. Pt. Raja Grafindo Persada Jakarta, p. 121.
- Syantini, Q., Pudjianto, H., & Rahajuni, D. (2020). Analysis Determinant Factors of Foreign Direct Investment in Indonesia. Sustainable Competitive Advantage (SCA), 10(1), 530-538.
- Tendelilin E. (2001). Investment Analysis and Portfolio Management. Edisi I, cet. I, BPFE, Yogyakarta.
- Venieris, Y.P., & Sebold, F.D. (2005). Macroeconomics Models and Policy. *Macroeconomics: theory, problem, and policy, ed. Muanga Nanga* (Jakarta: Raja Grafindo Persada, p. 237.
- Wijaya, A. G., Astuti, D., Tarigan, Z. J. H., & Edyanto, N. (2020). Determinants of Foreign Direct Investment in Indonesia "Evidence from Co-Integration and Error Correction Modeling" (Doctoral dissertation, EDP Sciences).
- Yanikkaya, H. (2003). Trade openness and economic growth: A cross-country empirical investigation. Journal of Development Economics, 72(1), 57–89.
- Yolanda, Y. (2017). Analysis of Factors Affecting Inflation and its Impact on Human Development Index and Poverty in Indonesia. *European Research Studies Journal*, 20(4B), 38 56.



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