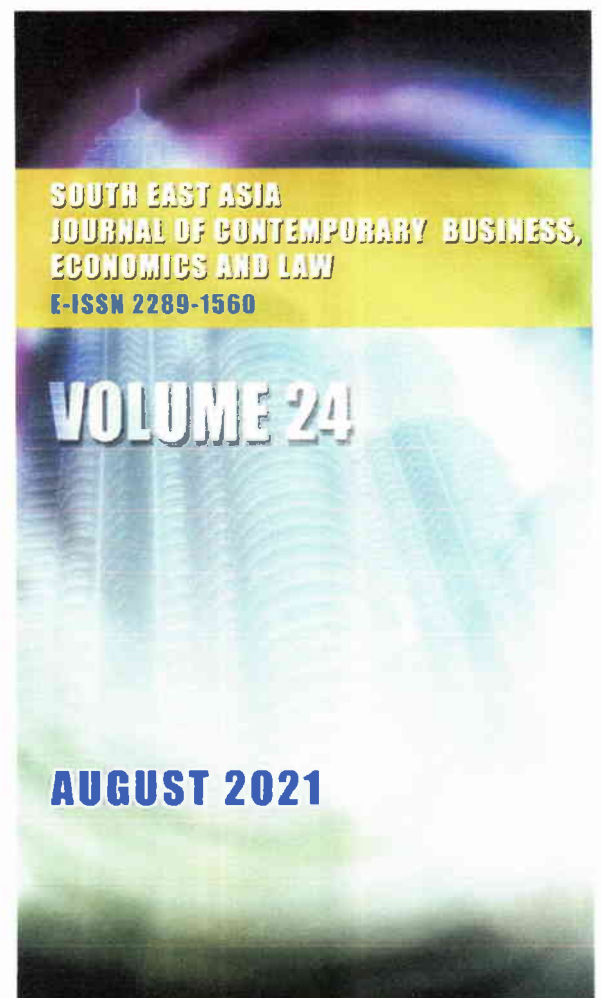


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## DETERMINANTS OF FOREIGN DIRECT INVESTMENT IN INDONESIA POST THE IMPLEMENTATION OF THE 2015 ASEAN ECONOMIC COMMUNITY

Henry Nosih Saturwa  
Abdul Aziz Ahmad  
Suharno

### ABSTRACT

*Empirical research states that the factors that influence foreign direct investment vary in different countries. This study aims to identify and analyze the factors that influence the entry of investment into the country by referring to best practices from developed countries. The variables used in this study consist of the dependent variable including foreign direct investment and the independent variables include: market size, infrastructure, trade openness, unemployment rate and the 2015 AEC. Novelty of this research include: the use of the 2015 MEA dummy variable, the infrastructure variable with indicators of electricity production capacity from the 35.000 MW power plant program which is dominated by fossil fuels and the open unemployment rate variable which has decreased in 10 years. The analysis method uses panel data regression from 34 provinces in Indonesia in the period 2013-2017. The results of panel data regression obtained that the best model is a random effect with variables that significantly affect investment including: infrastructure and market size. The construction of power plant infrastructure has a positive effect on foreign direct investment in accordance with the pollutant haven hypothesis, namely investors will look for locations in developing countries with environmental regulations that are easier and cheaper to carry out pollution-intensive production processes. Market size variable that has a positive effect on investment. This shows that foreign investors tend to move their investments to countries with larger markets with strong purchasing power so that their investment returns are higher. The conclusion of this study, Indonesia should focus on improving infrastructure and market size because it is included in the Global Competitiveness Index indicator which can encourage the entry of foreign direct investment into the country.*

Keywords: Foreign Direct Investment, Infrastructure, Unemployment, Market Size, AEC 2015

### INTRODUCTION

The Neo Classical growth theory developed by Solow-Swan states that economic growth is determined by the interaction of production factors which include the accumulation of capital, labor and technology. Empirical research results state that economic growth in developing and developed countries is influenced by exports and investment (Sutawijaya, 2010). One type of investment that is believed to have a positive impact on the economy is Foreign Direct Investment (Alfaro et al., 2004). Foreign direct investment can affect economic growth endogenously if it is able to increase production through externalities and chain effects (Makki & Somwaru, 2015). However, ironically, developing countries often face problems in the development process to encourage economic growth, namely limited funding sources caused by the saving investment gap (Viphindrartin et al., 2020). One source of financing to close the savings and investment gap in developing countries can be done by utilizing foreign direct investment or known as Foreign Direct Investment-FDI (Mahmood & Alkhateeb, 2018).

*Lesson learned the success of FDI to encourage economic growth has been proven in China.* In 1979, China had opened up to foreign investment so that it had no FDI in 1979, quadrupled to USD \$45,46 billion in 1998 (Q. Sun & Tong, 2002). The inflow of FDI has had a significant impact on increasing the ratio of China's total trade volume compared to GDP which was originally only 15,4 percent in 1981 to 26,6 percent in 1995 with an average annual export growth of 63,3 percent (H. Sun, 1999). Like other countries, Indonesia needs foreign direct investment for development funding and as one of the key factors to encourage its economic growth (Kiptanui, 2017). In 2010, investment needs in Indonesia amounted to Rp 2.128 trillion, while on the other hand, domestic saving was Rp 2.246 trillion, so there is still an excess of savings of Rp 118 trillion. However, entering 2012, investment needs increased to Rp 2.819 trillion, with the availability of domestic savings of Rp 2.756 trillion, resulting in a saving investment gap of Rp 63 trillion. Furthermore, in 2018 the savings and investment gap widened to reach Rp191 trillion (LPPI, 2019).

Based on the 2020 World Bank report, Indonesia has entered the upper middle income group with a per capita income of USD \$ 4.050. This achievement was achieved through economic transformation and infrastructure development in order to increase economic capacity. However, in the last 14 years (2005-2019) foreign direct investment in Indonesia has a volatile annual growth trend that poses the risk of Indonesia's re-entry into the lower middle income group. Indonesia has the opportunity to increase foreign direct investment with the ASEAN economic integration known as the ASEAN Economic Community (AEC) which was implemented in 2015. One of the pillars of the AEC is the openness of investment and capital flows in ASEAN countries in order to realize the pillars of equitable and just economic development in the region. Efforts to increase foreign direct investment in Indonesia have been carried out through the XVI economic policy package issued by the Coordinating Ministry for Economic Affairs on November 16, 2018. The regulation regulates several things, including: expansion of the corporate income tax reduction facility (tax holiday), relaxation of the negative investment list, and increasing foreign exchange from exports of natural resources. Initially, the policy had a positive impact on increasing investment in the first quarter of 2019 which recorded an increase of 29,14 percent compared to the previous year. However, in the second quarter of 2019, investment only grew by 3,34 percent compared to the previous year. Meanwhile, in the second quarter of 2019 it decreased by 6,65 percent year on year. This shows that the economic policy package decided by the government has not structurally affected the entry of foreign direct investment into the country.

Various kinds of empirical studies have been carried out to identify the determinants of the entry of foreign direct investment in various countries. Research in Malaysia, concluded that education, market size, inflation rate, and exchange rate significantly affect foreign direct investment, while infrastructure is not significant to attract foreign direct investment to the country (Hamood *et al.*, 2018). While the determinants of foreign direct investment in India include corporate taxes, labor wages, interest rates, a stable political environment, exchange rates, infrastructure and inflation (Hooda *et al.*, 2011). A study in the European Union found that the unemployment rate has an influence on investors' decisions to realize foreign direct investment in a country. The higher unemployment rate causes pressure on social and economic conditions so that it has an impact on the investment climate in the destination country (Grahovac & Softić, 2017). This is supported by research which states that a high unemployment rate is a symptom of instability in macroeconomic conditions which is the main consideration for investors in the realization of investment in a country (Strat *et al.*, 2015). The unemployment rate is one indicator that shows poverty which can have an impact on security insecurity, thereby reducing investor interest in investing in destination countries (Mpanju, 2012).

The determinants of foreign direct investment in China include market size, number of workers, minimum wage levels, exchange rates and ownership of government assets (Zhang, 2011). Recent research shows that the determinants of foreign direct investment in developing countries include market size, availability of infrastructure and trade openness, while the availability of natural resources and inflation rates do not significantly affect the entry of foreign direct investment (Asongu *et al.*, 2018). Research to determine the determinants of foreign direct investment is important because based on empirical studies these investments have a major role in supporting national development (Sarwedi, 2002). In addition, the flow of foreign investment plays an important role in accelerating the process of structural reforms that can maintain the country's economic growth in the long term (Irandoust, 2016). High and sustainable national growth can anticipate Indonesia's entry into the middle income trap (Sujatmiko *et al.*, 2021). The novelty in this study is the use of the 2015 MEA dummy variable. Use of infrastructure variables with indicators of electricity production capacity. This variable reflects the local wisdom of development in Indonesia, which is currently implementing a 35,000 MW project which is dominated by PLTU and PLTGU with fossil fuels. The variable of labor availability is used as an indicator of the open unemployment rate which in the last 10 years has decreased so it is necessary to examine its impact on the development of foreign direct investment. Investment Gap in Indonesia that must be met by foreign direct investment to carry out the structural reform agenda. Structural transformation is strategic so that Indonesia is not trapped in the lower middle income group of countries. However, on the other hand, the determinants of foreign direct investment in various countries are very diverse, especially in the 2015 ASEAN era. The government needs to formulate targeted policies to determine the determinants of foreign direct investment in Indonesia based on the experiences of other countries that have succeeded.

The purpose of this study is to analyze the determinants of investment, namely infrastructure development, open unemployment, market size, trade openness and implementation of the 2015 MEA on Foreign Direct Investment in Indonesia. This research is useful as a tool to identify and analyze the factors that most influence the entry of investment into the country. If significant factors have been obtained for foreign direct investment, policy makers can focus on these factors to be more encouraged so that they have a positive impact on economic development. The development of electricity infrastructure can encourage the nation's competitiveness (Suhaemi, 2016). Therefore, the availability of electricity is one of the indicators for measuring the level of easy doing business that can attract foreign direct investment into a country (Malpass, 2020). The decline in the unemployment rate in the last 10 years shows the economic stability of a country (Strat *et al.*, 2015). Stable economic conditions in a country are the main considerations for investors to realize foreign direct investment in the destination country (Siklar & Kocaman, 2018). Meanwhile, market size is an important consideration for investors to invest in a country because it shows the country's demand structure (Siklar & Kocaman, 2018). The size of the market is directly proportional to the size of the production capacity so as to encourage the efficiency of the use of production factors. Optimization of production resources will provide benefits for investors in obtaining economies of scale (Chakrabarti, 2001). Therefore, market size is a widely accepted variable as one of the determinants of the entry of foreign direct investment in various countries (Seref Akin, 2010). On the other hand, foreign investors also pay attention to the trade openness of the host country in global trade (Siklar & Kocaman, 2018). An open trade system will make it easier for multinational companies to carry out export-import activities as well as obtain international funding (Purnomo, 2020). Since the MEA policy in 2015, the economy between countries has become more open so that restrictions on capital and investment flows are very small (Masudi, 2016). Indonesia can take advantage of this opportunity to obtain fresh funds for sustainable economic development.

Research in 187 countries in the world found that a well-developed infrastructure in a country has proven to have a positive impact on the entry of foreign direct investment throughout the country (Koyuncu & Unver, 2016). In general, a high unemployment rate will have a negative impact on social, economic and political conditions in a country (Grahovac & Softić, 2017). The unemployment rate can indicate the occurrence of poverty which has an impact on security insecurity which in turn can reduce the interest of investors to invest in the destination country (Mpanju, 2012). In addition, the unemployment rate can indicate a macroeconomic imbalance so that it becomes a negative signal for investors to invest in the destination country (Strat *et al.*, 2015). The variable market size provides the attractiveness of trade between regions that can encourage the flow of foreign direct investment. Investor's decision to make foreign direct investment is significantly related to market size in American companies (Ellis, 2008). A large market size will encourage high investment acceptance expectations, so that it will attract investors to invest in foreign direct investment (Q. Sun & Tong, 2002). Globalization will encourage increased trade openness and penetration by foreign direct investment (Neumayer & De Soysa, 2005). Investors will choose countries with trade openness because it will be easy to import raw materials and market their products. This condition will certainly be an investment attraction for foreign investors so that it has a positive impact on the entry of foreign direct investment into countries that have trade openness policies (Erdal, 2002). The ASEAN Economic Community (AEC) has an impact on the absence of restrictions on the flow of goods, services, capital flows, investment flows and the flow of trained workers among ASEAN countries. Various studies have proven that there is a positive relationship between regional integration in relation to the entry of foreign direct investment (Masudi, 2016). Regional economic integration will make it easier for investors to find investment locations that are in accordance with their business characteristics so that they can encourage the entry of foreign direct investment flows into the country because there are no cross-border barriers. Based on the empirical study literature study and theoretical basis, the following hypothesis is formulated:

H<sub>1</sub> : Infrastructure has a positive influence on foreign direct investment

- H<sub>2</sub> : Unemployment has a negative effect on foreign direct investment  
H<sub>3</sub> : Market size has a positive effect on foreign direct investment  
H<sub>4</sub> : Trade openness has a positive effect on foreign direct investment  
H<sub>5</sub> : There is an increase in foreign direct investment in Indonesia after the 2015 MEA policy

## METHODS

This research belongs to the quantitative study group with the method used is associative, namely research that aims to determine the relationship between two or more variables. The dependent variable in this study is foreign direct investment while the independent variables include: infrastructure, unemployment, market size, trade openness and the 2015 MEA dummy variable. The type of data used is secondary data for a period of 5 years from 2013-2017 from 34 provinces in Indonesia. The data sources used are from the World Bank, the Central Statistics Agency, the Investment Coordinating Board (BKPM), the Ministry of Energy and Mineral Resources and other documentation from literature studies.

The data analysis method used in this study is panel data regression analysis, which is a combination of time series data and cross section to observe the relationship between the dependent variable and one or more independent variables (Gujarati & Porter, 2013, p. 188). Panel data regression is used to determine the relationship model of the independent variable to the dependent variable on a particular unit of observation. To answer the research hypotheses 1 to 4 using the panel data regression analysis method, while for the 5th research hypothesis, panel data analysis was used using the 2015 MEA dummy variable. Data analysis tools used E-Views 9.0 and Microsoft Excel 2013. The form of the panel data regression equation in this study is as follows:

$$I_{it} = \beta_0 + \beta_o O_{it} + \beta_y Y_{it} + \beta_L L_{it} + \beta_A A_{it} + D_1 + \varepsilon_{it}$$

Where:

- $I_{it}$  : FDI for province i at time t  
 $\alpha$  : regression constant  
 $O_{it}$  : market openness for province i at time t  
 $Y_{it}$  : per capita income for province i at time t  
 $L_{it}$  : unemployment rate for province i at time t  
 $A_{it}$  : infrastructure of the i-th province's electricity production capacity at the t time  
 $\beta$  : regression coefficient  
 $D$  : 2015 MEA Dummy  
 $\varepsilon_{it}$  : error for individual i for period t period

## RESULTS AND DISCUSSIONS

Based on the results of statistical tests using the Chow, Hausman and Lagrange Multiplier tests, it can be concluded that the estimation model using the random effect method is the best model that can be used in this study with the following regression equation:

$$\hat{I}_{it} = -2,6413 + 0,3905 \log A_{it} - 0,0191 L_{it} + 1,2616 \log Y_{it} - 5,68E-14 O_{it} + 0,1275 MEA_{it}$$

(t=4,3268)    (t=-0,2955)    (t=3,7250)    (t=-0,0053)    (t=1,2727)

R<sup>2</sup> = 0,2391  
F = 10,3096  
DW = 1,6545

In the random effects model there are 2 (two) independent variables individually significant to the dependent variable, namely the market size variable and the infrastructure variable having a P-value t test that is smaller than alpha 5%. While the variables of trade openness, unemployment and MEA in 2015 individually were not significant with a P-value t test greater than 5% alpha. In detail the results of panel data regression are as shown in Table 1 below.



Tabel 1. Model Random Effect

Variable	Coefficient	t-Statistic	P-value
C	-2,6413	-0,7665	0,4445
log_market size	1,2616	3,7250	0,0003
log_infrastructure	0,3905	4,3268	0,0000
Trade	-5,68E-14	-0,0053	0,9957
Unemployment	-0,0191	-0,2955	0,7680
MEA	0,1275	1,2727	0,2049
R <sup>2</sup>	= 0,2391	F = 10,3096	
Adj R <sup>2</sup>	= 0,2159	DW = 1,6545	
i	= 34		
t	= 5		

Source: processed data, 2021

The results of data processing obtained a regression equation with a market size variable coefficient of 1,2616, which means that an increase of one percent of market size with per capita GRDP indicators will increase the entry of foreign direct investment in Indonesia as much as Rp1.261,6. This shows that the higher the level of national income per capita will be the driving force for the entry of foreign direct investment into the country.

The coefficient value of the infrastructure variable is 0,3905, which means that an increase of one percent of infrastructure in the form of installed capacity for electricity production will increase the entry of foreign direct investment in Indonesia as much as USD\$0,3905. This shows that the increasing installed capacity of electricity production will encourage the entry of foreign direct investment into Indonesia.

The unemployment rate has no effect on the entry of foreign direct investment in Indonesia. This implies that the trend of decreasing the unemployment rate in Indonesia in the last 10 years has not had an impact on the entry of foreign direct investment. This is supported by empirical research which concludes that a low unemployment rate signals the limited availability of labor so that in the end it can reduce the chances of investors to find workers with low wages (Blanchard, 2010, p. 145). Meanwhile, the availability of workers with competitive wages is one of the considerations for investors in making investment decisions (Strat *et al.*, 2015).

Another study states that a high quality workforce in a country will be able to attract greater foreign direct investment in the context of realizing capital-intensive investments (Q. Sun & Tong, 2002). Based on the 2021 National Manpower Survey, unemployment which shows the level of labor availability in Indonesia is dominated by people with a high school education background with a share of 11,29 percent. This condition has the consequence that the government needs to prioritize economic policies that can help improve the quality of education so that it can encourage investment in the long term (Grahovac & Softić, 2017).

Openness of trade has no effect on foreign direct investment. This is due to the existence of a trade balance deficit which is one of the causes of economic openness that does not affect economic growth which in the end does not affect the entry of foreign direct investment (Bibi *et al.*, 2014).

Based on BPS data, the national trade balance has a downward trend in the 2013-2017 period and has experienced a deficit in 2018 to date. A larger portion of imports can have an impact on an unstable exchange rate which in turn has a negative impact on the macroeconomy. Unstable macroeconomic conditions can affect investors' preferences in allocating their investments (Strat *et al.*, 2015).

In another study it was found that economic openness lowers social and environmental standards that trigger poverty (Dreher, 2006). High poverty rates in developing countries indicate unfavorable macroeconomic conditions because they can increase the risk of a financial crisis (Mpanju, 2012). Unstable economic conditions can be a negative signal for investors to invest in destination countries (Strat *et al.*, 2015).

The 2015 MEA policy did not significantly affect the entry of foreign direct investment in Indonesia. This can be caused by Indonesia's position which is ranked 50th (fifty) in the world or decreased 5 places from the previous year tahun. While in the ASEAN region, Indonesia is ranked 4 (fourth) after Singapore (ranked 1 in the world), Malaysia (ranked 27 in the world) and Thailand (ranked 40 in the world) in the 2019 Global Competitiveness Index (GCI) ranking. Meanwhile, the CGI ranking generally acts as an attraction for a country to encourage the entry of foreign direct investment into the country (Popovici & Calin, 2015). This is supported by research in the Balkans which found that the level of competitiveness of a country is positively related to the entry of foreign direct investment (Zlatković, 2016).

The stagnant position of Indonesia's GCI at the 4th rank among ASEAN countries in the last 5 years (2015-2019) may indicate the low national competitiveness in attracting investment into the country. In an effort to attract foreign direct investment in the 2015 MEA era, the Government of Indonesia can focus on improving the global competitiveness index indicators published by the World Bank because they are an important reference for global investors in investing (Popovici & Calin, 2015).

Economic integration in the ASEAN region becomes a facilitator to attract more foreign direct investment for regional countries through policy packages that can increase global competitiveness. However, it also depends on the investment liberalization policy in each country and the ability to create an attractive and competitive investment environment (Ismail *et al.*, 2009).

Adjusted R-squared value of 21,59 percent which means that the independent variables consisting of market size, infrastructure, trade openness, unemployment rate and 2015 MEA together affect the dependent variable by 21,59 percent while the remaining 78,41 percent influenced by other variables not examined, among others: quality of labor, industrialization, research

and development expenditure and political risk risiko (Q. Sun & Tong, 2002). In addition, there are also twelve easy doing business indicators issued by the World Bank which are considered by investors in investing (Malpass, 2020).

The classical assumption test used in linear regression with the General Least Square (GLS) approach includes: normality test, multicollinearity, heteroscedasticity and autocorrelation. The classical assumption test required for the random effect model includes normality and heteroscedasticity (Gujarati & Porter, 2013, p. 594). However, to determine the level of reliability of the estimation model in this study, all classical assumption tests will be carried out.

#### Multicollinearity

The multicollinearity test was conducted to test whether the regression model found a correlation between the independent variables (independent). A good regression model ideally has no correlation between the independent variables. The full multicollinearity test results are informed in Table 2 below.

Table 2. Multicollinearity Test Results

	Correlation					
	FDI	log_market size	log_infrastructure	trade	Unemployment	MEA
FDI	1,0000	0,3083	0,5559	-0,1190	0,4178	0,0177
log_market size	0,3083	1,0000	0,1454	-0,1592	0,3232	0,0794
log_infrastructure	0,5559	0,1454	1,0000	-0,1447	0,4269	0,0643
trade	-0,1190	-0,1592	-0,1447	1,0000	0,0285	-0,0529
unemployment	0,4178	0,3232	0,4269	0,0285	1,0000	0,0172
MEA	0,0177	0,0794	0,0643	-0,0529	0,0172	1,0000

Source: *output e-views 9*

Based on the results of the multicollinearity test, information is obtained that the partial correlation value between the independent variables shows that there is no independent variable that has a correlation coefficient of more than 0,85 so it can be concluded that the data does not have multicollinearity symptoms.

#### Autocorrelation

Autocorrelation is the condition of the disturbance variable in a certain period that is correlated with the value of the variable in the previous period or the disturbance variable is not random. The autocorrelation test method in this study uses the Durbin Watson (DW) test, if the statistical DW value > table DW, it can be concluded that there is no autocorrelation. Based on the autocorrelation test, the DW value of 1,654507 is not located in the upper limit interval (4-dU) and the lower limit dU, then the regression model has symptoms of autocorrelation.

#### Normality

Normality test is done by looking at the probability value of Jarque-Bera (JB) from the results of data analysis analysis. The JB value in this study is 0,19513 or more than 5 percent alpha, so it can be concluded that the standardized residuals spread normally.

#### Heteroscedasticity

Heteroscedasticity test is carried out to determine whether in the regression model there is an inequality of variance from the residuals from one observation to another. Symptoms of heteroscedasticity are shown by the regression coefficients on each independent variable to the absolute value of the residual. The method used to determine heteroscedasticity in this study used the Glejser method with the results as shown in Table 3 below.

Tabel 3. Heteroscedasticity Test Results

Variable	Coefficient	t-Statistic	P-value
C	5,3737	3,3023	0,0012
log_market size	-0,4057	-2,5150	0,0129
log_infrastructure	-0,0175	-0,3862	0,6998
Trade	8,26E-13	0,1184	0,9059
Unemployment	-0,0079	-0,1874	0,8515
MEA	-0,1090	-1,2970	0,1964

Source: *output e-views*

Based on the results of the Glejser test in Table 3, information is obtained that four independent variables have a statistical error probability value (P-value) t test greater than 5% alpha so that it can be concluded that the data are not affected by heteroscedasticity symptoms. However, there is one independent variable, namely the market size variable with the GRDP per capita indicator which has a statistical error probability value (P-value) t test smaller than alpha 5% so that it is affected by heteroscedasticity symptoms.

### Simultaneous Test (F Test)

Simultaneous tests were carried out to determine the overall significance level of the independent and dependent variables with the following hypothesis:

$H_0: \beta_i = 0$ , meaning that the independent variables simultaneously have no significant effect on the dependent variable.

$H_1: \beta_i \neq 0$ , meaning that the independent variables simultaneously have a significant effect on the dependent variable.

Based on the estimation results, the probability value of the statistical error of the simultaneous test (Test F) is 0.00000 or smaller than the alpha value of 5% so that it can be concluded that  $H_0$  is rejected. This shows that the feasible model and the independent variables consisting of market size, infrastructure, unemployment rate, trade openness and the 2015 MEA together have an effect on foreign direct investment.

### Test (t test)

The t-test is used to show how far the influence of one independent variable on the dependent variable is by assuming the other independent variables are constant. In this study, the t-test of the independent variable which is suspected to have a positive relationship to the dependent variable is formulated as follows:

$H_0: \beta_i \leq 0$ , this means that the independent variables (infrastructure, market size, trade openness and 2015 MEA) individually have no significant positive effect on the Foreign Direct Investment variable

$H_1: \beta_i > 0$ , it means that the independent variables (infrastructure, market size, trade openness and MEA 2015) individually have a significant positive effect on the Foreign Direct Investment variable.

While the t-test of the independent variable which is suspected to have a negative relationship to the dependent variable is formulated as follows:

$H_0: \beta_i \geq 0$ , this means that the unemployment rate variable individually does not have a significant negative effect on the Foreign Direct Investment variable.

$H_1: \beta_i < 0$ , this means that the individual unemployment rate variable has a significant negative effect on the Foreign Direct Investment variable.

The regression results show that the market size variable coefficient is 1,2616 which identifies a unidirectional relationship between the market size variable and foreign direct investment. The result of the statistical t test on this variable is 3,7250 where with 5% alpha and 165 degree of freedom (df) the t table value is 1,6541 on the right side (right tail), so the value of t count > t table or  $H_0$  is rejected. Based on the t-test, it can be concluded that the market size variable has a positive and significant effect on the entry of foreign direct investment in Indonesia. The coefficient of the infrastructure variable is 0,3905 which identifies a unidirectional relationship between the infrastructure variable and foreign direct investment. The result of the statistical t test on this variable is 4,3268 where with 5% alpha and 165 degree of freedom (df) the t table value is 1,6541 on the right side (right tail), so the value of t count > t table or  $H_0$  is rejected. Based on the t-test, it can be concluded that the infrastructure variable has a positive and significant effect on the entry of foreign direct investment in Indonesia.

While the trade openness variable coefficient is -0.00000000000568 which identifies an inverse relationship between the trade openness variable and foreign direct investment. The result of the statistical t test on this variable is -0,0053 where with 5% alpha and 165 degree of freedom (df) the t table value is 1,6541 on the right side (right tail), so the value of t count < t table or  $H_0$  accepted. Based on the t-test, it can be concluded that the trade openness variable has no effect on the entry of foreign direct investment in Indonesia. The coefficient of the unemployment rate variable is -0,0191 which identifies an inverse relationship between the unemployment rate variable and foreign direct investment. The result of the statistical t test on this variable is -0.2955 where with 5% alpha and 165 degree of freedom (df) the t table value is -1.6541 on the left side (left tail), so the value of t count > t table or  $H_0$  is accepted. Based on the t-test, it can be concluded that the unemployment rate variable has no effect on the entry of foreign direct investment in Indonesia. The coefficient of the 2015 MEA variable is 0.1275 which identifies a directly proportional relationship between the 2015 MEA variable and foreign direct investment. The result of the statistical t test on this variable is 1.2727 where with 5% alpha and 165 degree of freedom (df) the t table value is 1.6541 on the right side (right tail), so the value of t count < t table or  $H_0$  is accepted. Based on the t-test, it can be concluded that the 2015 MEA Dummy variables have no effect on the entry of foreign direct investment in Indonesia.

### Adjusted Coefficient of Determination ( $R^2$ adjusted)

Based on the analysis of panel data regression results with the random effect estimation model, the adjusted  $R^2$  value is 0,215952. This value can be interpreted that the independent variables consisting of market size, infrastructure, unemployment rate, trade openness and the 2015 MEA are able to explain the dependent variable, namely foreign direct investment of 21,59%. While the remaining 78,41% is explained by other variables not examined in the estimation model.

### CONCLUSIONS

Based on the results of the analysis using the random effects model by including the 2015 MEA policy dummy variable, several important conclusions can be obtained, namely: The development of power generation infrastructure and market size has a positive and significant impact on the entry of foreign direct investment in Indonesia after the implementation of the 2015 MEA. Meanwhile, the variables of unemployment rate, market openness and implementation of the 2015 MEA policy have no effect on the entry of foreign direct investment into Indonesia.

The construction of power plant infrastructure using fossil fuels has a positive and significant impact on the entry of foreign direct investment in Indonesia after the implementation of the 2015 MEA. This implicitly shows that investors are interested in countries with low environmental regulations. Therefore, in the future, the Government needs to focus on increasing the utilization of electricity availability to encourage an increase in the ranking of the Global Competitiveness Index indicator which is the main consideration for investors in investing in a country.



Market size with per capita income indicators has a positive and significant impact on the entry of foreign direct investment in Indonesia after the implementation of the 2015 MEA policy. This condition shows that the motivation of investors in realizing foreign direct investment in Indonesia is the large size of the national market. The government needs to encourage the growth of domestic production centers so that the fulfillment of goods and services can be met from within the country.

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