About Conference

This conference is IRSA's main annual event that promotes the advancement of research across the country. The conference will facilitate open discussions and debates, transfer of knowledge, strategies for policy formulation,and networking among scholars and policymakers.Each year since its establishment, the IRSA annual conference has been attended by a large number of academics and policymakers from numerous Indonesian institutions.IRSA has also created a large network of academics and policymakers who are concerned with issues of regional development. This network has now reached a critical mass that can play a major role not only in the academic arena through research and publications but also contribute to the evidence-based regional development policies nationally, regionally, and locally.

ISSN: 2654-3850

The 14th IRSA International Conference. Surakarta, July 23-24th 2018

ISSN: 2654-3850

CONFERENCE PROCEEDINGS

The 14th IRSA International Conference

"Strenghtening Regional and Local Economies"

Best Western Premier Solo

July, 23-24th 2018

Hosted by:
Faculty of Economics and Business- Universitas Sebelas Maret (UNS)
collaboration with IRSA

PROCEEDING

THE 14th IRSA INTERNATIONAL CONFERENCE 2018

Strengthening Regional and Local Economies

COMPARATIVE ANALYSIS OF *BROAD MONEY* , ECONOMIC GROWTH, *EXCHANGE RATE* OF FOREIGN LOAN FOREIGN INVESTMENT IN ASEAN 5

PERIOD 2000 -2015

Wira Ganet Aribowo

Siti Aisyah Tri Rahayu

Lukman Hakim

Sebelas Maret University

ABSTRACT

The purpose of this study was to analyze the *Broad Money* Comparison , Economic Growth, *Exchange Rate on* Foreign Direct Investment in ASEAN 5 (Indonesia, Malaysia, Philippines, Singapore, and Thailand) . In addition, this study also analyzed the influence of macroeconomic factors on whether or not the influence of the *shock*.

This study uses secondary data period 2000 -2015 using Data Panel model. Variables used are macroeconomic factors (*Broad Money* , Economic Growth, *exchange rate*) effect on *Foreign Direct Investment* in ASEAN 5 (Indonesia, Malaysia, Philippines, Singapore, and Thailand) .

This research gap is to combine macroeconomic factors (*Broad Money* , Economic Growth, *exchange rate*) effect on *Foreign Direct Investment* . The results of this study indicate that macroeconomic factors have a positive influence in ASEAN countries 5 as the Country *Home Country* , as well as *Host Country* . Meanwhile, due to the impact of *FDI* has a negative influence of one of the macroeconomic factors of *exchange rate*. The policy implications of this study suggest that monetary authorities oversee the flow of direct investment by either government or private entities into *host country* countries .

Keywords: *Broad Money* Comparative Analysis , Economic Growth, *Exchange Rate* Against Foreign Direct Investment In ASEAN 5 (Indonesia, Malaysia, Philippines, Singapore, and Thailand) , Data Panel

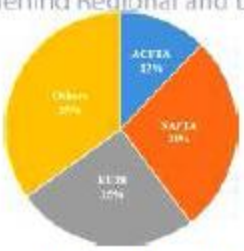
1. Introduction

Research studies on Foreign Direct Investment (FDI) that occurred in a country has been widely practiced. Research on the influence of Foreign Direct Investment (FDI) in a country has been investigated by Rodolphe Desbordes, Shang-Jin Wec (2017), George S. Chen, Yao Yao, Julien Malizard (2017), Arijit Mukherjee , Uday Bhanu Sinha (2016), Qiaomin Li, Robert Scollay, Sholeh Maani (2016) , Carmen Boghean and Mihaela State (2015), Agyenim Boateng, Shaista Nisar, Junjie Wu, Xiuping Hua (2015), Juthathip Jongwanich, Archanun Kohpaiboon), M. Fabricio Perez, Josef C. Brada Zdenek Drabek (2012), ShinjiTakagi, Zongying Shi (2011) examines comparing how Broad Money , Economic Growth, Exchange Rate affecting Foreign Direct Investment in ASEAN 5 (Indonesia, Malaysia, Philippines, Singapore, and Thailand) . But for the writer of Broad Money is also a macro instrument that also affects Foreign Direct Investment in a country and always interesting to discuss.

In the framework of the economic development of a country, requires a flow of capital as a supporter of the running of the policy. Capital flows are tailored to the characteristics of a country . Large financing in economic development for every country can not be entirely derived from the flow of domestic capital , but financing coming from foreign capital is needed to meet the shortfall in financing the economic development of a country.

Alfaro (2008) in his research concludes that the increasing flow of international capital as a result of financial openness is in line with the improvement of institutional quality. Second, capital market imperfection due to asymmetric and sovereign risk information Empirical studies Herrmann and Kleinert (2014) in countries incorporated in the European Monetary Union (EMU) indicate, market imperfection will hinder the efficiency of capital allocation. As a result, the flow of capital into poor countries and in perspective.

Figure 1. GDP of the three largest trade blocs in the economy world in 2010



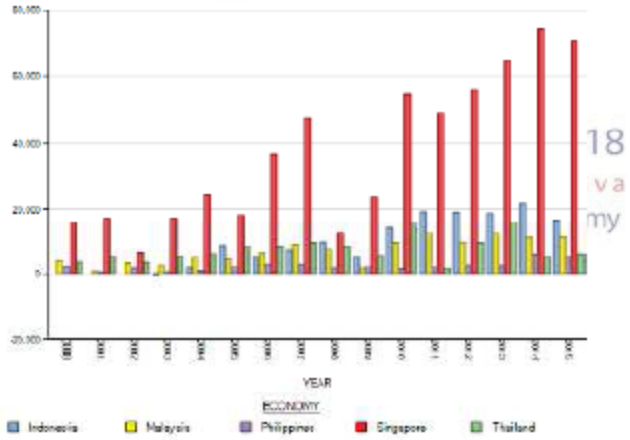
Data Source: UNCTAD.

FTA *(Free Trade Agreement)* ASEAN-China formed the third largest economic group in the world, after the EU and NAFTA (*North America Free Trade Aggreemnet*) . Have 1.85 billion people and covers an area of 14 million square kilometers. In 2010, China's total GRDP and ASEAN-68 were US $ 7.79 trillion, accounted for 99% of China's combined GDP and 10 ASEAN members, and 12% of the world economy. Between 2000 and 2010, the annual GDP growth rate was 10.8% for China and 5.5% for ASEAN-6. This rapid growth

coinciding with the growing importance of ACFTA members *(Asean-China Free Trade Area)* in the world economy. (Qiaomin Li, Robert Scollay , Sholeh Maani , 2016) .

Foreign investment coming into the country consists of foreign direct investment (FDI) and portfolio investment. Both types of investment are equally positive for the process of economic development of a country, but in its development FDI gives more significant advantages when compared with portfolio investment. *Foreign Direct Investment* (FDI) consists of *inward* and *outward* . FDI *inward* is an investment sourced from other countries to countries in the ASEAN region almost most classified as a developing country. Economic development that runs in developing countries must be lagging behind compared to developed countries.

Figure 2. Foreign direct investment flow (FDI): *inward* and *outward* on ASEAN (Indonesia, Malaysia, Philippines, Singapore, and Thailand) 2000 -2015.



Along with the rapid economic growth in ASEAN (Indonesia, Malaysia, Philippines, Singapore and Thailand) thus experiencing the growth of its FDI inflows . Foreign direct investment in ASEAN (Indonesia, Malaysia, Philippines, Singapore and Thailand) from 2000 to 201 5 , FDI grew slowly, with FDI shares in ASEAN (Indonesia, Malaysia, Philippines, Singapore and Thailand). Between these tables FDI in Singapore is highest compared to other countries in ASEAN.

The associated growth patterns conical variables of interest to be analyzed (*Broad Money* , Economic Growth, *exchange rate*) have an influence on *Foreign Direct Investment.*

analysis of panel data (*pooling data*) that is by connecting data that is *time series cross section* .

2. Literature Review

The emergence of foreign investment, especially FDI can not be separated from the thoughts that became the basis of the use of FDI in the international world. These thoughts can in essence be explained as follows:

a) The Theory of Sthepen Hymer Market Imperfections

This theory suggests that FDI is a direct effect of an imperfect market. Stephen Hymer himself is considered a pioneer in foreign investment theory, which emphasizes the role of specific corporate excellence and market imperfection in explaining the underlying motivation or objectives of the firm in making investments.

Higher returns on investment abroad do not guarantee the completeness of the explanation of capital flows, since the return on investment itself can mean that capital will be more efficient when allocated through the capital market and does not require corporate transfers. In connection with higher investment returns by acquiring and mergers with existing and potential firms in the host country , it is expected to offset the disadvantages of the company's operations abroad.

By having certain advantages such as, access to easier and relatively large sources of capital, the presence of large-scale raw material markets, and having management skills, marketing skills encourage greater returns on investment.

b) JH Dunning's *Eclectic Approach* Theory

This theory explains that the phenomenon of FDI distribution can be understood through three main frameworks namely *Ownership, Location,* and *Internalization* (OLI), as the explanation of the three components are as follows (JH Dunning, 1994, 2001; Krugman and Obstfeld, 2003; Griffin and Pustay, 2009):

- *Ownership (Ownership advantage)*

Dunning explained that the ownership factor is the main condition that should be owned by investors who want to invest in other countries. To be able to make foreign direct investment a company must have a product or a production process that is not owned by other companies.

Do not rule out the possibility that the shape of the ownership of intangible objects, but may be trademarks or quality reputation. The benefits of *ownership* or *ownership* is to give the company a very valuable competitiveness so as to reduce the unfavorable things in managing business abroad.

- *Location (Location Excellence)*

  Location has a very big role in terms of direct foreign investment. A good overseas location will provide benefits for investors to produce abroad compared to their own country. Transportation costs and barriers to trade will determine location eligibility from FDI. Good location is usually also connected with the availability of resources. For example the Caterpillar company manufactures bulldozers in Brazil to enjoy cheaper labor costs and avoid high tariff barriers on goods exported from its factories in the United States.

- *Internalization*

  In this section it is explained that FDI will be more profitable for multinational companies to conduct transactions eg input, technology, and management within a firm *(within a firms)* . This will ensure ownership of the specific advantages they already have. In other words , the company must gain greater profit by controlling its business activities abroad than by hiring an independent local company to provide such services.

c) *Macroeconomic* Theory *Approach* Kiyoshi Kojima

Each country has several different factors of production and demand internationally. Although some countries are also equipped with manpower or natural resources they can not afford efficiency because of the unavailability of *intermediate* goods , namely managerial capacity, science and technology. Kojima (1982) attempts to integrate the theory of trade with FDI and suggests that FDI is needed to make market factors more competitive and efficient at the International level. In addition, also to improve the production process in a country blessed with certain resources.

With the entry of FDI will lead to increased production and exports if transferred in the form of capital packages, managerial and technological expertise of an industry that has a comparative weakness in state investment compared to the recipient country. Thus contributing to productivity gains and comparisons of host countries . Then kojima named the condition as FDI with *trade oriented* which is specifically applied by Japan.

On the other hand, if FDI moves out of an industry that has a comparative advantage in investments to other countries, it will lead to efficiency losses by blocking the reorganization of international trade. The way is then referred to as FDI with anti-trade orientation (*anti-trade oriented*) . This type is often used by investors from America.

According Jhingan (2004) Foreign Investment (PMA) has a role in the economic growth of a country. The first foreign capital can be utilized as a tool to accelerate investment and economic growth. Both economic growth is increased should be followed

by the structure of production and trade in the country. Last foreign capital as the mobilization of funds that have an important role. These three things must be supported also by the role of the government that uses the foreign capital for the purpose of building infrastructure.

According to UNCTAD (2006) that there are 3 motivations or reasons to make direct investment abroad. The first *market - seeking* , where investors aim to penetrate from the market and is generally linked between the size of the market with per capita income, economic growth, trade access between the surrounding countries, and the tastes of the people of the country to be selected. Second *Resource - asset* , where investors are based on the amount of raw materials starting from natural resources, labor costs, labor force, skilled labor, physical infrastructure (roads, ports, and telecommunications), and technology. Finally, *efficiency - seeking* , investors have the motivation to create new competitiveness for the company because of lower production costs in doing their productivity.

3. Data and facts

The greater the flow of incoming FDI will increase public confidence to the government, and vice versa. In this study to see the development of FDI flow into ASEAN countries 5 (Indonesia, Malaysia, Philippines, Singapore, and Thailand) period 2000 - 2015. FDI *inflow* data obtained from world bank. The development of FDI in ASEAN 5 (Indonesia, Malaysia, Singapore, Thailand, Philippines) which can be explained below.

Table 3.1. Development of FDI in ASEAN 5 (Indonesia, Malaysia, Philippines, Singapore and Thailand)

	FDI, net inflows (% of GDP)				
Tahun	Indonesia	Malaysia	Philipina	Singapore	Thailand
2000	-2.7574	4.0384	1.8352	16.1898	2.6631
2001	-1.8557	0.5970	0.9966	19.0476	4.2122
2002	0.0742	3.1661	2.1744	6.6969	2.4882
2003	-0.2543	2.9209	0.5864	17.5785	3.4359
2004	0.7382	3.5079	0.6479	21.3597	3.3895
2005	2.9161	2.7344	1.6144	14.1977	4.3396
2006	1.3479	4.7272	2.2154	24.9828	4.0213
2007	1.6030	4.6869	1.9542	26.5212	3.2836
2008	1.8263	3.2808	0.7693	6.3471	2.9382
2009	0.9039	0.0567	1.2265	12.3805	2.2759
2010	2.0252	4.2686	0.5363	23.2956	4.3232

2011	2.3030	5.0744	0.8955	17.8360	0.6671
2012	2.3098	2.8291	1.2857	19.4481	3.2446
2013	2.5571	3.4943	1.3749	21.3826	3.7895
2014	2.9137	3.1412	2.0168	24.0105	1.2239
2015	2.2965	3.7001	1.9261	23.7770	2.2552

Source: World Bank Data (processed)

The table shows that the development of FDI entering the ASEAN 5 countries (Indonesia, Malaysia, Philippines, Singapore and Thailand) shows a varied trend in the period 2000 - 2015. The occurrence of crisis in some countries in ASEAN began private policy in Thailand to *leveraging* . By applying for large-scale credit to developed countries such as Japan, driven by a stable Thai economic trend, in 1996 private debt in Thailand was due to payments but could not fulfill its obligations , so its capability fell 1.2762% of growth its economy . Private companies with debts maturing in 1997 are finding it increasingly difficult to repay loans because the Baht is declining sharply. It also happens in other ASEAN countries Indonesia, Malaysia, Singapore . So that raises a negative sentiment for investors to invest capital to countries, especially ASEAN 5.

4. Methodology

Panel data is a combination of *time series* and *cross section* data . Time-consuming data usually includes one object / individual (eg: FDI, *Broad Money* , Economic Growth, *exchange rate*), but includes several periods (daily, monthly, quarterly, or yearly bias). Cross data consists of several or many objects, often called respondents (eg companies) with some types of data (eg, profit, advertising costs, retained earnings, and investment rates) in a given period of time. When we conduct an observation of the behavior of an economic unit such as a household, a company or a State, we will not only observe these units at the same time but also the behavior of the units over various time periods.

To see the impact of *Foreign Direct Investment* from *Broad Money* factors , Economic Growth, *exchange rate* . Can be written in mathematical models

$$FDI = f(BRM, GDP, EXR)$$

Panel data is a combination of *time-series* data and *cross-sectional* data , where the same cross section unit is measured at different times. Panel data analysis is used to observe the relationship between one *dependent variable* with one or more *independent variables* . The use of panel data can provide many advantages in statistics as well as in economic theory, among others (Gujarati, 2003):

1.Dat a panel is capable of explicitly accounting for individual heterogeneity by allowing individual-specific variables to allow panel data to be used to test and build more complex behavior models.

2.If the specific effect is significantly correlated with other explanatory variables, then the use of panel data will substantially reduce the *omitted-variables* problem .

3.Panel data based on repeated *cross section* observation so that panel data method is suitable for *study of dynamic adjustment* .

4.The high number of observations has implications for more informative, more varied data, the collinearity between the diminishing variables, and the increased degree of freedom (*degree of freedom*) so that more efficient estimates can be obtained. The above advantages have implications for the unnecessary testing of classical assumptions in the panel data model, according to what is in some of the literature used in this study (Maddala 1998, Pindyck and Rubinfield, 1991 and Gujarati, 2003) .

The linear regression model uses *cross section* and *time series data* .

1. Model with *cross section* data

$Yi = \alpha + \beta Xi + \varepsilon i; i = 1,2, ..., N$ (1)

N: number of *cross section* data

2. Mode with *time series* data

$Yt = \alpha + \beta Xt + \varepsilon t; t = 1,2, ..., T$ (2)

N: number of *time series* data

Considering panel data is a combination of *cross section* data and *time series* data , the model is written with:

$Yit = \alpha + \beta Xit + \varepsilon it; i = 1,2, ..., N; t = 1,2, ..., T$ (3)

where:

N = number of observations

T = amount of time

N x T = number of panel data

5. Empirical Results

In analyzing research data with panel, the researcher uses three types of model estimation, *pooled least square (PLS), fixed effect method (FEM), and Random effect method (REM)* . The results to be used in drawing conclusions in this study are the results of the best model of model testing performed. The results of the calculation of the three

models are obtained by using software eviews 9, while the estimation results that have been done are as follows:

Table 5.1. Panel data estimation results with PLS Determinant FDI ASEAN 5 Period 2000 - 2015:

Variabel Dependen : FDI

Variabel	PLS	FEM	REM
C	-13.96799	0.253577	-4.569095
	(-8.083903)	(0.062147)	(-1.438363)
BRM?	0.008503	-0.003385	0.028254
	(0.574675)	(-0.076758)	(0.929882)
GDP?	42.35326	0.431592	0.462316
	(10.48875)	(3.548550)	(3.897338)
EXR?	0.450069	8.666381	13.12162
	(2.597145)	(1.740748)	(2.806526)
Indonesia		-3.587447	-1.412372
Malaysia		-2.029957	-3.055122
Philipina		-3.869087	-2.517713
Singapura		10.94631	8.684569
Thailand		-1.459822	-1.699363
R-squared	0.697759	0.873226	0.245758
F-statistic	58.48510	70.84843	8.254473

Source: EVIEWS Data Processing Results 9

Based on the above table it is known that the estimation result using the PLS approach shows that *Broad Money* , Economic Growth, *exchange rate* have a positive and significant influence on FDI in ASEAN 5 on = 5 *exchange rate* , economic growth

$$FDI_{it} = (-13.96799) + 0.008503\ BRM_{it} - 42.35326\ GDP_{it} + 0.450069\ EXR_{it}$$

t = -8.083903 0.574675 10.48875 2.597145

$R^2 = 0.697759$ $F = 58.48510$ $d = 0.973$

Judging from the value of the coefficient of determination (*goodness of fit test*) shows that the FEM model has the value of R-squared 0.873226 better than R-squared PLS value of 0.697759 and REM of 0.245758 . It can be interpreted that the independent variable (*broad money* , economic growth, exchange rate) in the FEM model is able to explain 87.3 % variance of FDI dependent variable. Meanwhile, 12.7 % described other variables not included in this research model.

In the FEM model the value of interception in each country is, Indonesia amounted to -3.587447 , Malaysia of -2.029957 , Ph ilipina of -3.869087 , Singapore amounted to 10.94631 , Thailand amounted to -1.459822 . Thus the *Fix Effect Methode* (FEM) approach explains the differences in FDI determinant behavior of the five countries.

5.1 Model Selection Test Results

After estimating panel data with *Pool Least Square* (PLS) approach , *Fixed Effect Methode* (FEM), and *Random Effect Methode* (REM), then the next step is to choose the model to determine the best model which result will be used to make the conclusion from the analysis that has been done in this study. Adapaun test panel data model can dijelaskam as follows.

1) *Common Effect* or *Individual Effect*

To find out which model is suitable for use in this research *Common Effect* or *Individual Effect* , can be seen from *Chow Test* results *Test* or often called F statistical test. As already explained before that to conduct this test used hypothesis that is:

H_0 = Model *Common Effect (Restricted)*

H_1 = Model *Individual Effect (Unrestricted)*

Table 5.2 . Test Results Chow Test panel data Fix Effects Methode (FEM) Period 2000 - 2015 :

Effects Test	Statistic	d.f.	Prob.
Cross-section F	24.913558	(4,72)	0.0000
Cross-section Chi-square	69.505284	4	0.0000

Based on the results of the test F_{count} is 24.91 , while F_{table} with *df of numerator = 3 , df of denumerator* = 76 , at a 5% confidence level of 2.7 2 . Please note that It can be seen that $F_{count} \geq F_{table}$ means to receiveH_0, and H_1 is rejected, which means the model to be used is Pooled Least Square. In other words, the interception for all cross section units is the same.

So that panel data model is suitable for use in estimating FDI in ASEAN 5 (Indonesia, Malaysia, Philippines, Singapore, and Thailand) is a *Common Effect (Restricted)* Model , compared to the *Individual Effect* Model *(Unrestricted)* .

2) *Fixed Effect Methode* (FEM) or *Random Effect Methode* (REM)

From the results of previous model selection shows a conclusion that the *Common Effect* (REM) is a suitable model for use in conducting analysis in this study. Next is the *Hausman Test test* , to determine what model is used *Fixed Effect Methode* (FEM) or *Random Effect Methode* (REM). In this test the hypothesis used is:

H_0 = Model Random Effect Methode (REM)

H_1 = Model Fixed Effect Methode (FEM)

The Hausman Test by using EVIEWS 9 software obtains the following results:

Table 5. 3 . *Hausman Test* Result Test panel data Random Effects Methode (REM) Period 2000 - 2015 :

Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	12.724791	3	0.0053

Source: EVIEWS Data Processing Results 9

It can be seen that the result of Hausman Test above has probability value of 0.0053 less than alpha 0,05 (0.0053< 0,05), then rejects the initial hypothesis H_0 and receives correct model by using Fix Effect Model.

It also can be seen the Hausman Test results above obtains value of chi square ($\chi 2$) counts as much as 12.724791, while the value of chi square ($\chi 2$) table df = 5, at 5% confidence level is 11.07. Thus, it can be seen that chi square ($\chi 2$) counts larger than the chi square ($\chi 2$) table, thus H_0 is rejected.

This indicates that the panel data model that is suitable to estimate FDI determination in ASEAN 5 (Indonesia, Malaysia, Philippines, Singapore, and Thailand), is panel data models with Fixed Effect Methode (FEM) approach.

5.2. Approach Method of Fixed Effect Method (FEM) with General Least Square

The study that uses cross section data has a tendency of heteroscedasticity (non homogeneous data) in research data. Therefore, in this study the researcher tries to see whether heteroscedasticity will occur from the estimation that is made through the method of Fixed Effect Method (FEM) approach.

The way that can be done to see the heteroscedasticity on Fixed Effect Method (FEM) estimation is by doing FEM estimation with GLS then compare the sum of squared residuals at weight statistics at sum of squared residuals unweight statistics. If the sum of squared residuals value of weighted statistics is smaller than in sum of squared residuals unweight statistics, then heteroscedasticity occurs.

The estimation result using software EVIEWS 9 obtains:

Table 5.4 . Panel estimation results with EGLS (Cross-section weights) Determinants of ASEAN FDI Period 2000 - 2015 :

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-9.068252	1.443567	-6.281836	0
BRM?	0.012711	0.010077	1.261359	0.211
EXR?	26.87274	3.773566	7.121312	0
GDP?	0.385142	0.146361	2.631447	0.0103
Indonesia	-3.587447			
Malaysia	-2.029957			
Philipina	-3.869087			

Singapura	10.94631
Thailand	-1.459822
R-squared	0.599536
F-statistic	27.61298

Source: EVIEWS Data Processing Results 9

Based on Table 5.4 above, it is known that the estimation result using Fixed Effect Methode (FEM) GLS approach shows independent variable that is economic growth, labor, transport service have positive and significant influence at $\alpha = 5\%$. Meanwhile, the variable of broad money, exchange rate, industry have negative effect and also significant $\alpha = 5\%$. The value of R2 resulted from the estimation is relatively smaller compared to the previous approaches of 8=59 , 9 % during the observation period. This means that the estimation made by using *Fixed Effect Methode* (FEM) GLS, independent variable (*Broad Money , exchange rate* , and Economic Growth) in this research is able to explain 59,9 % variance variable depend en FDI. For the rest of 40.1 % explained other variables that are not included in this research model. Value intercept (c) of -9.068252 the FEM model of the GLS is the average value of the component errors *(error)*. While the value of *individual effect* in each country shows how big the difference of component error (*error*) of a country to the average value of the intercept of all countries. Based on the above results can be explained that the difference of the components of the state error on the average value of all countries namely Indonesia (-3.587447), Malaysia (-2.029957) , Philipines (-3.869087), Singapore (10.94631), Thailand (-1.459822), From the results of the above estimation can be written an equation of the determinant model of FDI ASEAN 5 (Indonesia, Malaysia, Thailand, Singapore, Philippines) China and Japan are:

- Indonesia

  FDI = -3.587447 + 0.012711 * BRM - 0.43878 * EXR + 0.07876 * GDP + μ_i

  (-6.281836) (1.261359) (7.121312) (2.631447)

- Malaysia

  FDI = -2.029957 + 0.012711 * BRM - 0.43878 * EXR + 0.07876 * GDP + μi

  (-6.281836) (1.261359) (7.121312) (2.631447)

- Philipina

  FDI = -3.869087 + 0.012711 * BRM - 0.43878 * EXR + 0.07876 * GDP + μ_i

  (-6.281836) (1.261359) (7.121312) (2.631447)

- Singapore

  FDI = 10.94631 + 0.012711 * BRM - 0.43878 * EXR + 0.07876 * GDP + μ_i

  (-6.281836) (1.261359) (7.121312) (2.631447)

- Thailand

  FDI = -1.459822 + 0.012711 * BRM - 0.43878 * EXR + 0.07876 * GDP + μ_i

  (-6.281836) (1.261359) (7.121312) (2.631447)

5.3.Statistical Test Results Model

The next step in this study is to test the model statistics that have been selected before. The stages of statistical test of this research model consist of:

a) The Statistical T Test (Partial Test)

Test t statistic or partial test is a test of individual variables or individually done to see whether the independent variable statistically affect the dependent variable. The self-test of the regression coefficients of each independent variable using 5% level of significance obtains the following results:

Table 5.5 Test Results t-statistics (α = 5%) Model Fixed Effects (FEM) GLS period 2000 - 2015

Variable	t-Statistic	t-tabel df (α/2,n-k) df	Prob.	Kesimpulan
C	-6.281836	±1.99006	0.0000	Signifikan
BRM?	1.261359	±1.99006	0.2110	Not Signifikan
EXR?	7.121312	±1.99006	0.0000	Signifikan
GDP?	2.631447	±1.99006	0.0103	Signifikan

Source: EVIEWS Data Processing Results 9

a. Variable BRM (*broad money*)

Based on data estimation results obtained t _ _ value 1.261359 <t ₀.₀₂₅ ± 1.99006 , has a significance value of 0.2110 which means above α = 0.05. It can be concluded that H ₀ accepted and rejects H ₐ meaning that the *broad money* variable has less statistically significant effect on FDI entering the ASEAN 5 countries (Indonesia, Malaysia, Philippines, Singapore, and Thailand) .

b. Variable EXR (*Exchange Rate* / exchange rate)

Based on estimates of data obtained , value 7.121312 > t ₀.₀₂₅ ± 1.99006 , has a significance value of 0.0000 which means under α = 0 , 05 . Hence it can be concluded that H ₀ ₐ rejected and accepts H ₐ which means the *Exchange Rate* variable has a statistically significant influence on the FDI entering the ASEAN 5 countries (Indonesia, Malaysia, Philippines, Singapore and Thailand) .

c. GDP Variables (Economic Growth)

Based on estimates of data obtained , value 2.631447 > t ₀.₀₂₅ ± 1.99006 , has a significance value of 0.0103 which means below α = 0.05. It can be concluded that H ₀ ₐ accepted and rejects H ₐ which means Economic Growth variables have statistically significant influence on FDI entering ASEAN 5 countries (Indonesia, Malaysia, Philippines, Singapore, and Thailand) .

b) Test F statistics (test together)

Stage F test is a test that aims to determine the magnitude of the effect of independent variables on the regression coefficient of independent variables using 5% *significant level of* obtained as follows:

Table 5.6 F-statistical test results (α = 5%) Model Fixed Effects (FEM) GLS period 2000 - 2015

Dependent Variable: FDI

Independent Variable	F-statistic	t-table df (α, k-1, nk) df (5, 4 , 76)	Conclusion
BRM, GDP, EXR	27.61298	2.72	Significant

Based on the results of testing the F statistic of the model *Fixed Effect Method* (FEM) GLS on the degree of significance of 5% was obtained F ___ 27.61298> F ___ 2.7 2 . This means that the *Fixed Effect Methode* (FEM) model of GLS together with *broad money* variables , economic growth, labor, exchange rate, *industr* y, and *transport service* have a statistically significant effect on FDI entering ASEAN countries 5 ((Indonesia, Malaysia, Philippines, Singapore, and Thailand) .

c) Test R ² (Coefficient of Determination)

The purpose of the Coefficient of Determination Test (R ²) is to know how far the ability of the model in explaining the variance of the dependent variable (dependent). The magnitude of R ² shows the effect described by the dependent variable.

Based on the results of data processing using Fixed Effect Model approach (FEM) GLS obtained R ² value of 0.873226 or about 87.3 %. This means that 87.3 % of FDI variables can be explained by *Broad Money* , *exchange rate* , and Economic Growth variables , while the remaining 12.7 % are explained by variables outside the model.

In general, this research is able to answer the initial hypothesis of previous research that the determinant variable of FDI which is categorized into macroeconomic and state characteristics are equally well in explaining the determinant of FDI inflow specially, in ASEAN 5, China and Japan. Furthermore, there will be further discussion to see the consistency of empirical findings with theories and previous researches, those are:

a) Broad Money Influence on FDI

Based on the model equation with Fixed Effect Methode (FEM) approach of GLS, it shows that the broad money variable has positive and statistically significant influence on α = 5% towards FDI flow that enters ASEAN 5 countries, China and Japan. The regression coefficient value of the broad money variable is 0.00108. It can be interpreted that if the change in broad money in ASEAN 5, China and Japan is 1% then it will cause the change of FDI flow into ASEAN 5, China and Japan of 0.00108 with the same relationship direction (unidirectional) and other variables are assumed to be *ceteris paribus*.

The results are consistent with the findings of Rodolphe Desbordes and Shang-Jin Wei (2017) which indicate that the source and development of direct-country financial objectives increase access to external finance and indirectly support economic activity.

Other result from a research by Agyenim Boateng, Shaista Nisar, Junjie Wu, Xiuping Hua (2015) suggests that the rapid increase of capital inflow into a country may result in an appreciation of the currency (real), especially when capital flow takes the form of an investment portfolio. Encouraging capital outflow all can help improve the pressure of currency appreciation. However, a major concern should be capital outflow of a country, spurring countries to accumulate excessive savings without structural adjustment in economic fundamentals. Thus, encouraging and liberalizing capital outflows should be implemented, together with rearranged austerity issues, in some Asian countries, especially the People's Republic of China, as well as promoting efficient use savings to improve the quantity and quality of investments in those countries.

b) Effect of Economic Growth on FDI

Based on the model equation with Fixed Effect Methode (FEM) approach of GLS, it shows that the economic growth variable has positive and statistically significant influence on α = 5% towards FDI flow that enters ASEAN 5 countries, China and Japan. The regression coefficient value of the economic growth variable is 0.07876. It can be interpreted that if the change in economic growth in ASEAN 5, China and Japan is 1% then it will cause the change of FDI flow into ASEAN 5, China and Japan of 0.07876 with the same relationship direction (unidirectional) and other variables are assumed to be *ceteris paribus*.

The result is consistent with the findings of George S. Chen, Yao Yao, Julien Malizard (2017). First, the Chinese government should be selective in granting treatments and fiscal concessions to foreign investors. Secondly, the Chinese government should provide financial and nonfinancial support to companies that want to form EJVs with foreign investors. As we have shown, the promotion of EJVs produces positive information not only for partners but also for the Chinese economy globally in focusing on reorientating the export-driven economic. However, the critical pillar for the success of this venture depends on creating an conducive environment to sustainable growth.

The result is consistent with the findings of Qiaomin Li, Robert Scollay, Sholeh Maani (2016). The impact of FDI on economic growth has focused on the existence and level of technology and productivity spillovers associated with the transfer of technology by multinational corporations, reflecting an understanding of modern growth theory that increased productivity is supported by advancement technology to sustain economic growth in the long run, against the possible convergence of percapita income.

c) Effect of Exchange Rates on FDI

Based on the model equation with Fixed Effect Methode (FEM) approach of GLS, it shows that the exchange rate variable has negative and statistically significant influence on $\alpha = 5\%$ towards FDI flow that enters ASEAN 5 countries, China and Japan. The regression coefficient value of the exchange rate variable is -0.43878. It can be interpreted that if the change in exchange rate in ASEAN 5, China and Japan is 1% then it will cause the change of FDI flow into ASEAN 5, China and Japan of -0.43878 with the same relationship direction (unidirectional) and other variables are assumed to be *ceteris paribus*.

As one of Hiroyuki Nishiyama's (2017) research result, the short-term effect of nominal exchange rates changes on the theoretical and empirical intra-industrial resource biases. The finding is the depreciation of the domestic currency lowering the productivity of cut-offs and exports of firms. The depreciation effect on industry-wide productivity is uncertain in pure theoretical analysis. But empirical tests using company data from the Japanese manufacturing industry (general machinery, electrical machinery, and means of transportation) show that the host currency (yen) depreciation tends to increase the industry's productivity widening. These results have some important policy implications. First, a policy that allows the host currency to fall

in the market value of Foreign Exchange can increase the average productivity in some manufacturing industries depending on the situation. Second, such a policy can be a protector for export companies, but not always useful for FDI.

Just as Juthohip Jongwanich's research result, Archanun Kohpaiboon (2013) suggests that the rapid inflows of capital rising to a country can result in an appreciation of the currency (real), especially when capital flows take the form of an investment portfolio. Encouraging capital outflow all can help improve the pressure of currency appreciation. However, it is a major concern that capital out of the country, spurring the country to accumulate excessive savings without structural adjustment in economic fundamentals. Thus, encouraging and liberalizing capital outflows should be implemented, together with rearranged austerity issues, in some Asian countries, especially the PRC, as well as promoting efficient use savings to improve the quantity and quality of investments in those countries.

M. Fabricio Perez, Josef C. Brada, Zdenek Drabek (2012) in their research result shows that bilateral FDI flows come from economic samples, host country samples encourage non-economic motivation such as the desire to facilitate illegal actions of capital transfers and money laundering, with using a bilateral FDI flow model. We show that an average of 29% percent of total FDI is directed to countries that are money laundering centers of about 20%. The econometric results show that non-traditional FDI flow determinants, including money laundering, should be integrated into foreign investment theory.

Likewise with Shinji Takagi's research, Zongying Shi (2011), the impact of the Asian financial crisis on the volume of FDI flows does not occur statistically significant, especially when China and India are excluded from data, FDI flows in the manufacturing sector, more stable than portfolio flows. A new outcome has noticed a significant FDI negative response to the three exchange rate changes: the volume of FDI flows to Japan is smaller when the distribution is positively skewed (ie, the yen has a bias towards a relatively large volatile depreciation). This result is strong, with other standard control variables having statistically significant coefficients.

The country's home investors, that are interested in the flow of earnings and returns in future currencies, are policymakers in developing countries who want to maintain FDI inflow stable. To what extent actual FDI inflows respond to flows and expectations of exchange rate changes, and expected changes are influenced by large fl ows, sharp exchange rate fluctuations can exacerbate the volatility of FDI inflows

through multiple channels. Avoiding unreliable exchange rate behavior, in relation to it the currencies of major source countries should help prevent the movement of FDI inflows indefinitely.

The 1997 exchange rate crisis showed the depreciation trend was not proven to attract FDI into the country, as evidenced by the declining number of FDI in ASEAN 5 countries post crisis. In Indonesia, the value of FDI was recorded to be decreasing into minus until 2000. This indicates that the currency in ASEAN 5 countries was not merely profit in the eyes of investors; it happened because of systemic impact of the currency of Thailand Bath was corrected instead.

The currency crisis had an unstable social and political impact. Therefore, it was concluded that the depreciation of currency in some ASEAN 5 countries did not mean that foreign investors would expand, but investors considered the social, economic and political stabilization aspect at that time which were also not conducive to invest especially in Indonesia, Thailand, Philippines and Malaysia.

In 2008, a series of impacts of the European crisis happened on banks in Europe and other countries, such as the U.S. and Japan. One of Greek's debts was owned Italy, while Italy's debt was held by France. Even the barrage continued to extend all the way to the United States. All of these were related where the U.S. also had a lot of debts to French, Japanese, English and German banks.

The crisis occurring in Europe and the United States created a dominant effect from the financial crisis that spread to other countries in the European Union. The crisis in Europe and the United States brought influence to commodity prices that tended to decline. The decline of commodity prices in the world market was mainly for raw materials. The drastic decline in commodity prices had also occurred before the global crisis of 2008. However, even in the crisis there was still a tendency to increase prices on investment commodities that were related to the nature of gold investment in the long term.

In the longer term (medium long), the global crisis is expected to have a major impact on the real sector, especially trade related to the slowdown in the world economy, especially in advanced countries. Global crisis does not have a major effect on direct trade between Indonesia and Europe, nor with the United States. But Indonesia's indirect trade route with Europe and America will be affected through China. China, which is the largest importer of Indonesian goods, is expected to reduce its imports due to declining demand for the declining nations towards Chinese goods.

6. Conclusions and recommendations

a) Conclusion

This study uses a model analysis of *Panel Data* where *Foreign Direct Investment* (FDI) affects the Macro Economic Factors In ASEAN 5 (Indonesia, Malaysia, the Philippines, Singapore, and Thailand) in the period 2000 -2015. Based on the discussion of the previous chapter , it can be drawn some conclusions as follows:

1. Increased capital inflows into a country can result in excessive appreciation of the currency (real), especially when capital flows take the form of investment portfolios.
2. The impact analysis of FDI is concentrated on wages and quality of work, and so on income inequality . The quality of work can be seen from the point of view of the worker, with a focus on the company's relatively high level of wages overseas against the wage rate in domestic firms, and from a national perspective, focusing on how work created by FDI affects overall productivity in the economy.
3. Short-term exchange rate exchange rate changes in domestic currency depreciation decreases domestic *cut-off* productivity and company exports. the effect of depreciation on productivity industry is uncertain in pure theoretical analysis. But empirical tests using company data from the Japanese manufacturing industry (general machinery, electrical machinery, and means of transportation) show that the *host currency* tends to increase industrial productivity. These results have some important policy implications. First, a policy that allows the *host currency* which fall on the market value of Foreign Exchange can increase the average productivity in some manufacturing industries depending on the situation. Secondly, such a policy could be a safeguard for export companies, but not always beneficial for domestic and FDI.
4. FDI can improve the domestic export market performance of the company. If the increase in export market income is large then overall impact on society will be positive. FDI can improve domestic export market performance of domestic companies at the expense of their market performance . If the increase in export market income is large then overall impact on society will be positive. Overall, it seems that FDI in the industry has a positive effect on the total revenue of domestic companies. Other companies in the textile industry seems to benefit from FDI, to identify which industries FDI has a positive impact on revenue from those

companies. Increases in total company earnings can be attributed to increased employment.

5. The vertical FDI growth is associated with the development of a production network, which in turn is related to the liberalization of semi-finished goods trade. The hypothesis that the ACFTA (*ASEAN-China Free Trade Agreement*) vertical fragmentation effect will occur substantially, generates a positive impact on vertical FDI. The horizontal FDI findings imply that the effect of market expansion may also contribute to explaining bilateral FDI in China and ASEAN. Horizontal FDI will increase due to the effect of market expansion, that is, the effect of reducing trade barriers in expanding the market size available to producers within the *Free Trade Agreement* , and Effects of this market enlargement in attracting MNCs (*Multinational Corporation*) looking for a market.

b) Suggestion

Based on the results of the above research, suggestions that can be given author are as follows:

1. In order to maintain sustainable FDI flow, the government and stakeholders as policy makers need to pay attention to the development of FDI itself, especially in the money market. Given these variables is an important factor that into consideration foreign investors. Government and private sectors are also expected to be selective in choosing trading partners, which are related to FDI, which takes into account the returns on foreign direct investment (FDI), because if FDI is not regulated it affects the exchange rate. Stability of exchange rate also need to be maintained volatility, because the stability of the exchange rate is an indicator of certainty of return on investment to be received by investors.
2. Government as policy maker is expected to take policy, manage and monitor FDI must pay attention to aspect of risk and prudence, especially in fiscal financing. Where the ratio of financing instruments is not greater than the domestic debt so that, able to encourage economic growth to continue to grow, given the economic growth as one of the macroeconomic variables that become important considerations of foreign investors in investing capital.
3. The government is also concerned with infrastructure, where good infrastructure is also one of the investors' attraction, especially transport service. Because a positive industrial climate is formed from a broad market and also a good distribution.

4. Labor as a specific force owned by the state also deserves more attention from the government and stakeholders involved in it. Then the need to improve the quality of labor becomes very important with the demands of the labor market that demands the provision of manpower with adequate skills. So that human resource investment in the form of skill improvement up to the level of education should be the main agenda of the current government.
5. In addition to the preparation of good human resources, the government is expected to provide protection for domestic workers, along with the inclusion of FDI labor from the country of origin as well as entry, so it takes government policy to regulate the entry of foreign workers so that the demand for domestic labor is also not diminishes, on the other hand excessive exploration may adversely affect domestic workforce, it is also related to the problem of bringing about cultural transfers from the country of origin of the investor, for example Korean culture that enters through investors in domestic companies.
6. The amount of FDI that goes into the country can also have negative impact, we can see from the private sector, where the dominant ownership of foreign investors can affect the company's policy, which can sometimes destroy the domestic industry. This is because the competition in the same sector in the global market, for example a tobacco company. Yields are sometimes unbalanced that benefit foreign investors. Another impact is the exclusion of ecosystems, social communities in the environment for example is a mining company in Irian Jaya.

REFERENCES

Agyenim Boateng, Xiuping Hua, Shaista Nisar, JunjieWu, (2015), "Examining the determinants of inward FDI: Evidence from Norway"

Akinori Tomohara, (2017). "Does immigration crowd out foreign direct investment inflows? Trade off between contemporaneous FDI-immigration substitution and ethnic network externalities."

Alfaro, Laura, S. Kalemli-Ozcan, dan V. Volosovych. (2008). Why Doesn't Capital Flow from Rich to Poor Countries? An Empirical Investigation, The Review of Economics and Statistics.Lucas,

Alfaro, Laura, S. Kalemli-Ozcan, dan V. Volosovych. (2007). Capital Flows in a Globalized World: The Role of Policies and Institutions.

Almeida, Heitor., Campello, Murillo., (2007), "Financial Constraints, Asset Tangibility, and Corporate Investment". *The Review of Financial Studies,* Vol. 20, No. 5 (Sept., 2007), pp. 1429-1460.

Ana-Maria Fuertes, Kate Phylaktis, Cheng Yan (2016) "Hot money in bank credit flows to emerging markets during the banking globalization era."

Arijit Mukherjee, Uday Bhanu Sinha, (2016) "Competition, foreign direct investment and welfare"

Aurora A.C. Teixeira, Rosa Forte, Susana Assunção (2017)"Do countries' endowments of non-renewable energy resources matter for FDI attraction? A panel data analysis of 125 countries over the period 1995–2012."

Baltagi, B. H., Egger, P., & Pfaffermayr, M. (2007). Estimating models of complex FDI: Are there third-country effects? Journal of Econometrics, 140(1), 260–281. http://dx.doi.org/10.1016/j.jeconom.2006.09.009

Bassem Kahoulia, Anis Omri (2017) "Foreign direct investment, foreign trade and environment: New evidence from simultaneous-equation system of gravity models"

Blomstro¨m, M., & Kokko, A. (2001). FDI and human capital: A research agenda. Paper for OECD technical meeting on FDI, human capital and education in developing countries.

Bong-Soo Lee, Byung S. Min (2011) "Exchange rates and FDI strategies of multinational enterprises."

Canning, David and Peter Pedroni.(2004)."Infrastructure and Long Run Economic Growth." University of Belfast.

Carmen Boghean, Mihaela State, (2015). "The relation between foreign direct investments (FDI) and labour productivity in the European Union countries."

Djaafara, Rizal A., dkk (Eds). (2012). Masyarakat Ekonomi ASEAN 2015: Proses Harmonisasi di Tengah Persaingan. Jakarta: Bank Indonesia.

Dunning, J.H, (2007), *Toward an Eclectik Theory of International Production : Some Empirical Tests,Journal of International Business Studies*, www.jstor.org

Dunning, J.H, (2001), *The Eclectic (OLI) Paradigm of International Production Past, Present and Future. International Journal of the Economics of Business*, 8(2), pp. 173-190.

Dunning, J. H, (1994), *Re-evaluating the Benefits of Foreign Direct Investment*, University of Reading : United Kingdom.

Febriana, Puspa. (2014). Pengaruh Kebijakan Makroekonomi Dan Kualitas Kelembagaan Terhadap Foreign Direct Investment Di ASEAN-6-Analisis Panel Data. Jurnal Ekonomi Pembangunan Trisakti, Vol 1, No 2, pp.159-175.

Firat Demir, (2016), "Effects of FDI Flows on Institutional Development: Does It Matter Where the Investors are from?."

George S. Chen, Yao Yao, Julien Malizard, (2017). "Does foreign direct investment crowd in or crowd out private domestic investment in China? The effect of entry model"

Goldberg, L.S., 2009. Understanding banking sector globalization. IMF Staff Pap. 56 (1),171–197.

Griffin, R.W. & Pustay, M.W. (2005). *Bisnis Internasional Perspektif Manajerial, Edisi kelima*. Jakarta: Indeks

Griffin, Ricky W. dan Michael W. Pustay. (2010). *International Business*. London: Pearson.

Guglielmo Maria Caporale, Luis A. Gil-Alana, Kefei You (2017) "Exchange rate linkages between the ASEAN currencies, the US dollar and the Chinese RMB."

Gujarati, D.N. dan Porter, D.C., (2012), Dasar-dasar Ekonometrika, Buku 1, Edisi 5, Salemba Empat, Jakarta.

Herrmann, Sabine, dan J. Kleinert. (2014). Lucas Paradox and Allocation Puzzle - Is the Euro Area Different?, Discussion Paper No. 06/2014. Frankfurt am Main: Deutsche Bundesbank.

Hiroyuki Nishiyama, (2017), "The effect of exchange rate fluctuation on intra-industry reallocationin a firm heterogeneity model with trade and foreign direct investment."

Harrison, A.E., Love, I., McMillan, M.S., (2004). Global capital flows and financing constraints. J. Dev. Econ. 75 (1), 269–301.

Harrison, A.E., McMillan, M.S., (2003). Does direct foreign investment affect domestic credit constraints? J. Int. Econ. 61 (1), 73–100.

Ivan Deseatnicov, Hiroya Akiba, (2016) "Exchangerate,political environment and FDI decision"

Jhingan, M.L. (2004). Ekonomi Pembangunan dan Perencanaan, Edisi 1 cetakan Ke - 10. Jakarta: PT Grafindo Persada.

Jhingan, (2000). Ekonomi Pembangunan dan Perencanaan, Jakarta : Rajawali Press.

Jack Joo K. Ree, Kyoungsoo Yoon, Hail Park (2015) "FX funding risks and exchange rate volatility."

John Anderson, Dylan Sutherland (2015) "Developed economy investment promotion agencies and emerging market foreign direct investment: The case of Chinese FDI in Canada."

Juthathip Jongwanich, Archanun Kohpaiboon, (2013). "Capital flows and real exchange rates in emerging Asian countries."

Kefei You, Offiong Helen Solomon (2015) "China's outward foreign direct investment and domestic investment: An industrial level analysis."

Kiyotaki, Nobuhiro dan Moore, John. (1997). Credit Cycles. The Journal of Political Economy, Vol. 105 No. 2, pp. 211-248.

Kristine Farla, Denis De Crombrugghe, Bart Verspagen (2016) "Institutions, Foreign Direct Investment, and Domestic Investment:Crowding Out or Crowding In?."

Kodoatie, R.J, (2003), Manajemen dan Rekayasa Infrastruktur. Yogyakarta: Pustaka Pelajar

Le Hoang Ba Huyen (2015) "Determinant of the factors affecting Foreign Direct Investment (FDI) flow to Thanh Hoa province in Vietnam."

Levine, King dan Ross Levine, 1993,"Finance and Growth : Schumpeter Might be Right", Quartely Journal of Economics, Vol.CVIII, Agustus : 716-737

Ling Chen, (2017) "Grounded Globalization: Foreign Capital and Local Bureaucrats in China's Economic Transformation," http://dx.doi.org/10.1016/j.worlddev.2017.05.001

Lukas Giessena, Muhammad Alif K. Sahide, (2017). "Blocking, attracting, imposing, and aligning: The utility of ASEAN forest and environmental regime policies for strong member states."

M. Fabricio Perez, Josef C. Brada Zdenek Drabek, (2012), "Illicit money flows as motives for FDI."

Mariarosaria Comunale, (2017), "Dutch disease, real effective exchange rate misalignments and their effect on GDP growth in EU."

Marie M. Stacka,*, Geetha Ravishankara, Eric Pentecost (2017)"Foreign direct investment in the eastern European countries:Determinants and performance."

Martin T. Bohl, Philip Michaelis, Pierre L. Siklos, (2016), "Austerity and recovery: Exchange rate regime choice, economic growth, and financial crises."

Mankiw, Gregory. (2003). "Teori Makroekonomi Edisi Kelima". Jakarta. Erlangga

Mankiw, Gregory. (2006). "Makroekonomi". Erlangga, Jakarta.

Meiningtyas,Dwi. (2007). Peranan Infrastruktur Bagi Pertumbuhan Ekonomi Daerah di Pulau Jawa. Universitas Indonesia.

Mengying Wang, (2017). "Does foreign direct investment affect host-country firms' financial constraints?."

Mohamed Abdouli, Sami Hammami, (2017),"Investigating the causality links between environmental quality, foreign direct investment and economic growth in MENA countries."

Nadia Doytch, Merih Uctum, (2016), "Globalization and the environmental impact of sectoral FDI."

Nahom Ghebrihiwet, (2017), "Acquisition or direct entry, technology transfer, and FDI policy liberalization."

Neringa Oboleviciute, Keith Pilbeam, (2012). "Does Foreign Direct Investment Crowd In or Crowd Out Domestic Investment? Evidence from the European Union."

Nzotta, Samuel Mbadike., Okereke, Emeka J. (2009).Financial Deepening and Economic Development Of Nigeria: An Empirical Investigation (52-66).

Okada, Keisuke. (2013). The Interaction Effects of Financial Openness and Institutions on International Capital Flows, Journal of Macroeconomics.

Oliver Morrissey, Manop Udomkerdmongkol (2016) "Response to 'Institutions, Foreign Direct Investment, and Domestic Investment: Crowding Out or Crowding In?'" http://dx.doi.org/10.1016/j.worlddev.2016.08.001

Onwumere, J.U.J, et al. (2012). The Impact of Financial Deepening on Economic Growth: Evidence From Nigeria (64-71)

Pogoda, Barbara. (2012). "The Lucas Paradox. Master's thesis, Universitas Bielefeld."

Qiaomin Li, Robert Scollay, Sholeh Maani, (2016). "Effects on China and ASEAN of the ASEAN-China FTA: The FDI perspective"

Rahardja, Prathama dan Mandala Manurung. 2004. *Teori Ekonomi Makro: Suatu Pengantar*. Jakarta: Lembaga Penerbit Fakultas Ekonomi Universitas Indonesia.

Robert E. (1990). "Why Doesn't Capital Flow from Rich to Poor Countries? The American Economic Review."

Robin Boudias, (2015), "Capital inflows, exchange rate regimes and credit dynamics inemerging markete conomies."

Rodolphe Desbordes, Shang-Jin Wei, (2017) "The effects of financial development on foreign direct investment"

Salvatore, D. (2007). International Economics. Prentice-Hall.

Salvatore, D. (1997). Ekonomi Internasional Edisi Kelima. Jakarta. Airlangga.

Salvatore Dell'Erba, Dennis Reinhardt (2015) "FDI, debt and capital controls"

Sèna Kimm Gnangnon, (2017), "Effect of multilateral trade liberalization on foreign direct investment outflows amid structural economic vulnerability in developing countries."

Shandre M. Thangavelu, Dionisius Narjoko (2014), "Human capital, FTAs and foreign direct investment flows into ASEAN"

Shaosheng Jin, Haiyue Guo, Michael S. Delgado, H. Holly Wang (2017) "Benefit or damage? The productivity effects of FDI in the Chinese food Industry"

Shang-ao Li, Shan Pan, Shawn Chi (2016), "North–South FDI and directed technical change."

Shinji Takagi, Zongying Shi, (2011), "Exchange rate movements and foreign direct investment (FDI): Japanese investment in Asia,1987–2008"

Siripha, Junlakarn, Weerin Wangjiraniran. (2016) "Assessing potential of power generation investment in ASEAN countries."

Sizhong Sun, Sajid Anwar, (2017), "Foreign direct investment and the performance of indigenous firms in China's textile industry "Foreign direct investment and the performance of indigenous firms in China's textile industry."

Soo Khoon Goh, Chung Yan Sam, Robert McNown, (2017)"Re-examining foreign direct investment, exports, and economic growth in asian economies using a bootstrap ARDL test for cointegration."

Teng Zhang, Puman Ouyang, (2017) "Is RMB appreciation a nightmare for the Chinese firms? An analysis on firm profitability and exchange rate."

Todaro, Michael. (2000)." Ekonomi Pembangunan Edisi ke 6" Erlangga, Jakarta

Todaro, Michael P. dan Stephen C. Smith. (2004). Pembangunan Ekonomi di Dunia Ketiga, Edisi kedelapan. Erlangga: Jakarta.

UNCTAD, (2017). World Investment Report, New York: United Nations Conference on Trade and Investment. http://unctad.org/en/PublicationsLibrary/wir2017_en.pdf

UNCTAD, (2006), World Investment Report, New York: United Nations Conference on Trade and Investment.

UNCTAD (2004), Prospects for FDI flows, TNC Strategies and Promotion Policies: 2004-2007, Laporan Penelitian.

Vinish Kathuria, Pradeep Ray, Rekha Bhangaonkar (2015) "FDI (foreign direct investment) in wind energy sector in India: Testingthe effectiveness of state policies using panel data."

Warjiyo, Perry dan Solikin. 2003. *Kebijakan Moneter di Indonesia*. Jakarta: Pusat Pendidikan dan Studi Kebanksentralan (PPSK) Bank Indonesia

Wen-Hsien Liu, Pan-Long Tsai, Ching-Lung Tsay, (2015), "Domestic impacts of outward FDI in Taiwan: Evidence from panel data of manufacturing firms."

World Bank, tanpa tahun. "Attracting foreign direct investment into infrastructure : why is it so difficult? ". http://econ.worldbank.org.

Yingyi Tsai, Arijit Mukherjee, Jong-Rong Chen (2016) "Host market competition, foreign FDI and domestic welfare."

COMPARATIVE ANALYSIS OF BROAD MONEY , ECONOMIC GROWTH, EXCHANGE RATE OF FOREIGN LOAN FOREIGN INVESTMENT IN ASEAN 5 PERIOD 2000 -2015

by Leon Akbar

Submission date: 25-Sep-2019 09:01PM (UTC+0700)
Submission ID: 1179783345
File name: n_ASEAN_5_Period_2000_-_2015_Wira,_Siti_AisyahTR,_Lukman_H..pdf (475.16K)
Word count: 9293
Character count: 50634

COMPARATIVE ANALYSIS OF *BROAD MONEY* , ECONOMIC GROWTH, *EXCHANGE RATE* OF FOREIGN LOAN FOREIGN INVESTMENT IN ASEAN 5

PERIOD 2000 -2015

Wira Ganet Aribowo

Siti Aisyah Tri Rahayu

Lukman Hakim

Sebelas Maret University

ABSTRACT

The purpose of this study was to analyze the *Broad Money* Comparison , Economic Growth, *Exchange Rate on* Foreign Direct Investment in ASEAN 5 (Indonesia, Malaysia, Philippines, Singapore, and Thailand) . In addition, this study also analyzed the influence of macroeconomic factors on whether or not the influence of the *shock* .

This study uses secondary data period 2000 -2015 using Data Panel model. Variables used are macroeconomic factors (*Broad Money* , Economic Growth, *exchange rate*) effect on *Foreign Direct Investment* in ASEAN 5 (Indonesia, Malaysia, Philippines, Singapore, and Thailand) .

This research gap is to combine macroeconomic factors (*Broad Money* , Economic Growth, *exchange rate*) effect on *Foreign Direct Investment* . The results of this study indicate that macroeconomic factors have a positive influence in ASEAN countries 5 as the Country *Home Country ,* as well as *Host Country* . Meanwhile, due to the impact of *FDI* has a negative influence of one of the macroeconomic factors of *exchange rate.* The policy implications of this study suggest that monetary authorities oversee the flow of direct investment by either government or private entities into *host country* countries .

Keywords: *Broad Money* Comparative Analysis , Economic Growth, *Exchange Rate* Against Foreign Direct Investment In ASEAN 5 (Indonesia, Malaysia, Philippines, Singapore, and Thailand) , Data Panel

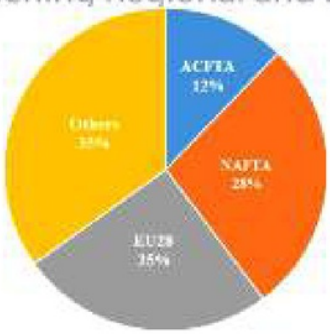
1. Introduction

Research studies on Foreign Direct Investment (FDI) that occurred in a country has been widely practiced. Research on the influence of Foreign Direct Investment (FDI) in a country has been investigated by Rodolphe Desbordes, Shang-Jin Wec (2017), George S. Chen, Yao Yao, Julien Malizard (2017), Arijit Mukherjee , Uday Bhanu Sinha (2016), Qiaomin Li, Robert Scollay, Sholeh Maani (2016) , Carmen Boghean and Mihaela State (2015), Agyenim Boateng, Shaista Nisar, Junjie Wu, Xiuping Hua (2015), Juthathip Jongwanich, Archanun Kohpaiboon), M. Fabricio Perez, Josef C. Brada Zdenek Drabek (2012), ShinjiTakagi, Zongying Shi (2011) examines comparing how Broad Money , Economic Growth, Exchange Rate affecting Foreign Direct Investment in ASEAN 5 (Indonesia, Malaysia, Philippines, Singapore, and Thailand) . But for the writer of Broad Money is also a macro instrument that also affects Foreign Direct Investment in a country and always interesting to discuss.

In the framework of the economic development of a country, requires a flow of capital as a supporter of the running of the policy. Capital flows are tailored to the characteristics of a country . Large financing in economic development for every country can not be entirely derived from the flow of domestic capital , but financing coming from foreign capital is needed to meet the shortfall in financing the economic development of a country.

Alfaro (2008) in his research concludes that the increasing flow of international capital as a result of financial openness is in line with the improvement of institutional quality. Second, capital market imperfection due to asymmetric and sovereign risk information Empirical studies Herrmann and Kleinert (2014) in countries incorporated in the European Monetary Union (EMU) indicate, market imperfection will hinder the efficiency of capital allocation. As a result, the flow of capital into poor countries and in perspective.

Figure 1. GDP of the three largest trade blocs in the economy world in 2010



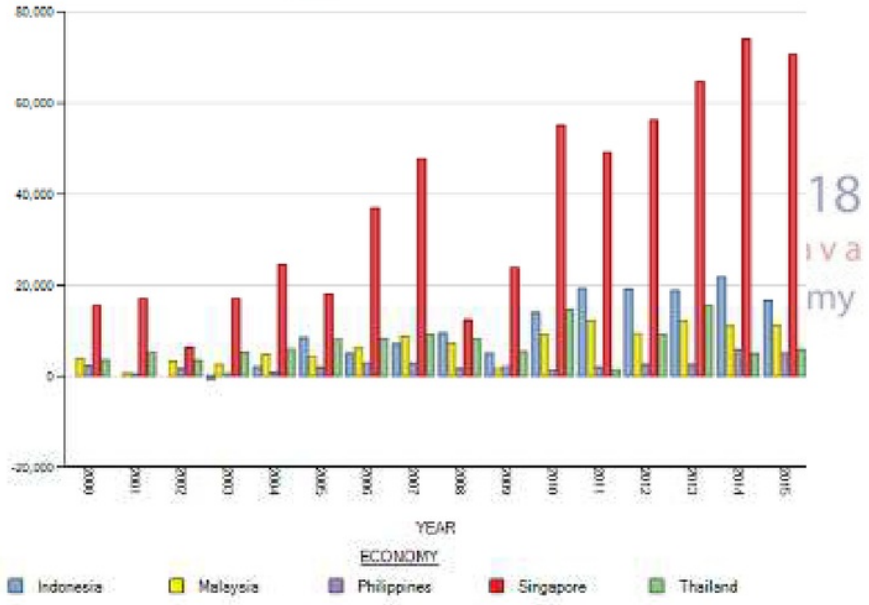
Data Source: UNCTAD.

FTA *(Free Trade Agreement)* ASEAN-China formed the third largest economic group in the world, after the EU and NAFTA (*North America Free Trade Aggreemnet*) . Have 1.85 billion people and covers an area of 14 million square kilometers. In 2010, China's total GRDP and ASEAN-68 were US $ 7.79 trillion, accounted for 99% of China's combined GDP and 10 ASEAN members, and 12% of the world economy. Between 2000 and 2010, the annual GDP growth rate was 10.8% for China and 5.5% for ASEAN-6. This rapid growth

coinciding with the growing importance of ACFTA members *(Asean-China Free Trade Area)* in the world economy. (Qiaomin Li, Robert Scollay , Sholeh Maani , 2016) .

Foreign investment coming into the country consists of foreign direct investment (FDI) and portfolio investment. Both types of investment are equally positive for the process of economic development of a country, but in its development FDI gives more significant advantages when compared with portfolio investment. *Foreign Direct Investment* (FDI) consists of *inward* and *outward* . FDI *inward* is an investment sourced from other countries to countries in the ASEAN region almost most classified as a developing country. Economic development that runs in developing countries must be lagging behind compared to developed countries.

Figure 2. Foreign direct investment flow (FDI): *inward* and *outward* on ASEAN (Indonesia, Malaysia, Philippines, Singapore, and Thailand) 2000 -2015.



Along with the rapid economic growth in ASEAN (Indonesia, Malaysia, Philippines, Singapore and Thailand) thus experiencing the growth of its FDI inflows . Foreign direct investment in ASEAN (Indonesia, Malaysia, Philippines, Singapore and Thailand) from 2000 to 201 5 , FDI grew slowly, with FDI shares in ASEAN (Indonesia, Malaysia, Philippines, Singapore and Thailand). Between these tables FDI in Singapore is highest compared to other countries in ASEAN.

The associated growth patterns conical variables of interest to be analyzed (*Broad Money* , Economic Growth, *exchange rate*) have an influence on *Foreign Direct Investment.*

analysis of panel data (*pooling data*) that is by connecting data that is *time series cross section* .

2. Literature Review

The emergence of foreign investment, especially FDI can not be separated from the thoughts that became the basis of the use of FDI in the international world. These thoughts can in essence be explained as follows:

a) The Theory of Sthepen Hymer Market Imperfections

This theory suggests that FDI is a direct effect of an imperfect market. Stephen Hymer himself is considered a pioneer in foreign investment theory, which emphasizes the role of specific corporate excellence and market imperfection in explaining the underlying motivation or objectives of the firm in making investments.

Higher returns on investment abroad do not guarantee the completeness of the explanation of capital flows, since the return on investment itself can mean that capital will be more efficient when allocated through the capital market and does not require corporate transfers. In connection with higher investment returns by acquiring and mergers with existing and potential firms in the host country , it is expected to offset the disadvantages of the company's operations abroad.

By having certain advantages such as, access to easier and relatively large sources of capital, the presence of large-scale raw material markets, and having management skills, marketing skills encourage greater returns on investment.

b) JH Dunning's *Eclectic Approach* Theory

This theory explains that the phenomenon of FDI distribution can be understood through three main frameworks namely *Ownership, Location,* and *Internalization* (OLI), as the explanation of the three components are as follows (JH Dunning, 1994, 2001; Krugman and Obstfeld, 2003; Griffin and Pustay, 2009):

- *Ownership (Ownership advantage)*

  Dunning explained that the ownership factor is the main condition that should be owned by investors who want to invest in other countries. To be able to make foreign direct investment a company must have a product or a production process that is not owned by other companies.

  Do not rule out the possibility that the shape of the ownership of intangible objects, but may be trademarks or quality reputation. The benefits of *ownership* or *ownership* is to give the company a very valuable competitiveness so as to reduce the unfavorable things in managing business abroad.

- *Location (Location Excellence)*

  Location has a very big role in terms of direct foreign investment. A good overseas location will provide benefits for investors to produce abroad compared to their own country. Transportation costs and barriers to trade will determine location eligibility from FDI. Good location is usually also connected with the availability of resources. For example the Caterpillar company manufactures bulldozers in Brazil to enjoy cheaper labor costs and avoid high tariff barriers on goods exported from its factories in the United States.

- *Internalization*

  In this section it is explained that FDI will be more profitable for multinational companies to conduct transactions eg input, technology, and management within a firm *(within a firms)* . This will ensure ownership of the specific advantages they already have. In other words , the company must gain greater profit by controlling its business activities abroad than by hiring an independent local company to provide such services.

c) *Macroeconomic* Theory *Approach* Kiyoshi Kojima

Each country has several different factors of production and demand internationally. Although some countries are also equipped with manpower or natural resources they can not afford efficiency because of the unavailability of *intermediate* goods , namely managerial capacity, science and technology. Kojima (1982) attempts to integrate the theory of trade with FDI and suggests that FDI is needed to make market factors more competitive and efficient at the International level. In addition, also to improve the production process in a country blessed with certain resources.

With the entry of FDI will lead to increased production and exports if transferred in the form of capital packages, managerial and technological expertise of an industry that has a comparative weakness in state investment compared to the recipient country. Thus contributing to productivity gains and comparisons of host countries . Then kojima named the condition as FDI with *trade oriented* which is specifically applied by Japan.

On the other hand, if FDI moves out of an industry that has a comparative advantage in investments to other countries, it will lead to efficiency losses by blocking the reorganization of international trade. The way is then referred to as FDI with anti-trade orientation (*anti-trade oriented*) . This type is often used by investors from America.

According Jhingan (2004) Foreign Investment (PMA) has a role in the economic growth of a country. The first foreign capital can be utilized as a tool to accelerate investment and economic growth. Both economic growth is increased should be followed

by the structure of production and trade in the country. Last foreign capital as the mobilization of funds that have an important role. These three things must be supported also by the role of the government that uses the foreign capital for the purpose of building infrastructure.

According to UNCTAD (2006) that there are 3 motivations or reasons to make direct investment abroad. The first *market - seeking* , where investors aim to penetrate from the market and is generally linked between the size of the market with per capita income, economic growth, trade access between the surrounding countries, and the tastes of the people of the country to be selected. Second *Resource - asset* , where investors are based on the amount of raw materials starting from natural resources, labor costs, labor force, skilled labor, physical infrastructure (roads, ports, and telecommunications), and technology. Finally, *efficiency - seeking* , investors have the motivation to create new competitiveness for the company because of lower production costs in doing their productivity.

3. Data and facts

The greater the flow of incoming FDI will increase public confidence to the government, and vice versa. In this study to see the development of FDI flow into ASEAN countries 5 (Indonesia, Malaysia, Philippines, Singapore, and Thailand) period 2000 - 2015. FDI *inflow* data obtained from world bank. The development of FDI in ASEAN 5 (Indonesia, Malaysia, Singapore, Thailand, Philippines) which can be explained below.

Table 3.1. Development of FDI in ASEAN 5 (Indonesia, Malaysia, Philippines, Singapore and Thailand)

	FDI, net inflows (% of GDP)				
Tahun	**Indonesia**	**Malaysia**	**Philipina**	**Singapore**	**Thailand**
2000	-2.7574	4.0384	1.8352	16.1898	2.6631
2001	-1.8557	0.5970	0.9966	19.0476	4.2122
2002	0.0742	3.1661	2.1744	6.6969	2.4882
2003	-0.2543	2.9209	0.5864	17.5785	3.4359
2004	0.7382	3.5079	0.6479	21.3597	3.3895
2005	2.9161	2.7344	1.6144	14.1977	4.3396
2006	1.3479	4.7272	2.2154	24.9828	4.0213
2007	1.6030	4.6869	1.9542	26.5212	3.2836
2008	1.8263	3.2808	0.7693	6.3471	2.9382
2009	0.9039	0.0567	1.2265	12.3805	2.2759
2010	2.0252	4.2686	0.5363	23.2956	4.3232

2011	2.3030	5.0744	0.8955	17.8360	0.6671
2012	2.3098	2.8291	1.2857	19.4481	3.2446
2013	2.5571	3.4943	1.3749	21.3826	3.7895
2014	2.9137	3.1412	2.0168	24.0105	1.2239
2015	2.2965	3.7001	1.9261	23.7770	2.2552

Source: World Bank Data (processed)

The table shows that the development of FDI entering the ASEAN 5 countries (Indonesia, Malaysia, Philippines, Singapore and Thailand) shows a varied trend in the period 2000 - 2015. The occurrence of crisis in some countries in ASEAN began private policy in Thailand to *leveraging* . By applying for large-scale credit to developed countries such as Japan, driven by a stable Thai economic trend, in 1996 private debt in Thailand was due to payments but could not fulfill its obligations , so its capability fell 1.2762% of growth its economy . Private companies with debts maturing in 1997 are finding it increasingly difficult to repay loans because the Baht is declining sharply. It also happens in other ASEAN countries Indonesia, Malaysia, Singapore . So that raises a negative sentiment for investors to invest capital to countries, especially ASEAN 5.

4. Methodology

Panel data is a combination of *time series* and *cross section* data . Time-consuming data usually includes one object / individual (eg: FDI, *Broad Money* , Economic Growth, *exchange rate*), but includes several periods (daily, monthly, quarterly, or yearly bias). Cross data consists of several or many objects, often called respondents (eg companies) with some types of data (eg, profit, advertising costs, retained earnings, and investment rates) in a given period of time. When we conduct an observation of the behavior of an economic unit such as a household, a company or a State, we will not only observe these units at the same time but also the behavior of the units over various time periods.

To see the impact of *Foreign Direct Investment* from *Broad Money* factors , Economic Growth, *exchange rate* . Can be written in mathematical models

$$FDI = f(BRM, GDP, EXR)$$

Panel data is a combination of *time-series* data and *cross-sectional* data , where the same cross section unit is measured at different times. Panel data analysis is used to observe the relationship between one *dependent variable* with one or more *independent variables* . The use of panel data can provide many advantages in statistics as well as in economic theory, among others (Gujarati, 2003):

1.Dat a panel is capable of explicitly accounting for individual heterogeneity by allowing individual-specific variables to allow panel data to be used to test and build more complex behavior models.

2.If the specific effect is significantly correlated with other explanatory variables, then the use of panel data will substantially reduce the *omitted-variables* problem .

3.Panel data based on repeated *cross section* observation so that panel data method is suitable for *study of dynamic adjustment* .

4.The high number of observations has implications for more informative, more varied data, the collinearity between the diminishing variables, and the increased degree of freedom (*degree of freedom*) so that more efficient estimates can be obtained. The above advantages have implications for the unnecessary testing of classical assumptions in the panel data model, according to what is in some of the literature used in this study (Maddala 1998, Pindyck and Rubinfield, 1991 and Gujarati, 2003) .

The linear regression model uses *cross section* and *time series data* .

1. Model with *cross section* data

$Yi = \alpha + \beta Xi + \varepsilon i;\ i = 1,2, ..., N$ (1)

N: number of *cross section* data

2. Mode with *time series* data

$Yt = \alpha + \beta Xt + \varepsilon t;\ t = 1,2, ..., T$ (2)

N: number of *time series* data

Considering panel data is a combination of *cross section* data and *time series* data , the model is written with:

$Yit = \alpha + \beta Xit + \varepsilon it;\ i = 1,2, ..., N;\ t = 1,2, ..., T$ (3)

where:

N = number of observations

T = amount of time

N x T = number of panel data

5. Empirical Results

In analyzing research data with panel, the researcher uses three types of model estimation, *pooled least square (PLS), fixed effect method (FEM), and Random effect method (REM)* . The results to be used in drawing conclusions in this study are the results of the best model of model testing performed. The results of the calculation of the three

models are obtained by using software eviews 9, while the estimation results that have been done are as follows:

Table 5.1. Panel data estimation results with PLS Determinant FDI ASEAN 5 Period 2000 - 2015:

Variabel Dependen : FDI

Variabel	PLS	FEM	REM
C	-13.96799	0.253577	-4.569095
	(-8.083903)	(0.062147)	(-1.438363)
BRM?	0.008503	-0.003385	0.028254
	(0.574675)	(-0.076758)	(0.929882)
GDP?	42.35326	0.431592	0.462316
	(10.48875)	(3.548550)	(3.897338)
EXR?	0.450069	8.666381	13.12162
	(2.597145)	(1.740748)	(2.806526)
Indonesia		-3.587447	-1.412372
Malaysia		-2.029957	-3.055122
Philipina		-3.869087	-2.517713
Singapura		10.94631	8.684569
Thailand		-1.459822	-1.699363
R-squared	0.697759	0.873226	0.245758
F-statistic	58.48510	70.84843	8.254473

Source: EVIEWS Data Processing Results 9

Based on the above table it is known that the estimation result using the PLS approach shows that *Broad Money* , Economic Growth, *exchange rat*e have a positive and significant influence on FDI in ASEAN 5 on = 5 *exchange rate* , economic growth

$$FDI_{it} = (-13.96799) + 0.008503\ BRM_{it} - 42.35326\ GDP_{it} + 0.450069\ EXR_{it}$$

t = -8.083903 0.574675 10.48875 2.597145

$R^2 = 0.697759$ $F = 58.48510$ $d = 0.973$

Judging from the value of the coefficient of determination (*goodness of fit test*) shows that the FEM model has the value of R-squared 0.873226 better than R-squared PLS value of 0.697759 and REM of 0.245758 . It can be interpreted that the independent variable (*broad money* , economic growth, exchange rate) in the FEM model is able to explain 87.3 % variance of FDI dependent variable. Meanwhile, 12.7 % described other variables not included in this research model.

In the FEM model the value of interception in each country is, Indonesia amounted to -3.587447 , Malaysia of -2.029957 , Ph ilipina of -3.869087 , Singapore amounted to 10.94631 , Thailand amounted to -1.459822 . Thus the *Fix Effect Methode* (FEM) approach explains the differences in FDI determinant behavior of the five countries.

5.1 Model Selection Test Results

After estimating panel data with *Pool Least Square* (PLS) approach , *Fixed Effect Methode* (FEM), and *Random Effect Methode* (REM), then the next step is to choose the model to determine the best model which result will be used to make the conclusion from the analysis that has been done in this study. Adapaun test panel data model can dijelaskam as follows.

1) *Common Effect* or *Individual Effect*

To find out which model is suitable for use in this research *Common Effect* or *Individual Effect* , can be seen from *Chow Test* results *Test* or often called F statistical test. As already explained before that to conduct this test used hypothesis that is:

H_0 = Model *Common Effect (Restricted)*

H_1 = Model *Individual Effect (Unrestricted)*

Table 5.2 . Test Results *Chow Test* panel data Fix Effects Methode (FEM) Period 2000 - 2015 :

Effects Test	Statistic	d.f.	Prob.
Cross-section F	24.913558	(4,72)	0.0000
Cross-section Chi-square	69.505284	4	0.0000

Based on the results of the test F_{count} is 24.91 , while F_{table} with *df of numerator = 3* , *df of denumerator* = 76 , at a 5% confidence level of 2.7 2 . Please note that It can be seen that $F_{count} \geq F_{table}$ means to receiveH_0, and H_1 is rejected, which means the model to be used is Pooled Least Square. In other words, the interception for all cross section units is the same.

So that panel data model is suitable for use in estimating FDI in ASEAN 5 (Indonesia, Malaysia, Philippines, Singapore, and Thailand) is a *Common Effect (Restricted)* Model , compared to the *Individual Effect* Model *(Unrestricted)* .

2) *Fixed Effect Methode* (FEM) or *Random Effect Methode* (REM)

From the results of previous model selection shows a conclusion that the *Common Effect* (REM) is a suitable model for use in conducting analysis in this study. Next is the *Hausman Test test* , to determine what model is used *Fixed Effect Methode* (FEM) or *Random Effect Methode* (REM). In this test the hypothesis used is:

H_0 = Model Random Effect Methode (REM)

H_1 = Model Fixed Effect Methode (FEM)

The Hausman Test by using EVIEWS 9 software obtains the following results:

Table 5. 3 . *Hausman Test* Result Test panel data Random Effects Methode (REM) Period 2000 - 2015 :

Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	12.724791	3	0.0053

Source: EVIEWS Data Processing Results 9

It can be seen that the result of Hausman Test above has probability value of 0.0053 less than alpha 0,05 (0.0053< 0,05), then rejects the initial hypothesis H_0 and receives correct model by using Fix Effect Model.

It also can be seen the Hausman Test results above obtains value of chi square ($\chi 2$) counts as much as 12.724791, while the value of chi square ($\chi 2$) table df = 5, at 5% confidence level is 11.07. Thus, it can be seen that chi square ($\chi 2$) counts larger than the chi square ($\chi 2$) table, thus H_0 is rejected.

This indicates that the panel data model that is suitable to estimate FDI determination in ASEAN 5 (Indonesia, Malaysia, Philippines, Singapore, and Thailand), is panel data models with Fixed Effect Methode (FEM) approach.

5.2. Approach Method of Fixed Effect Method (FEM) with General Least Square

The study that uses cross section data has a tendency of heteroscedasticity (non homogeneous data) in research data. Therefore, in this study the researcher tries to see whether heteroscedasticity will occur from the estimation that is made through the method of Fixed Effect Method (FEM) approach.

The way that can be done to see the heteroscedasticity on Fixed Effect Method (FEM) estimation is by doing FEM estimation with GLS then compare the sum of squared residuals at weight statistics at sum of squared residuals unweight statistics. If the sum of squared residuals value of weighted statistics is smaller than in sum of squared residuals unweight statistics, then heteroscedasticity occurs.

The estimation result using software EVIEWS 9 obtains:

Table 5.4 . Panel estimation results with EGLS (Cross-section weights) Determinants of ASEAN FDI Period 2000 - 2015 :

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-9.068252	1.443567	-6.281836	0
BRM?	0.012711	0.010077	1.261359	0.211
EXR?	26.87274	3.773566	7.121312	0
GDP?	0.385142	0.146361	2.631447	0.0103
Indonesia	-3.587447			
Malaysia	-2.029957			
Philipina	-3.869087			

Singapura	10.94631
Thailand	-1.459822
R-squared	0.599536
F-statistic	27.61298

Source: EVIEWS Data Processing Results 9

Based on Table 5.4 above, it is known that the estimation result using Fixed Effect Methode (FEM) GLS approach shows independent variable that is economic growth, labor, transport service have positive and significant influence at α = 5%. Meanwhile, the variable of broad money, exchange rate, industry have negative effect and also significant α = 5%. The value of R2 resulted from the estimation is relatively smaller compared to the previous approaches of 8=59 , 9 % during the observation period. This means that the estimation made by using *Fixed Effect Methode* (FEM) GLS, independent variable (*Broad Money* , *exchange rate* , and Economic Growth) in this research is able to explain 59,9 % variance variable depend en FDI. For the rest of 40.1 % explained other variables that are not included in this research model. Value intercept (c) of -9.068252 the FEM model of the GLS is the average value of the component errors *(error).* While the value of *individual effect* in each country shows how big the difference of component error (*error*) of a country to the average value of the intercept of all countries. Based on the above results can be explained that the difference of the components of the state error on the average value of all countries namely Indonesia (-3.587447), Malaysia (-2.029957) , Philipines (-3.869087), Singapore (10.94631), Thailand (-1.459822), From the results of the above estimation can be written an equation of the determinant model of FDI ASEAN 5 (Indonesia, Malaysia, Thailand, Singapore, Philippines) China and Japan are:

- Indonesia

  FDI = -3.587447 + 0.012711 * BRM - 0.43878 * EXR + 0.07876 * GDP + μ_i

  (-6.281836) (1.261359) (7.121312) (2.631447)

- Malaysia

  FDI = -2.029957 + 0.012711 * BRM - 0.43878 * EXR + 0.07876 * GDP + μi

  (-6.281836) (1.261359) (7.121312) (2.631447)

- Philipina

  FDI = -3.869087 + 0.012711 * BRM - 0.43878 * EXR + 0.07876 * GDP + μ_i

  (-6.281836) (1.261359) (7.121312) (2.631447)

- Singapore

  FDI = 10.94631 + 0.012711 * BRM - 0.43878 * EXR + 0.07876 * GDP + μ_i

  (-6.281836) (1.261359) (7.121312) (2.631447)

- Thailand

  FDI = -1.459822 + 0.012711 * BRM - 0.43878 * EXR + 0.07876 * GDP + μ_i

  (-6.281836) (1.261359) (7.121312) (2.631447)

5.3.Statistical Test Results Model

The next step in this study is to test the model statistics that have been selected before. The stages of statistical test of this research model consist of:

a) The Statistical T Test (Partial Test)

Test t statistic or partial test is a test of individual variables or individually done to see whether the independent variable statistically affect the dependent variable. The self-test of the regression coefficients of each independent variable using 5% level of significance obtains the following results:

Table 5.5 Test Results t-statistics (α = 5%) Model Fixed Effects (FEM) GLS period 2000 - 2015

Variable	t-Statistic	t-tabel df (α/2,n-k) df	Prob.	Kesimpulan
C	-6.281836	±1.99006	0.0000	Signifikan
BRM?	1.261359	±1.99006	0.2110	Not Signifikan
EXR?	7.121312	±1.99006	0.0000	Signifikan
GDP?	2.631447	±1.99006	0.0103	Signifikan

Source: EVIEWS Data Processing Results 9

a. Variable BRM (*broad money*)

Based on data estimation results obtained t_{count} value 1.261359 $< t_{table} \pm$ 1.99006 , has a significance value of 0.2110 which means above α = 0.05. It can be concluded that H_0 is accepted and rejects H_a meaning that the *broad money* variable has less statistically significant effect on FDI entering the ASEAN 5 countries (Indonesia, Malaysia, Philippines, Singapore, and Thailand) .

b. Variable EXR (*Exchange Rate* / exchange rate)

Based on estimates of data obtained , value 7.121312 > $t_{table} \pm$ 1.99006 , has a significance value of 0.0000 which means under α = 0 , 05 . Hence it can be concluded that H_0 is rejected and accepts H_a which means the *Exchange Rate* variable has a statistically significant influence on the FDI entering the ASEAN 5 countries (Indonesia, Malaysia, Philippines, Singapore and Thailand) .

c. GDP Variables (Economic Growth)

Based on estimates of data obtained , value 2.631447 > $t_{table} \pm$ 1.99006 , has a significance value of 0.0103 which means below α = 0.05. It can be concluded that H_0 is accepted and rejects H_a which means Economic Growth variables have statistically significant influence on FDI entering ASEAN 5 countries (Indonesia, Malaysia, Philippines, Singapore, and Thailand) .

b) Test F statistics (test together)

Stage F test is a test that aims to determine the magnitude of the effect of independent variables on the regression coefficient of independent variables using 5% *significant level of* obtained as follows:

Table 5.6 F-statistical test results (α = 5%) Model Fixed Effects (FEM) GLS period 2000 - 2015

Dependent Variable: FDI

Independent Variable	F-statistic	t-table df (α, k-1, nk) df (5, 4 , 76)	Conclusion
BRM, GDP, EXR	27.61298	2.72	Significant

Based on the results of testing the F statistic of the model *Fixed Effect Method* (FEM) GLS on the degree of significance of 5% was obtained F_{count} 27.61298> F_{table} 2.7 2 . This means that the *Fixed Effect Methode* (FEM) model of GLS together with *broad money* variables , economic growth, labor, exchange rate, *industr* y, and *transport service* have a statistically significant effect on FDI entering ASEAN countries 5 ((Indonesia, Malaysia, Philippines, Singapore, and Thailand) .

c) Test R^2 (Coefficient of Determination)

The purpose of the Coefficient of Determination Test (R^2) is to know how far the ability of the model in explaining the variance of the dependent variable (dependent). The magnitude of R^2 shows the effect described by the dependent variable.

Based on the results of data processing using Fixed Effect Model approach (FEM) GLS obtained R^2 value of 0.873226 or about 87.3 %. This means that 87.3 % of FDI variables can be explained by *Broad Money* , *exchange rate* , and Economic Growth variables , while the remaining 12.7 % are explained by variables outside the model.

In general, this research is able to answer the initial hypothesis of previous research that the determinant variable of FDI which is categorized into macroeconomic and state characteristics are equally well in explaining the determinant of FDI inflow specially, in ASEAN 5, China and Japan. Furthermore, there will be further discussion to see the consistency of empirical findings with theories and previous researches, those are:

a) Broad Money Influence on FDI

Based on the model equation with Fixed Effect Methode (FEM) approach of GLS, it shows that the broad money variable has positive and statistically significant influence on $\alpha = 5\%$ towards FDI flow that enters ASEAN 5 countries, China and Japan. The regression coefficient value of the broad money variable is 0.00108. It can be interpreted that if the change in broad money in ASEAN 5, China and Japan is 1% then it will cause the change of FDI flow into ASEAN 5, China and Japan of 0.00108 with the same relationship direction (unidirectional) and other variables are assumed to be *ceteris paribus.*

The results are consistent with the findings of Rodolphe Desbordes and Shang-Jin Wei (2017) which indicate that the source and development of direct-country financial objectives increase access to external finance and indirectly support economic activity.

Other result from a research by Agyenim Boateng, Shaista Nisar, Junjie Wu, Xiuping Hua (2015) suggests that the rapid increase of capital inflow into a country may result in an appreciation of the currency (real), especially when capital flow takes the form of an investment portfolio. Encouraging capital outflow all can help improve the pressure of currency appreciation. However, a major concern should be capital outflow of a country, spurring countries to accumulate excessive savings without structural adjustment in economic fundamentals. Thus, encouraging and liberalizing capital outflows should be implemented, together with rearranged austerity issues, in some Asian countries, especially the People's Republic of China, as well as promoting efficient use savings to improve the quantity and quality of investments in those countries.

b) Effect of Economic Growth on FDI

Based on the model equation with Fixed Effect Methode (FEM) approach of GLS, it shows that the economic growth variable has positive and statistically significant influence on $\alpha = 5\%$ towards FDI flow that enters ASEAN 5 countries, China and Japan. The regression coefficient value of the economic growth variable is 0.07876. It can be interpreted that if the change in economic growth in ASEAN 5, China and Japan is 1% then it will cause the change of FDI flow into ASEAN 5, China and Japan of 0.07876 with the same relationship direction (unidirectional) and other variables are assumed to be *ceteris paribus.*

The result is consistent with the findings of George S. Chen, Yao Yao, Julien Malizard (2017). First, the Chinese government should be selective in granting treatments and fiscal concessions to foreign investors. Secondly, the Chinese government should provide financial and nonfinancial support to companies that want to form EJVs with foreign investors. As we have shown, the promotion of EJVs produces positive information not only for partners but also for the Chinese economy globally in focusing on reorientating the export-driven economic. However, the critical pillar for the success of this venture depends on creating an conducive environment to sustainable growth.

The result is consistent with the findings of Qiaomin Li, Robert Scollay, Sholeh Maani (2016). The impact of FDI on economic growth has focused on the existence and level of technology and productivity spillovers associated with the transfer of technology by multinational corporations, reflecting an understanding of modern growth theory that increased productivity is supported by advancement technology to sustain economic growth in the long run, against the possible convergence of percapita income.

c) Effect of Exchange Rates on FDI

Based on the model equation with Fixed Effect Methode (FEM) approach of GLS, it shows that the exchange rate variable has negative and statistically significant influence on $\alpha = 5\%$ towards FDI flow that enters ASEAN 5 countries, China and Japan. The regression coefficient value of the exchange rate variable is -0.43878. It can be interpreted that if the change in exchange rate in ASEAN 5, China and Japan is 1% then it will cause the change of FDI flow into ASEAN 5, China and Japan of -0.43878 with the same relationship direction (unidirectional) and other variables are assumed to be *ceteris paribus.*

As one of Hiroyuki Nishiyama's (2017) research result, the short-term effect of nominal exchange rates changes on the theoretical and empirical intra-industrial resource biases. The finding is the depreciation of the domestic currency lowering the productivity of cut-offs and exports of firms. The depreciation effect on industry-wide productivity is uncertain in pure theoretical analysis. But empirical tests using company data from the Japanese manufacturing industry (general machinery, electrical machinery, and means of transportation) show that the host currency (yen) depreciation tends to increase the industry's productivity widening. These results have some important policy implications. First, a policy that allows the host currency to fall

in the market value of Foreign Exchange can increase the average productivity in some manufacturing industries depending on the situation. Second, such a policy can be a protector for export companies, but not always useful for FDI.

Just as Juthohip Jongwanich's research result, Archanun Kohpaiboon (2013) suggests that the rapid inflows of capital rising to a country can result in an appreciation of the currency (real), especially when capital flows take the form of an investment portfolio. Encouraging capital outflow all can help improve the pressure of currency appreciation. However, it is a major concern that capital out of the country, spurring the country to accumulate excessive savings without structural adjustment in economic fundamentals. Thus, encouraging and liberalizing capital outflows should be implemented, together with rearranged austerity issues, in some Asian countries, especially the PRC, as well as promoting efficient use savings to improve the quantity and quality of investments in those countries.

M. Fabricio Perez, Josef C. Brada, Zdenek Drabek (2012) in their research result shows that bilateral FDI flows come from economic samples, host country samples encourage non-economic motivation such as the desire to facilitate illegal actions of capital transfers and money laundering, with using a bilateral FDI flow model. We show that an average of 29% percent of total FDI is directed to countries that are money laundering centers of about 20%. The econometric results show that non-traditional FDI flow determinants, including money laundering, should be integrated into foreign investment theory.

Likewise with Shinji Takagi's research, Zongying Shi (2011), the impact of the Asian financial crisis on the volume of FDI flows does not occur statistically significant, especially when China and India are excluded from data, FDI flows in the manufacturing sector, more stable than portfolio flows. A new outcome has noticed a significant FDI negative response to the three exchange rate changes: the volume of FDI flows to Japan is smaller when the distribution is positively skewed (ie, the yen has a bias towards a relatively large volatile depreciation). This result is strong, with other standard control variables having statistically significant coefficients.

The country's home investors, that are interested in the flow of earnings and returns in future currencies, are policymakers in developing countries who want to maintain FDI inflow stable. To what extent actual FDI inflows respond to flows and expectations of exchange rate changes, and expected changes are influenced by large fl ows, sharp exchange rate fluctuations can exacerbate the volatility of FDI inflows

through multiple channels. Avoiding unreliable exchange rate behavior, in relation to it the currencies of major source countries should help prevent the movement of FDI inflows indefinitely.

The 1997 exchange rate crisis showed the depreciation trend was not proven to attract FDI into the country, as evidenced by the declining number of FDI in ASEAN 5 countries post crisis. In Indonesia, the value of FDI was recorded to be decreasing into minus until 2000. This indicates that the currency in ASEAN 5 countries was not merely profit in the eyes of investors; it happened because of systemic impact of the currency of Thailand Bath was corrected instead.

The currency crisis had an unstable social and political impact. Therefore, it was concluded that the depreciation of currency in some ASEAN 5 countries did not mean that foreign investors would expand, but investors considered the social, economic and political stabilization aspect at that time which were also not conducive to invest especially in Indonesia, Thailand, Philippines and Malaysia.

In 2008, a series of impacts of the European crisis happened on banks in Europe and other countries, such as the U.S. and Japan. One of Greek's debts was owned Italy, while Italy's debt was held by France. Even the barrage continued to extend all the way to the United States. All of these were related where the U.S. also had a lot of debts to French, Japanese, English and German banks.

The crisis occurring in Europe and the United States created a dominant effect from the financial crisis that spread to other countries in the European Union. The crisis in Europe and the United States brought influence to commodity prices that tended to decline. The decline of commodity prices in the world market was mainly for raw materials. The drastic decline in commodity prices had also occurred before the global crisis of 2008. However, even in the crisis there was still a tendency to increase prices on investment commodities that were related to the nature of gold investment in the long term.

In the longer term (medium long), the global crisis is expected to have a major impact on the real sector, especially trade related to the slowdown in the world economy, especially in advanced countries. Global crisis does not have a major effect on direct trade between Indonesia and Europe, nor with the United States. But Indonesia's indirect trade route with Europe and America will be affected through China. China, which is the largest importer of Indonesian goods, is expected to reduce its imports due to declining demand for the declining nations towards Chinese goods.

6. Conclusions and recommendations

a) Conclusion

This study uses a model analysis of *Panel Data* where *Foreign Direct Investment* (FDI) affects the Macro Economic Factors In ASEAN 5 (Indonesia, Malaysia, the Philippines, Singapore, and Thailand) in the period 2000 -2015. Based on the discussion of the previous chapter , it can be drawn some conclusions as follows:

1. Increased capital inflows into a country can result in excessive appreciation of the currency (real), especially when capital flows take the form of investment portfolios.
2. The impact analysis of FDI is concentrated on wages and quality of work, and so on income inequality . The quality of work can be seen from the point of view of the worker, with a focus on the company's relatively high level of wages overseas against the wage rate in domestic firms, and from a national perspective, focusing on how work created by FDI affects overall productivity in the economy.
3. Short-term exchange rate exchange rate changes in domestic currency depreciation decreases domestic *cut-off* productivity and company exports. the effect of depreciation on productivity industry is uncertain in pure theoretical analysis. But empirical tests using company data from the Japanese manufacturing industry (general machinery, electrical machinery, and means of transportation) show that the *host currency* tends to increase industrial productivity. These results have some important policy implications. First, a policy that allows the *host currency* which fall on the market value of Foreign Exchange can increase the average productivity in some manufacturing industries depending on the situation. Secondly, such a policy could be a safeguard for export companies, but not always beneficial for domestic and FDI.
4. FDI can improve the domestic export market performance of the company. If the increase in export market income is large then overall impact on society will be positive. FDI can improve domestic export market performance of domestic companies at the expense of their market performance . If the increase in export market income is large then overall impact on society will be positive. Overall, it seems that FDI in the industry has a positive effect on the total revenue of domestic companies. Other companies in the textile industry seems to benefit from FDI, to identify which industries FDI has a positive impact on revenue from those

companies. Increases in total company earnings can be attributed to increased employment.

5. The vertical FDI growth is associated with the development of a production network, which in turn is related to the liberalization of semi-finished goods trade. The hypothesis that the ACFTA (*ASEAN-China Free Trade Agreement*) vertical fragmentation effect will occur substantially, generates a positive impact on vertical FDI. The horizontal FDI findings imply that the effect of market expansion may also contribute to explaining bilateral FDI in China and ASEAN. Horizontal FDI will increase due to the effect of market expansion, that is, the effect of reducing trade barriers in expanding the market size available to producers within the *Free Trade Agreement* , and Effects of this market enlargement in attracting MNCs (*Multinational Corporation*) looking for a market.

b) Suggestion

Based on the results of the above research, suggestions that can be given author are as follows:

1. In order to maintain sustainable FDI flow, the government and stakeholders as policy makers need to pay attention to the development of FDI itself, especially in the money market. Given these variables is an important factor that into consideration foreign investors. Government and private sectors are also expected to be selective in choosing trading partners, which are related to FDI, which takes into account the returns on foreign direct investment (FDI), because if FDI is not regulated it affects the exchange rate. Stability of exchange rate also need to be maintained volatility, because the stability of the exchange rate is an indicator of certainty of return on investment to be received by investors.
2. Government as policy maker is expected to take policy, manage and monitor FDI must pay attention to aspect of risk and prudence, especially in fiscal financing. Where the ratio of financing instruments is not greater than the domestic debt so that, able to encourage economic growth to continue to grow, given the economic growth as one of the macroeconomic variables that become important considerations of foreign investors in investing capital.
3. The government is also concerned with infrastructure, where good infrastructure is also one of the investors' attraction, especially transport service. Because a positive industrial climate is formed from a broad market and also a good distribution.

4. Labor as a specific force owned by the state also deserves more attention from the government and stakeholders involved in it. Then the need to improve the quality of labor becomes very important with the demands of the labor market that demands the provision of manpower with adequate skills. So that human resource investment in the form of skill improvement up to the level of education should be the main agenda of the current government.
5. In addition to the preparation of good human resources, the government is expected to provide protection for domestic workers, along with the inclusion of FDI labor from the country of origin as well as entry, so it takes government policy to regulate the entry of foreign workers so that the demand for domestic labor is also not diminishes, on the other hand excessive exploration may adversely affect domestic workforce, it is also related to the problem of bringing about cultural transfers from the country of origin of the investor, for example Korean culture that enters through investors in domestic companies.
6. The amount of FDI that goes into the country can also have negative impact, we can see from the private sector, where the dominant ownership of foreign investors can affect the company's policy, which can sometimes destroy the domestic industry. This is because the competition in the same sector in the global market, for example a tobacco company. Yields are sometimes unbalanced that benefit foreign investors. Another impact is the exclusion of ecosystems, social communities in the environment for example is a mining company in Irian Jaya.

REFERENCES

Agyenim Boateng, Xiuping Hua, Shaista Nisar, JunjieWu, (2015), "Examining the determinants of inward FDI: Evidence from Norway"

Akinori Tomohara, (2017). "Does immigration crowd out foreign direct investment inflows? Trade off between contemporaneous FDI-immigration substitution and ethnic network externalities."

Alfaro, Laura, S. Kalemli-Ozcan, dan V. Volosovych. (2008). Why Doesn't Capital Flow from Rich to Poor Countries? An Empirical Investigation, The Review of Economics and Statistics.Lucas,

Alfaro, Laura, S. Kalemli-Ozcan, dan V. Volosovych. (2007). Capital Flows in a Globalized World: The Role of Policies and Institutions.

Almeida, Heitor., Campello, Murillo., (2007), "Financial Constraints, Asset Tangibility, and Corporate Investment". *The Review of Financial Studies,* Vol. 20, No. 5 (Sept., 2007), pp. 1429-1460.

Ana-Maria Fuertes, Kate Phylaktis, Cheng Yan (2016) "Hot money in bank credit flows to emerging markets during the banking globalization era."

Arijit Mukherjee, Uday Bhanu Sinha, (2016) "Competition, foreign direct investment and welfare"

Aurora A.C. Teixeira, Rosa Forte, Susana Assunção (2017)"Do countries' endowments of non-renewable energy resources matter for FDI attraction? A panel data analysis of 125 countries over the period 1995–2012."

Baltagi, B. H., Egger, P., & Pfaffermayr, M. (2007). Estimating models of complex FDI: Are there third-country effects? Journal of Econometrics, 140(1), 260–281. http://dx.doi.org/10.1016/j.jeconom.2006.09.009

Bassem Kahoulia, Anis Omri (2017) "Foreign direct investment, foreign trade and environment: New evidence from simultaneous-equation system of gravity models"

Blomstro¨m, M., & Kokko, A. (2001). FDI and human capital: A research agenda. Paper for OECD technical meeting on FDI, human capital and education in developing countries.

Bong-Soo Lee, Byung S. Min (2011) "Exchange rates and FDI strategies of multinational enterprises."

Canning, David and Peter Pedroni.(2004)."Infrastructure and Long Run Economic Growth." University of Belfast.

Carmen Boghean, Mihaela State, (2015). "The relation between foreign direct investments (FDI) and labour productivity in the European Union countries."

Djaafara, Rizal A., dkk (Eds). (2012). Masyarakat Ekonomi ASEAN 2015: Proses Harmonisasi di Tengah Persaingan. Jakarta: Bank Indonesia.

Dunning, J.H, (2007), *Toward an Eclectik Theory of International Production : Some Empirical Tests,Journal of International Business Studies*, www.jstor.org

Dunning, J.H, (2001), *The Eclectic (OLI) Paradigm of International Production Past, Present and Future. International Journal of the Economics of Business*, 8(2), pp. 173-190.

Dunning, J. H, (1994), *Re-evaluating the Benefits of Foreign Direct Investment,* University of Reading : United Kingdom.

Febriana, Puspa. (2014). Pengaruh Kebijakan Makroekonomi Dan Kualitas Kelembagaan Terhadap Foreign Direct Investment Di ASEAN-6-Analisis Panel Data. Jurnal Ekonomi Pembangunan Trisakti, Vol 1, No 2, pp.159-175.

Firat Demir, (2016), "Effects of FDI Flows on Institutional Development: Does It Matter Where the Investors are from?."

George S. Chen, Yao Yao, Julien Malizard, (2017). "Does foreign direct investment crowd in or crowd out private domestic investment in China? The effect of entry model"

Goldberg, L.S., 2009. Understanding banking sector globalization. IMF Staff Pap. 56 (1),171–197.

Griffin, R.W. & Pustay, M.W. (2005). *Bisnis Internasional Perspektif Manajerial, Edisi kelima.* Jakarta: Indeks

Griffin, Ricky W. dan Michael W. Pustay. (2010). *International Business*. London: Pearson.

Guglielmo Maria Caporale, Luis A. Gil-Alana, Kefei You (2017) "Exchange rate linkages between the ASEAN currencies, the US dollar and the Chinese RMB."

Gujarati, D.N. dan Porter, D.C., (2012), Dasar-dasar Ekonometrika, Buku 1, Edisi 5, Salemba Empat, Jakarta.

Herrmann, Sabine, dan J. Kleinert. (2014). Lucas Paradox and Allocation Puzzle - Is the Euro Area Different?, Discussion Paper No. 06/2014. Frankfurt am Main: Deutsche Bundesbank.

Hiroyuki Nishiyama, (2017), "The effect of exchange rate fluctuation on intra-industry reallocationin a firm heterogeneity model with trade and foreign direct investment."

Harrison, A.E., Love, I., McMillan, M.S., (2004). Global capital flows and financing constraints. J. Dev. Econ. 75 (1), 269–301.

Harrison, A.E., McMillan, M.S., (2003). Does direct foreign investment affect domestic credit constraints? J. Int. Econ. 61 (1), 73–100.

Ivan Deseatnicov, Hiroya Akiba, (2016) "Exchangerate,political environment and FDI decision"

Jhingan, M.L. (2004). Ekonomi Pembangunan dan Perencanaan, Edisi 1 cetakan Ke - 10. Jakarta: PT Grafindo Persada.

Jhingan, (2000). Ekonomi Pembangunan dan Perencanaan, Jakarta : Rajawali Press.

Jack Joo K. Ree, Kyoungsoo Yoon, Hail Park (2015) "FX funding risks and exchange rate volatility."

John Anderson, Dylan Sutherland (2015) "Developed economy investment promotion agencies and emerging market foreign direct investment: The case of Chinese FDI in Canada."

Juthathip Jongwanich, Archanun Kohpaiboon, (2013). "Capital flows and real exchange rates in emerging Asian countries."

Kefei You, Offiong Helen Solomon (2015) "China's outward foreign direct investment and domestic investment: An industrial level analysis."

Kiyotaki, Nobuhiro dan Moore, John. (1997). Credit Cycles. The Journal of Political Economy, Vol. 105 No. 2, pp. 211-248.

Kristine Farla, Denis De Crombrugghe, Bart Verspagen (2016) "Institutions, Foreign Direct Investment, and Domestic Investment:Crowding Out or Crowding In?."

Kodoatie, R.J, (2003), Manajemen dan Rekayasa Infrastruktur. Yogyakarta: Pustaka Pelajar

Le Hoang Ba Huyen (2015) "Determinant of the factors affecting Foreign Direct Investment (FDI) flow to Thanh Hoa province in Vietnam."

Levine, King dan Ross Levine, 1993,"Finance and Growth : Schumpeter Might be Right", Quartely Journal of Economics, Vol.CVIII, Agustus : 716-737

Ling Chen, (2017) "Grounded Globalization: Foreign Capital and Local Bureaucrats in China's Economic Transformation," http://dx.doi.org/10.1016/j.worlddev.2017.05.001

Lukas Giessena, Muhammad Alif K. Sahide, (2017). "Blocking, attracting, imposing, and aligning: The utility of ASEAN forest and environmental regime policies for strong member states."

M. Fabricio Perez, Josef C. Brada Zdenek Drabek, (2012), "Illicit money flows as motives for FDI."

Mariarosaria Comunale, (2017), "Dutch disease, real effective exchange rate misalignments and their effect on GDP growth in EU."

Marie M. Stacka,∗, Geetha Ravishankara, Eric Pentecost (2017)"Foreign direct investment in the eastern European countries:Determinants and performance."

Martin T. Bohl, Philip Michaelis, Pierre L. Siklos, (2016), "Austerity and recovery: Exchange rate regime choice, economic growth, and financial crises."

Mankiw, Gregory. (2003). "Teori Makroekonomi Edisi Kelima". Jakarta. Erlangga

Mankiw, Gregory. (2006). "Makroekonomi". Erlangga, Jakarta.

Meiningtyas,Dwi. (2007). Peranan Infrastruktur Bagi Pertumbuhan Ekonomi Daerah di Pulau Jawa. Universitas Indonesia.

Mengying Wang, (2017). "Does foreign direct investment affect host-country firms' financial constraints?."

Mohamed Abdouli, Sami Hammami, (2017),"Investigating the causality links between environmental quality, foreign direct investment and economic growth in MENA countries."

Nadia Doytch, Merih Uctum, (2016), "Globalization and the environmental impact of sectoral FDI."

Nahom Ghebrihiwet, (2017), "Acquisition or direct entry, technology transfer, and FDI policy liberalization."

Neringa Oboleviciute, Keith Pilbeam, (2012). "Does Foreign Direct Investment Crowd In or Crowd Out Domestic Investment? Evidence from the European Union."

Nzotta, Samuel Mbadike., Okereke, Emeka J. (2009).Financial Deepening and Economic Development Of Nigeria: An Empirical Investigation (52-66).

Okada, Keisuke. (2013). The Interaction Effects of Financial Openness and Institutions on International Capital Flows, Journal of Macroeconomics.

Oliver Morrissey, Manop Udomkerdmongkol (2016) "Response to 'Institutions, Foreign Direct Investment, and Domestic Investment: Crowding Out or Crowding In?'" http://dx.doi.org/10.1016/j.worlddev.2016.08.001

Onwumere, J.U.J, et al. (2012). The Impact of Financial Deepening on Economic Growth: Evidence From Nigeria (64-71)

Pogoda, Barbara. (2012). "The Lucas Paradox, Master's thesis, Universitas Bielefeld."

Qiaomin Li, Robert Scollay, Sholeh Maani, (2016). "Effects on China and ASEAN of the ASEAN-China FTA: The FDI perspective"

Rahardja, Prathama dan Mandala Manurung. 2004. *Teori Ekonomi Makro; Suatu Pengantar*. Jakarta: Lembaga Penerbit Fakultas Ekonomi Universitas Indonesia.

Robert E. (1990). "Why Doesn't Capital Flow from Rich to Poor Countries? The American Economic Review."

Robin Boudias, (2015), "Capital inflows, exchange rate regimes and credit dynamics inemerging markete conomies."

Rodolphe Desbordes, Shang-Jin Wei, (2017) "The effects of financial development on foreign direct investment"

Salvatore, D. (2007). International Economics. Prentice-Hall.

Salvatore, D. (1997). Ekonomi Internasional Edisi Kelima. Jakarta. Airlangga.

Salvatore Dell'Erba, Dennis Reinhardt (2015) "FDI, debt and capital controls"

Sèna Kimm Gnangnon, (2017), "Effect of multilateral trade liberalization on foreign direct investment outflows amid structural economic vulnerability in developing countries."

Shandre M. Thangavelu, Dionisius Narjoko (2014), "Human capital, FTAs and foreign direct investment flows into ASEAN"

Shaosheng Jin, Haiyue Guo, Michael S. Delgado, H. Holly Wang (2017) "Benefit or damage? The productivity effects of FDI in the Chinese food Industry"

Shang-ao Li, Shan Pan, Shawn Chi (2016), "North–South FDI and directed technical change."

Shinji Takagi, Zongying Shi, (2011), "Exchange rate movements and foreign direct investment (FDI): Japanese investment in Asia,1987–2008"

Siripha, Junlakarn, Weerin Wangjiraniran. (2016) "Assessing potential of power generation investment in ASEAN countries."

Sizhong Suna, Sajid Anwar, (2017), "Foreign direct investment and the performance of indigenous firms in China's textile industry "Foreign direct investment and the performance of indigenous firms in China's textile industry."

Soo Khoon Goh, Chung Yan Sam, Robert McNown, (2017)"Re-examining foreign direct investment, exports, and economic growth in asian economies using a bootstrap ARDL test for cointegration."

Teng Zhang, Puman Ouyang, (2017) "Is RMB appreciation a nightmare for the Chinese firms? An analysis on firm profitability and exchange rate."

Todaro, Michael. (2000)." Ekonomi Pembangunan Edisi ke 6" Erlangga, Jakarta

Todaro, Michael P. dan Stephen C. Smith. (2004). Pembangunan Ekonomi di Dunia Ketiga, Edisi kedelapan. Erlangga: Jakarta.

UNCTAD, (2017), World Investment Report, New York: United Nations Conference on Trade and Investment. http://unctad.org/en/PublicationsLibrary/wir2017_en.pdf

UNCTAD, (2006), World Investment Report, New York: United Nations Conference on Trade and Investment.

UNCTAD (2004), Prospects for FDI flows, TNC Strategies and Promotion Policies: 2004-2007, Laporan Penelitian.

Vinish Kathuria, Pradeep Ray, Rekha Bhangaonkar (2015) "FDI (foreign direct investment) in wind energy sector in India: Testingthe effectiveness of state policies using panel data."

Warjiyo, Perry dan Solikin. 2003. *Kebijakan Moneter di Indonesia*. Jakarta: Pusat Pendidikan dan Studi Kebanksentralan (PPSK) Bank Indonesia

Wen-Hsien Liu, Pan-Long Tsai, Ching-Lung Tsay, (2015), "Domestic impacts of outward FDI in Taiwan: Evidence from panel data of manufacturing firms."

World Bank, tanpa tahun. "Attracting foreign direct investment into infrastructure : why is it so difficult? ". http://econ.worldbank.org.

Yingyi Tsai, Arijit Mukherjee, Jong-Rong Chen (2016) "Host market competition, foreign FDI and domestic welfare."

COMPARATIVE ANALYSIS OF BROAD MONEY , ECONOMIC GROWTH, EXCHANGE RATE OF FOREIGN LOAN FOREIGN INVESTMENT IN ASEAN 5 PERIOD 2000 -2015

ORIGINALITY REPORT

11%	7%	6%	4%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

MATCH ALL SOURCES (ONLY SELECTED SOURCE PRINTED)

< 1%

★ ageconsearch.umn.edu

Internet Source

Exclude quotes	Off	Exclude matches	Off
Exclude bibliography	Off		

COMPARATIVE ANALYSIS OF BROAD MONEY , ECONOMIC GROWTH, EXCHANGE RATE OF FOREIGN LOAN FOREIGN INVESTMENT IN ASEAN 5 PERIOD 2000 -2015

GRADEMARK REPORT

FINAL GRADE

/0

GENERAL COMMENTS

Instructor

PAGE 1

PAGE 2

PAGE 3

PAGE 4

PAGE 5

PAGE 6

PAGE 7

PAGE 8

PAGE 9

PAGE 10

PAGE 11

PAGE 12

PAGE 13

PAGE 14

PAGE 15

PAGE 16

PAGE 17

PAGE 18

PAGE 19

PAGE 20

PAGE 21

PAGE 22

PAGE 23

PAGE 24

PAGE 25

PAGE 26

LEMBAR
HASIL PENILAIAN SEJAWAT SEBIDANG ATAU *PEER REVIEW*
KARYA ILMIAH : ***PROSIDING ****

Judul Karya Ilmiah (paper)	:	Comparative Analysis of Broad Money, Economic Growth, Exchange Rate of Foreign Loan Foreign Investment in ASEAN 5 Period 2000 – 2015		
Jumlah Penulis	:	3 Orang (Wira G Aribowo, **Siti Aisyah TR**, Lukman Hakim)		
Status Pengusul	:	~~Penulis pertama~~ / penulis ke 2 / ~~penulis korespondasi**~~		
Identitas Prosiding	:	a. Nama Prosiding	:	**14th IRSA International Conference**
		b. ISBN/ISSN	:	**2654 – 3850**
		c. Tahun Terbit,Tempat Pelaksanaan	:	**23 – 24 Juli 2018, Solo**
		d. Penerbit/organiser	:	**FEB Universitas Sebelas Maret**
		e. Alamat repository PT/web prosiding	:	https://repository.feb.uns.ac.id/lihatpdf.php?lokasi=publikasi&kode=779
		f. Terindeks di (jika ada)	:	

Kategori Publikasi Makalah : ☒ Prosiding Forum Ilmiah Internasional .....
(beri ˇ pada kategori yang tepat) ☐ Prosiding Forum Ilmiah Nasional .....

Hasil Penilaian *Peer Review* :

Komponen Yang Dinilai		Nilai Maksimal **Prosiding 15**		Nilai Akhir Yang Diperoleh
		Internasional ☒	Nasional ☐	
a.	Kelengkapan unsur isi paper (10%)	1,5		1,20
b.	Ruang lingkup dan kedalaman pembahasan (30%)	4,5		3,50
c.	Kecukupan dan kemutahiran data/informasi dan metodologi (30%)	4,5		3,75
d.	Kelengkapan unsur dan kualitas terbitan/prosiding (30%)	4,5		3,40
Total = (100%)		**15**		**11,85**
Nilai Pengusul = (40% x 11,85) / 2 = 2,37 (Penulis Kedua)				

Catatan Penilaian artikel oleh Reviewer :

a. Kelengkapan dan kesesuaian unsur isi artikel : Paper ini memenuhi semua unsur yang seharusnya ada dalam sebuah paper, mencakup latar belakang, perumusan masalah, review literatur, metodologi, hasil analisis, kesimpulan dan referensi.

b. Ruang lingkup dan kedalaman pembahasan : Paper ini meneliti tentang **perbandingan broad money, pertumbuhan ekonomi, dan nilai tukar terhadap investasi asing** di lima negara ASEAN. Studi ini **menyarankan hal penting kepada pemerintah** terutama otoritas moneter terkait aliran investasi asing.

c. Kecukupan dan pemutakhiran data/informasi dan metodologi : Paper ini sudah memiliki kecukupan dan juga menggunakan data dan metodologi yang mutakhir. **Analisis yang baik** dilakukan dengan menggunakan **model regresi panel data** untuk melihat dampat variable makroekonomi terhadap investasi asing di 5 negara tersebut. Studi ini **menyarankan hal penting kepada pemerintah** terutama otoritas moneter terkait aliran investasi asing.

d. Kelengkapan unsur dan kualitas terbitan : Prosiding ini diterbitkan oleh Indonesian Regional Science Association (IRSA) Committee yang merupakan Konferensi para ilmuwan yang memiliki keahlian dan minat pada bidang ilmu pengembangan regional/wilayah dari berbagai multidisiplin, khususnya Ekonomi Regional. Konferensi IRSA dikelola oleh Organisasi Akademisi Indonesia dan secara aktif mempromosikan dan melakukan riset antar wilayah negara.s Konferensi IRSA diselenggarakan secara rutin setiap tahun dengan Perguruan Tinggi di Indonesia sebagai penyelenggara konferensi secara bergantian. Kualitas terbitan sudah sesuai dengan ketentuan sebuah konferensi.

e. Indikasi Plagiat : Tidak ada indikasi plagiasi, ditunjukkan dengan rendahnya hasil uji similarity (terlampir)

f. Kesesuaian bidang ilmu : sangat sesuai dengan bidang ilmu penulis, dimana paper ini membahas kajian bidang Ekonomi Makroekonomi.

Surakarta, ... 07 APR 2020 .....

Reviewer 2

Prof. Dr. Yunastiti Purwaningsih, MP
NIP. 195906131984032001
Jabatan : Guru Besar
Pangkat,Gol Ruang : Pembina Utama Muda/IV D
Unit Kerja : FEB UNS
Bidang Ilmu : Ekonomi Pembangunan

*Dinilai oleh dua Reviewer secara terpisah
**Coret yang tidak perlu

LEMBAR
HASIL PENILAIAN SEJAWAT SEBIDANG ATAU *PEER REVIEW*
KARYA ILMIAH : ***PROSIDING ****

Judul Karya Ilmiah (paper)	:	Comparative Analysis of Broad Money, Economic Growth, Exchange Rate of Foreign Loan Foreign Investment in ASEAN 5 Period 2000 – 2015		
Jumlah Penulis	:	3 Orang (Wira G Aribowo, **Siti Aisyah TR**, Lukman Hakim)		
Status Pengusul	:	~~Penulis pertama~~ / penulis ke 2 / ~~penulis korespondasi~~**		
Identitas Prosiding	:	a. Nama Prosiding	:	**14th IRSA International Conference**
		b. ISBN/ISSN	:	**2654 – 3850**
		c. Tahun Terbit,Tempat Pelaksanaan	:	**23 – 24 Juli 2018, Solo**
		d. Penerbit/organiser	:	**FEB Universitas Sebelas Maret**
		e. Alamat repository PT/web prosiding	:	https://repository.feb.uns.ac.id/lihatpdf.php?lokasi=publikasi&kode=779
		f. Terindeks di (jika ada)	:	

Kategori Publikasi Makalah (beri ˇ pada kategori yang tepat) : ☒ Prosiding Forum Ilmiah Internasional .....
☐ Prosiding Forum Ilmiah Nasional .....

Hasil Penilaian *Peer Review* :

Komponen Yang Dinilai		Nilai Maksimal **Prosiding 15**		Nilai Akhir Yang Diperoleh
		Internasional ☐	Nasional ☐	
a.	Kelengkapan unsur isi paper (10%)	1.5		1.25
b.	Ruang lingkup dan kedalaman pembahasan (30%)	4.5		3.55
c.	Kecukupan dan kemutahiran data/informasi dan metodologi (30%)	4.5		3.55
d.	Kelengkapan unsur dan kualitas terbitan/prosiding (30%)	4.5		3.55
Total = (100%)		**15**		**11.90**
Nilai Pengusul = (40% x 11.90) / 2 = 2.38 (Penulis Kedua)				

Catatan Penilaian artikel oleh Reviewer :

a. Kelengkapan dan kesesuaian unsur isi artikel :
Paper ini mempunyai kaidah yang sesuai dengan penulisan ilmiah terdiri atas introduction, literature review, method, result dan conclusion. Isi paper juga sesuai dengan judul

b. Ruang lingkup dan kedalaman pembahasan :
Penelitian tentang ekonomi makro sudah banyak dilakukan namun tetap menarik untuk dilakukan khususnya apabila manggunakan alat analisis yang berbeda. Ulasan dan pembahasan menjadi point penting dalam penilaian paper ini

c. Kecukupan dan pemutakhiran data/informasi dan metodologi :
Alat analisis yang digunakan dalam penelitian ini adalah panel data yang cukup menarik digunakan dan sesuai dengan tujuan yang ingin diambil.

d. Kelengkapan unsur dan kualitas terbitan :
Paper ini dipublikasikan oleh IRSA, yang sudah sering mengadakan konferensi Internasional tahunan, sehingga cukup berkualitas

e. Indikasi Plagiat :
Tidak terdapat indikasi plagiasi dalam penelitian ini

f. Kesesuaian bidang ilmu :
Bidang ilmu penelitian ini sesuai dengan penulis yaitu ekonomi pembangunan dengan pengkhususuan pada moneter Internasional

Surakarta, ... 09 APR 2020 .....

Reviewer ½ **

Dr. Izza Mafruhah,.SE,.M.Si
NIP. 197203232002122001
Jabatan : Lektor Kepala
Pangkat,Gol Ruang : Pembina Tingkat I / IV/b
Unit Kerja : Fakultas Ekonomi dan Bisnis UNS
Bidang Ilmu : Ekonomi Pembangunan

*Dinilai oleh dua Reviewer secara terpisah
**Coret yang tidak perlu