The Effect of Global Competitiveness and Trade Openness through the Investment, Tax, and Inflation towards Economic Growth

by Eleonora Sofilda, Dini Hariyanti Tri Ismawaty

Submission date: 03-Oct-2022 12:20PM (UTC+0700)
Submission ID: 1915137206
File name: The_Effect_of_Global_Competitiveness_and_Trade_Openness.pdf (324.29K)
Word count: 7211
Character count: 38373

The Effect of Global Competitiveness and Trade Openness through the Investment, Tax, and Inflation towards Economic Growth

Eleonora Sofilda [a], Dini Hariyanti [b] , Tri Ismawaty [c]
[a,c] Magister Economic Program, Trisakti University, Indonesia.
[b] Economic Development Program, Trisakti University, Indonesia.
[a] Corresponding authour: eleonora_140872@yahoo.com

OIDA International Journal of Sustainable Development, Ontario International Development Agency, Canada
ISSN 1923-6654 (print) ISSN 1923-6662 (online)
Available at http://www.ssrn.com/link/OIDA-Intl-Journal-Sustainable-Dev.html

Abstract: Based on the great economic potential and in order to face the challenges of regional cooperation, the leaders of ASEAN countries to make long-term plans the establishment of an ASEAN Community comprising the ASEAN Economic Community (AEC), ASEAN Security Community (ASC) and the ASEAN Socio-cultural Community (ASCC). These three pillars are interrelated to each other and mutually reinforcing objectives for achieving sustainable peace, stability and prosperity in the region equalization.The main objective is to achieve sustainable economic growth and equitable, as well as supporting individual katahanan member countries and regions. Cooperation between ASEAN countries has been strengthened with the spirit of economic and social stability in the region, including through accelerating economic growth, social progress, and culture with regard to equality and partnership that became the foundation for the achievement of a prosperous and peaceful society. To create economic growth, each ASEAN country should conduct an open economy. With the open economy, capital can move from one country to another and investors can buy assets in various countries in an unlimited amount. So will cause a rise in the amount of foreign direct investment into the economy of the country.

In the development of the concept of the MEA with the ultimate goal of economic integration, ASEAN perform this feat with several steps, namely the free flow of goods services investment, skilled labor, and freer flow of capital. Conducted economic cooperation especially in the fields of trade and investment. This can be seen with the start prefential Trade Arrangement (PTA, 1977), the ASEAN Free Trade Area (AFTA, 1992), the ASEAN Framework Agreement on Services (AFAS, 1995) and the ASEAN Investment Area (AIA, 1998), and then fitted with the formulation of sector priority of integration and cooperation in the field of monetary another. All this is a manifestation of the pursuit of MEA

Measures to strengthen the framework MEA rolling back in 2006, among others with formulations containing the blueprint for achieving the targets and time MEA clearly. Weigh the benefits and interests of ASEAN to face the challenges of global competitiveness, it was decided to accelerate the formation of MEA from 2020 to 2015 (12th ASEAN Summit, January 2007). This decision is also the political will of the leaders of ASEAN by at signing of the ASEAN Charter.

The background of the formation of the AEC in 2015, research was conducted to investigate the factors of economic growth in the ASEAN 6 countries. Indonesia, Singapore, Malaysia, Thailand, Philippines, and Vietnam became the object of research to-six countries. As for the purpose of this study is; (1) To analysisthe effect of the Global Competitiveness of Investment, (2) To analysis the effect of trade openness (TO) on investments, (3) To analysis the effect of investment on economic growth, (4) To analysis the effect of the State Tax Revenue (TaxR) on economic growth, (5) To analysis the effect of inflation on economic growth in the period 2004-2013 6 ASEAN countries.

This study uses a panel model and within a period of 10 years from 2004 to 2013. The variables tested in the form of a variable percentage of competitiveness, trade openness, state tax revenue, investment, and inflation. Regression testing using a panel with two-step method. The first step in which the investment is the dependent variable, while its independent variable is global competitiveness and trade openness. In the second step, the economic growth becomes the dependent variable, and independent variables it is tax revenue, investment, and inflation.

The results showed that 4 out of 5 of these variables significantly. The result is that in the first step, trade openness variable have negative impact and no significant on the investment but significant value of 0.7831 which express the degree of confidence in doubt.Meanwhile, global competitiveness have a significant effect with 95% confidence level. In the second step, where the variables in the test is revenue from taxes, inflation, and investment, all significant variables and according to the theory of economic growth in the ASEAN-6.

Accordingly, in promoting economic growth, it can be suggested as follows: (1) To promote cooperation among ASEAN countries and makes the MEA in December 2015 into an opportunity of economic growth, not the threat of economic growth, (2) Increasing productivity and innovation in order to invest in the country could increase , (3) Increasing investment opportunities in the ASEAN region by running the ASEAN Comprehensive Investment Agreement (ACIA) and improve the supporting facilities investment activities. (4) In terms of taxes, improve tax payment system so that taxpayers easily willing to pay the tax. (5) Strengthening the foundations of economic security to prevent malicious inflation due to global economic turmoil. (6) Making the rules between ASEAN anticipation of unfair competition. (7) The government provides support for their respective countries as a form of commitment in achieving the AEC 2015.

Keywords: Economic Growth, Investment, Trade Openness, the gross domestic product, Global competitiveness,Tax revenue

Introduction

At the beginning of establishment in 1967, the ASEAN (Association of Southeast Asian Nations) over its role in the political-oriented cooperation for the achievement of peace and security in the scope of Southeast Asia. Cooperation between countries is further strengthened by the spirit of economic and social stability in the region, including through accelerating economic growth, social progress, and culture with regard to equality and partnership that became the foundation for the achievement of a prosperous and peaceful society.To create economic growth, each ASEAN country should conduct an open economy. With the open economy, capital can move from one country to another and investors can buy assets in various countries in an unlimited amount. So will cause a rise in the amount of foreign direct investment into the economy of the country. Over time, the ASEAN region has become an area of interest as a promising area. Great economic potential and a population that many make the ASEAN region promises huge growth potential. It can be seen from Table 1 that contains the GDP of ASEAN countries in 2011.

Next page

Table 1. ASEAN Gross Domestic Product in 2011

Ranking GDP	Country	Total GDP (Millions US$)	Population (Millions of Lives)	GDP/Capita / millions (US$)	Share Of The World GDP
1	Indonesia	706.56	244.20	2.893	1.43
2	Thailand	345.60	0.70	5,394	0.76
3	Malaysia	278.70	29.00	9,700	0.57
4	Singapura	259.80	5.30	49,271	0.40
5	Filippina	213.10	95.30	2,223	0.50
6	Vietnam	122.70	90.00	1,374	0.38
7	Brunei	15.50	0.40	36,584	0.03
8	Kamboja	12.90	14.40	852	0.04

Resource *: The Global Competitiveness Report 2012-2013 (WEF)*

Referring to the great economic potential and in order to face the challenges of regional cooperation, the leaders of ASEAN countries to make long-term plans the establishment of the ASEAN Community is comprised of three pillars, namely the ASEAN Economic Community (AEC), ASEAN Security Community (ASC) and the ASEAN Socio-cultural Community (ASCC). These three pillars are interrelated to each other and strengthen each other objectives for achieving sustainable, peace, stability and prosperity in the region equalization. The main objective is to achieve sustainable economic growth and equitable, as well as supporting individual member in countries and regions.

In the development of the realization of the concept of AEC with the ultimate goal of economic integration, ASEAN perform this feat with several steps, namely the free flow of goods services investment, skilled labor, and freer flow of capital. Various economic cooperation carried out particularly in the fields of trade and investment. On the other hand, the readiness of ASEAN countries in dealing with AEC in 2015 will directly impact on the level of tax revenue that is applied by individual countries of Southeast Asia. Some countries are planning to do a reduction in tax rates enacted before 2015 AEC.

Various attempts were made by the ASEAN countries in preparing measures so that the achievement of the AEC can be realized at the end of this year. Additionally increasingly competitive ASEAN countries to develop in the economic field to make the position of ASEAN countries to be increased among the economies of other International countries. By knowing the factors that affect the economic growth in ASEAN countries, for which the authors are interested in doing research on "Determinants of Economic Growth in ASEAN Countries Period 2004-2013".

Theoritical Background and Previous Research

Basic Theory

Economic growth is one indicator that is very important in performs an analysis of the economic development in a country. Kuznets stated economic growth is a long-term increase in a country's ability to provide more and more kinds of economic goods to its citizens. This ability to grow in accordance with advances in technology, and institutional and ideological adjustments are needed (Lincolyn, 2004).

In the view of the classical economists, there are four factors that influence economic growth, namely: population, amount of stock of capital goods, land area and natural resources, as well as the level of technology used.

According to the Harrod-Domar, each economy can set aside a certain proportion of national income if only to replace capital goods were damaged. However, to grow the economy, it needs new investments as an additional stock of capital. The more savings and then invest, the faster the economy will grow (Lincolyn, 2004: 64-67).

According to this theory outline of the growth process similar to the Harrod-Domar theory, where the assumptions underlying this model are:

- Labor (or population) is growing at a certain rate.
- The production function Q = f (K, L) applicable to each period.
- The tendency of saving (propensity to save) by the community expressed as a certain proportion of output.
- All public savings invested S = I = ΔK. In accordance with the presumption regarding the propensity to save, then a proportion of output is left for savings and then invest.

Investment Theory

Investment in economic theory can mean the purchase of the means of production (including goods for sale) with capital in the form of money. Investments are divided into two types, namely:

- Investment Real

An investment on capital goods for the production process, consisting of:

a) fixed investment companies (Business Fixed Investment)
b) Residential Investment (Residence Construction)
c) Investments inventory (Inventory Investment)

- Financial Investments

An investment on securities like stocks and others. Each investment has characteristics that are different from each other, which can be seen in the rate of return (return), the level of risk, legal status, and the rate of tax or the results received from the investment made. Therefore, in making an investment selection decisions should not rely solely on the expected rate only.

Theory of Foreign Direct Investment

Foreign investment (foreign direct investment) aims to make a profit through the creation of a production or services performed by foreign parties in order to invest in one country. According to Krugman & Obsfeld (2003), FDI is an international capital flows where a company in a country set up or expand their company branches in other countries. FDI is not only concerned with the problem of transfer of resources, but also related to control issues.There are several theories about FDI, among others: Theory Duning (1981).

Tax Revenue (Tax Revenue)

In general, the tax is defined as the levies of the country to its people, coercive. Taxes are used to finance government expenditures, including financing for development that are useful for the common good.

Diverse understanding of tax experts, then abstracted by Waluyo, 2010, are as follows:

- Taxes levied under the laws and rules of procedure that are enforceable.
- In the tax payments can not be shown for individual contra the government.
- Tax levied by the state both central government and local government.
- Tax expenditures earmarked for the government, that if there is still a surplus of revenues, used to finance public investment.
- The tax may also have a purpose other than budgetary, but also to regulate.

Global Competitiveness (GCI)

Competitiveness is the capacity to face the challenges of international market competition and maintain or increase their real income (Council of Competitiveness, Washington, DC 2006)

Competitiveness is the ability to produce goods and services that meet the International, and in the same time also can mempengauhi country's income level is high and sustainable, or the ability of the area generate income and employment high with stay open to competition external (European Commission, 1999)

Based institute of the World Economic Forum (WEF), the competitiveness of the national economy's ability to achieve high economic growth and sustainable. Components include the right policies, appropriate institutional, economic characteristics which support the realization of high economic growth and sustainable.

Trade Openness

Foreign investment is one form of the openness of the economy apart from international trade (Kappel, 2003). Kappel stated that the concept of openness profitable economy through international trade, international capital transactions and the exchange of international knowledge and information. Openness in terms of foreign capital can accelerate the gross domestic product due to the entry of foreign investment can add factors - both domestic production factors regarding quantity and quality and then encourage economic growth.

Inflation

According to Boediono in Suhendra (2010), inflation is the tendency of prices to rise in general and continuously. The increase in the price of one or two items alone can not be called inflation, unless the increase is widespread or result in increases in.

Framework

Based on the theory and study of some previous research that has been stated above, the formulation of the model proposed in this study are as follows:

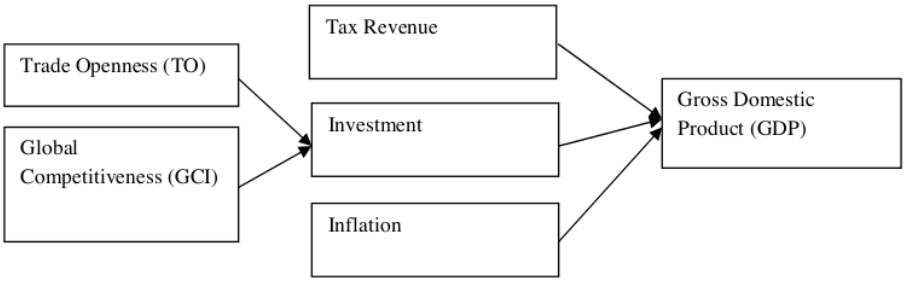

Figure 1 Framework
Resource : Author

Research Methodology

As mentioned above, the authors will analysis the formulas problems that exist in the ASEAN-6. This study is limited in scope Yasng more specifically, that in several ASEAN countries. This study aims to determine the effect of independent variables in the form of state revenue from taxes (TaxR), Global Competitiveness (GCI)), Disclosure of Commerce (TO), and Inflation (INF) on the dependent variable (Economic Growth in the ASEAN-6) spelled out in the econometric model. The data used in this study is a secondary data analysis as a percentage where the data will be processed using a data panel with E Views.

Research Design and Modelling

The design of the model that will be proposed in the regression model with six variables and 2 models, namely:

- Investment = f (Global Competitiveness, Trade Openness)
- Economic Growth = f (Tax Revenue, Investment, and Inflation)

Data Analysis Model

The analytical tool used in this research is the analysis of the panel and use the help of a software analysis tool E-views.Analisis Data Panel. Panel data is data that has dimensions of space and time, which is a combination of data cross (cross section) with time series data (time series). If each unit cross section has a number of time series observations are the same then referred to as a balanced panel. Conversely, if the number of observations is different for each unit cross section is called unbalanced panel.

Fixed coefficient between Time and Individuals (Common effect)

This technique does not change by making a regression with cross section data or time series. However, for the data panel, before making a regression we should incorporate cross-section data with time-series data (the data pool). Then the combined data is treated as a unit of observation to estimate the model with OLS method.

Fixed Effects Model

At common effect, we assume that the intercept and the slope is the same, both over time and between companies. However, this assumption is clearly very far from the reality of the situation. The existence of the variables that are not all included in the model equations allow for an intercept that is not constant. Or in other words, this intercept may be changed for each individual and time. Thought is the primary rationale Fixed effect model building, which is a panel data estimation technique using dummy variables to capture the diversity intercept. But the weakness of the model Fixed effect is sometimes added a dummy variable that will reduce the efficiency of parameter estimates.ModelEfek Random (*Random effect*).

Random techniques this effect into account that the error may be correlated throughout the time series and cross section. Thus, the model Random effect is a technique to cope with the uncertainty of the model used by Fixed effect. Error individually and in combination error assumed uncorrelated. In this model, the use of degrees of freedom to be more efficient because it does not reduce in number as the fixed effects model.

Testing Instrument (Selection of Estimation Model)

The purpose of this test is to see the model estimates the best and most appropriate for estimating the results in this study. In testing the power panel, there are three models produced.Pemilihan Model Regresi Data Panel.

As is known, there are three types of estimation techniques panel data regression model, ie a model with methods common effect, a model Fixed effects and random effects models. To make the selection of the panel models that have been produced, there are several tests that need to be done:

Chow Test

Chow test conducted to choose between models with fixed effects Common effects with the hypothesis:

Ho : Common Model better effect.
Ha : Model Fixed better effect.

Proposed decision is if the result of Prob. > F is smaller than the value of α (5 percent), then Ho will be rejected and Ha accepted. In other words, the model Fixed effectlebih well.Vice versa, if the results of Prob. <F greater than the value α, so Ho accepted and Ha rejected.

HausmanTest

Hausman test is used to determine the best model among the models Fixed effect and random effect. The hypothesis is as follows:

Ho: Model Random better effect
Ha: Model Fixed better effect

If the Probability of Chi-square> 0.05 then Ho is accepted models used Random effect. But if Probability <0.05, the model used is the Fixed effects. The process of selecting the model in the model panel can be seen in the chart below:

Garch Test

Garch test is one of the econometric model introduced by Engle (1982) and developed Bollerslev (1986). In the development of GARCH become a mainstay for time series analysis on the capital markets, which shows the volatility estimators. ARCH-GARCH models advantages compared to methods OLSadalah this model does not look heteroskedastisitas as a problem, namunjustru use it to create a model. In addition, this model not only produces forecasts of y, but also peramalandari variance. Changes in the variance is very important for example untukmemahami stock market and financial markets.

Discussion

In this fourth chapter will discuss the description of the data associated with each ASEAN-6 and in the next section is to discuss the results of the analysis that has been tested using the software E-Views.

Overview

Economic growth in the ASEAN-6

High economic growth is highly desirable for all countries or regions. National economic growth is calculated by GDP (Gross Domestic Product) can also be used as indicator of the rate of the national economy concerning the

effectiveness of the level of investment in and outside the ASEAN negeri.Perekonomian fast growing and relatively stable since 2000.

The data released by McKinsey Global Institute, Southeast Asia at the crossroad in November 2014 (Figure 3).

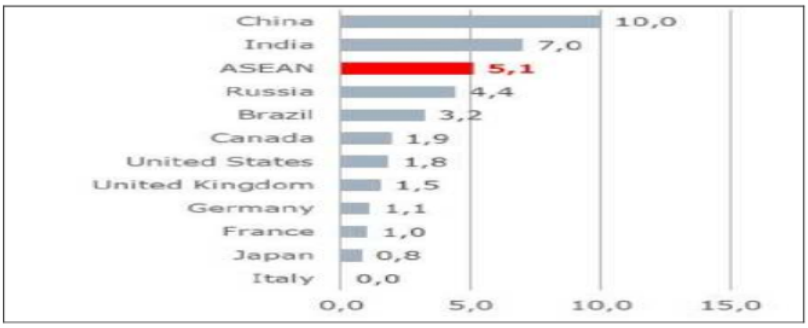

Figure 3 The growth of GDP in 2000-2013 (%)
Resource: McKinsey Global Institute

ASEAN is ranked third with 5.1 percentage points in GDP growth after China and India. Even countries Italy shows the percentage of 0% for GDP growth in 2000-2013.

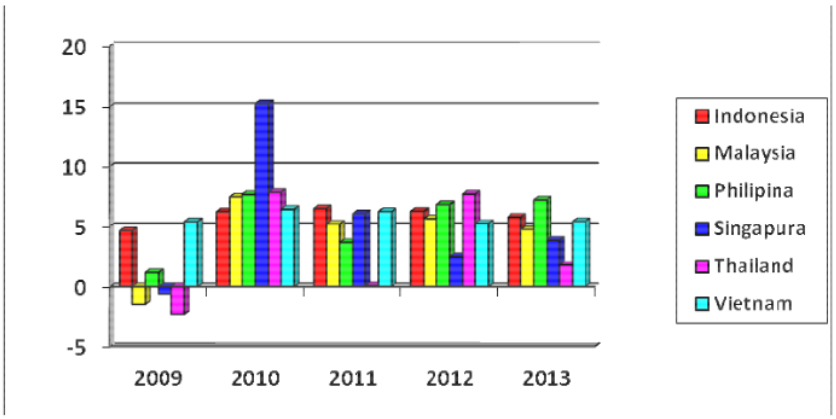

Figure 4 Economic Growth (%) in the ASEAN-6
Resource: World Bank 2015

Based on the above picture, the three ASEAN-6 (Malaysia, Singapore, and Thailand) experienced negative economic growth in 2009. This is the impact of the global economic crisis affecting the economic growth in each country. Joachin Von Amsberg which is an economist and president of the World Bank in a seminar on "Global Economy and the Road to Recovery" states the global economic crisis make economic growth in the countries of the ASEAN region fell compared to the previous year. Positive economic growth can be seen from Indonesia, China, India, and the Philippines.

Investments ASEAN-6

Good economic growth in ASEAN countries led to increased investment in the country. Based on data reported by the ASEAN states that in 2014, the AEC was ranked the fourth largest in the world (Figure 5)

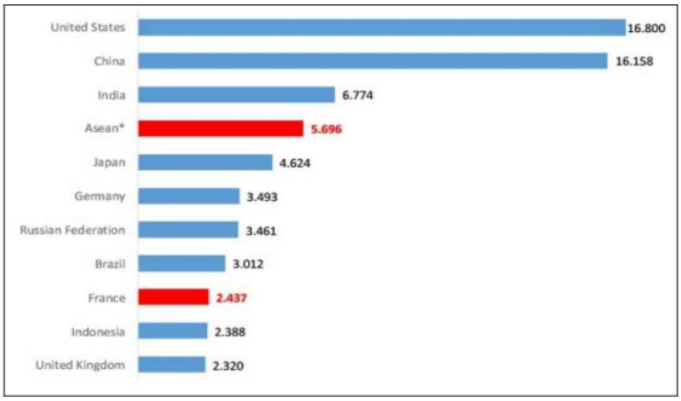

Figure 5 ranking in the World Economy
Source: ASEAN Data

Good economy ratings spur investors to invest in the country. It can be seen from the increase in FDI (Foreign Direct Investment) originating from ASEAN countries and of the world that occurred in 2000 and 2011.

Table 3
U $ Billion FDI inflow in 2000 and 2011

Country	2000		2011	
	ASEAN	World	ASEAN	World
Brunei Darussalam	10,62	538,99	67,47	1.140,83
Kamboja	-	148,50	223,82	667,92
Indonesia	(232,55)	(4.317,43)	8.338,15	10.903,46
Laos	13,72	20,29	53,96	246,78
Malaysia	258,12	3.529,51	2.664,32	9.336,57
Myanmar	74,02	133,98	na	Na
Philippina	125,40	2.114,22	(106,98)	1.368,98
Singapura	12,30	14.739,90	13.213,40	50.783,80
Thailand	389,03	2.961,22	317,13	7.460,96
Vietnam	202,39	1.086,31	1.499,38	5.930,62
Total			26.270,65	87.839,92
Total of growth (%)			2.979,61	319,17

Source: ASEAN Secretariat, September 2013

Based on the above data, it can be seen that in 2000, Indonesia has a minus value in FDI from ASEAN countries as well as from countries around the world. Whereas in 2011, Indonesia was rated second after Singapore's biggest FDI. As well as Singapore in 2000 just to attract the foreign investors in addition to ASEAN, in 2011 Singapore get the largest FDI inflow of ASEAN countries and also from around the world.

TaxRevenue ASEAN-6 Country

Tax has a very important role for state financing.

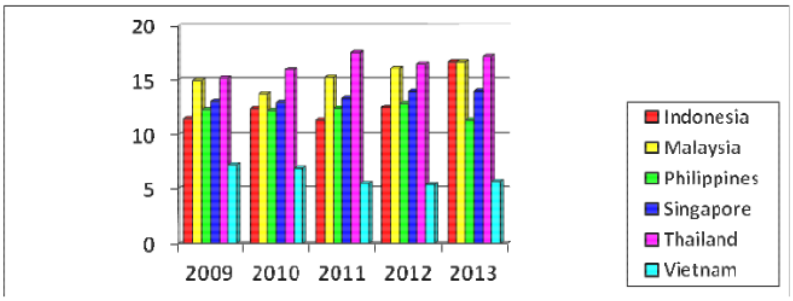

Figure 6 Data of Revenue to GDP of ASEAN-6
Source: World Bank 2015

Based on data of the OECD (Organisation for Economic Cooperation and Development), Taxratio in Indonesia lagged behind neighboring countries in ASEAN, especially Thailand with Taxratio above 15% and Malaysia over 14%. However, the State of Vietnam is still much smaller ratio of tax revenue compared to the five other ASEAN countries with an average value of 6% (Figure 7).

It can be concluded that the State Thailand is a country which has the highest tax revenue compared to the five other ASEAN countries. Unlike the five other countries, Vietnam has the lowest tax sources.

nflation in the ASEAN-6

Inflation in economics is defined as a process of rising prices in general and continuously associated with the market mechanism and can be caused by various factors, among others, private consumption increased, excess liquidity in the market that trigger consumption, or even speculation, to include also due to the lack of launch distribution of goods. (Business News, January 3, 2011). Inflation is important to monitor because it is closely related to people's purchasing power. Inflation developments in ASEAN-6 quite volatile during the period 2009 to 2013.

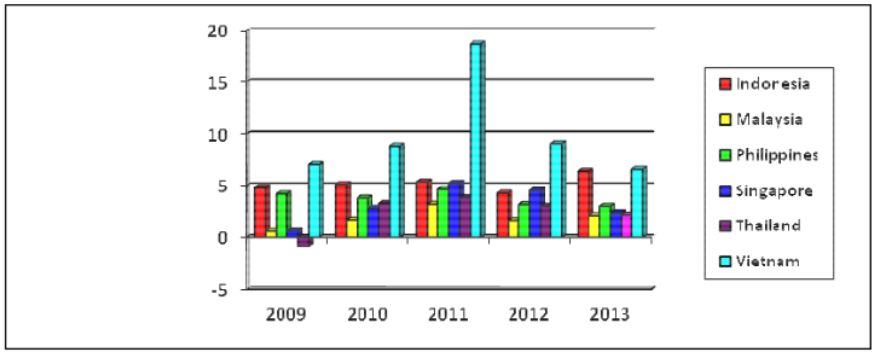

Figure 7 The inflation rate in the ASEAN-6
Resource: World Bank, 2015

In other ASEAN countries, the movement of the inflation rate is also quite volatile. But in contrast to Thailand which inflation rates soared in 2011, this is caused by massive flooding that melada several provinces. These floods caused losses because many agricultural and industrial land inundated by the flood. So the production and distribution of goods to be blocked.

If you see in the picture above, Vietnam has a high inflation rate in 2012. Meanwhile, only five other countries have inflation rates are under 5%. Based on data from the International Monetary Fund in 2010, the macroeconomic policy in Vietnam is still relatively weak, apart from the lack of transparency by the government in the country.

The power level Competitiveness (GCI) in the ASEAN-6

Along with the change and development of the age, the current competitiveness has an important role for the progress of a country, developed countries have high levels of competitiveness. This competitiveness will then menyebabkanpersaingan between countries.

Competitiveness is closely associated with the level of productivity. WEF defines competitiveness is "competitiveness as the set of institutions, policies, and factors that Determine the level of productivity of a country." Filo (2007) explains that competitiveness is the trend and skills to compete, win, and retain a position in the market , to increase market share and profitability, and ultimately to consolidate the commercial success.

From Figure 6 below shows that the competitiveness of Singapore's fifth highest compared to other ASEAN countries even get into the top 10 positions in competitiveness ranking continues to increase every year. In 2010 the competitiveness ranking Singapore is 7, while in 2011 and 2013 ranked Singapore is stable at 2.

Table 4. Competitiveness ranking ASEAN-6

Country	Years					
	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013
Indonesia	54	55	54	44	46	40
Malaysia	21	21	24	26	21	25
Philippina	71	71	87	85	75	65
Singapore	7	5	3	3	2	2
Thailand	28	34	36	38	39	38
Vietnam	68	70	75	59	65	75

Resource: ASEAN Secretariat

In contrast to the Philippines, which is the country with the most low competitiveness compared to five other ASEAN countries. Philippines ranks 71 for 2 years in a row and dropped to 87 in 2009-2010. While climbed to 75 in 2011 and 65 ranked in 2012.

Trade Openness in ASEAN-6

Economic openness index is the ratio of total trade (Export + import) to Gross Domestic Product (GDP). The more the value of a country's openness, meaning the country is open to trade traffic.

Economic openness index is the ratio of total trade (Export + import) to Gross Domestic Product (GDP). The more the value of a country's openness, meaning the country is open to trade traffic.

If seen in Figure 8, Singapore has a high degree of trade openness compared to the five other ASEAN countries. This is in accordance degan amount of export and import activities undertaken by the state of Singapore. While the value of openness is Malaysia's second highest.

On the other hand, two countries that have a value of trade openness is the smallest Indonesia and the Philippines. Value of trade openness Indonesia is only one seventh of the value of trade openness Singapore.

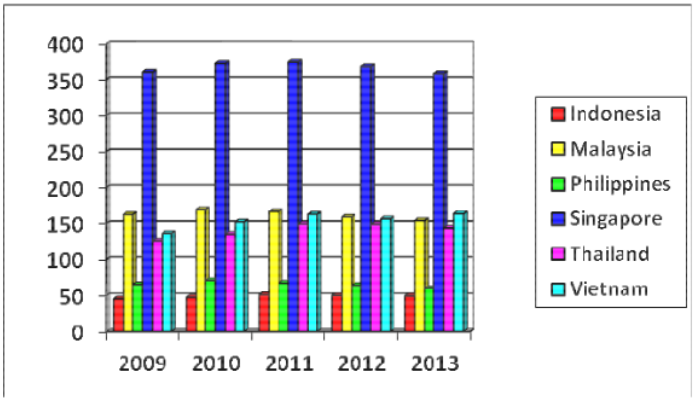

Figure 8 Level of Trade Openness in ASEAN-6
Source: World Bank 2015

Data Analysis

Discussion analysis done by interpreting the results of data processing using the instrument panel with the help of software E-Views. Analysis of this discussion will affect the results of the research objectives was made.

There are two test models, namely:
1. Investment = f (open & Trade Global Competitiveness)
2. Economic Pertubuhan = f (Inflation, Tax Revenue and Investments).

Hypothesis Testing

Based on the results of hypothesis testing, the obtained result

Table 5. Equation 1 Results Estimation Method of Fixed effect

Variabel Dependent (Investment)			
Variables	**Hypothesis**	**Probability**	**Coefficient**
***Trade openness* (TO)**	+	0.7831	-0.012378
Global competitiveness Index **(GCI)**	+	0.0190	1.601416
C	+	0.9498	0.565694
Prob F-Stat			0.00000
Adjusted R-Squared			0.835886

Source: Data processed

All variables have a positive influence on the investment. But from the above test result, trade openness has a minus coefficient values different from the theory should be. If seen from the value of 0.7831 probability that its value is greater than 0.05 (5% alpha), which can be inferred statistically there is no influence on the TO INV.Sedangkan value of the coefficient is -0.012378, which means, if trade openness rose by 1%, then the investment will go down by 0.012378%. Supposedly, the greater the level of international trade is done by ASEAN, the greater the investment into the country.

Trade openness is the ratio of trade (exports + imports) to GDP, a negative result can be caused by import levels were too large for the export market. It occurs in some ASEAN-6 countries such as Indonesia, which has a balance of trade deficit.

Table 6

Trade Balance ASEAN-6 (Billion U $)

Country	NetExport ASEAN-6			
	2010	2011	2012	2013
Indonesia	-5.56	-9.01	-11.83	-13.22
Malaysia	5,79	3,96	6,14	9,15
Singapura	31,98	49,54	50,17	51,43
Philippina	-5,32	-7,02	-5,72	-6,19
Thailand	13,6	16,24	15,56	16,72
Vietnam	-6,06	-7,33	-3,45	-2,88

Resource: ASEAN Secretariat

From the above table, it can be seen that there are still many countries in the ASEAN-6 that the trade balance is still in deficit.

In contrast to the the results of competitiveness. Competitiveness become an important element in glbalisasi era. According to the World Bank (2014), the countries in the ASEAN region needs to give more attention to the development efforts of competitiveness through higher productivity development accompanied by investment in education and training in the younger generation. Competitiveness index is based on this test has a value of 0.0190 which is a smaller probability of alpha 0:05 / 5%, it is concluded that the statistical confidence level of 95% there is a positive influence on the investment GCI. And when viewed from the value of the coefficient, if GCI increased by 1%, the country's investment subsidiary increased by 1.601416%.

Data Human Development Index (HDI) which was issued by the United Nations show that 50% of ASEAN countries still are at the stage of development of quality human being. In addition, GCI increase should remain in Boost as GCI can describe how to rank a country compared to other countries which are useful for the government because it can be used as a benchmarking with other countries. Thus, when the rank of a country menungkat, eating investors will be more interested to invest in the country.

Test Instruments (Selection of Estimation Model) - The second model

Test instrument is the same as the previous test, but the model used is the Economic Growth = f (Inflation, Receipt of Tax and Investment).

Next page

Table 7. Equation 2 Comparison of Results Estimates

Variable	*Common effect* Coefficient	*Fixed effect* Coefficient	*Random effect* Coefficient	
C	3.112503	12.37321	3.112503	**
INF	0.062687	-0.048153	0.062687	
TAX	0.142577	-0.183137	0.142577	
INVFIT	0.041354	-0.754504	0.041354	
R^2	0.066558	0.124654	0.429452	
Adjusted R^2	0.016553	-0.012655	0.409433	
F-Statistik	1.331013	0.907837	21.45199	***

Resource: *World Bank, 2015 (data processing with Eviews 7.0)*
Description: * *Significant, alpha 10%*
** *Significant, alpha 5%*
*** *Significant, alpha 1%*

After testing Testing instrument, then the Chow Test in the second model.

Table 8. Results of Elections Estimation Model Common effects and Individual Effect

Method	Probabilita Chi-square	Conclusion	Description
Chow *Test*	0.5704	Ho fail rejected	*Common effect*

Resource: Data Processed (Eviews 7.0)

Tests using Chow Test Hypothesis:
(H0): Model common effect better
(Ha): Model Individual better Effect
Probability values obtained from the Chi square of 0.5704> 0.05. Thus the null hypothesis (H0) fails rejected, so that a better model to use is a common effect estimation with the classic assumption test, the test did not proceed due to LM test coefficient between the common effect with random effect sama.Menggunakan OLS method in the equation have the disease heteroskedastisitas, when performed accommodation that occur in the equation are multikolinearitas and heteroskedastisitas disease is not cured. By because they were transformed using analytical methods now GARCH where this method has been to adjust the heteroscedasticity in the equation. The first step is the testing of normality test, where this test is used to see if the residual values are normally distributed or not. A good regression model is normally distributed if the residual value. Hypotheses used are:

Ho: Distribution error normal
Ha: Distribution error not normal

Decision-making If the probability is less than 0.05 then Ho is rejected (contrast).

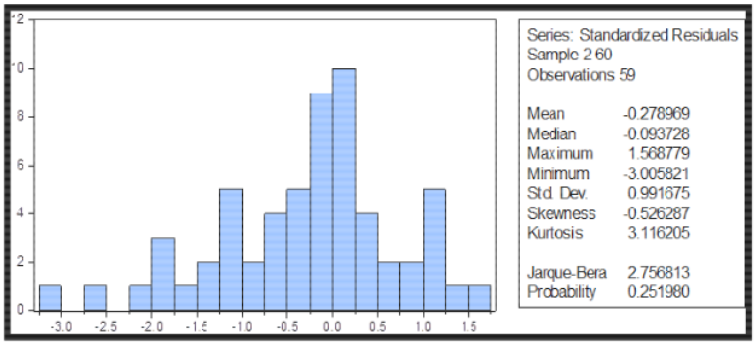

Figure 9 Normality Test Results
Resource: Data processed

Based on calculations using normality test, the data show the value prob. of Jarque Bera amounted to 0.251980 greater than 0:05, so the data distribution of the normal error.

Multikollienaritas further testing which aims to tell whether or not a high correlation between independent variables in the model. If there is a high correlation between the independent variables, the relationship between independent variables and the dependent variable to be disrupted.

Tabel 9. Multicolinieritas Test

	INF	**INVF**	***TAX***
INF	1.000000	-0.179593	0.088332
INVF	-0.179593	1.000000	0.446972
TAX	0.088332	0.446972	1.000000

Resource: Data Processed (Eviews 7.0)

Based on test results is known that there is no multicollinearity between the independent variables because of the correlation between the independent variable. This is because the value of all the variables under 0.75.

Further testing with Garch method. This method regressed and accommodates the hetero in an equation models. In addition, this method has advantages compared with the OLS method.
That is :

- This model does not look heteroskedastisitas as a problem, but instead use it to create a model.
- This model not only produces forecasts of y, but also peramalandari variance. Changes in the variance is very important for example untukmemahami stock market and financial markets.

Next page

Table 10
Result TestGARCH

F-statistic	0.008038	Prob. F(1,56)	0.9289
Obs*R-squared	0.008324	Prob. Chi-Square(1)	0.9273

Resource: Data Processed (Eviews 7.0)

Based on test results Garch above, it is known that the probability of Chi-Square (1) amounted to 0.9273> 0.05, which means that the model in this study free from disease autocorrelation.

Final testing is T test, where the test is done simultaneously to determine how the effect of all independent variables together against the dependent variable.

Table 11. T test

Variable	Coefficient	Std. Error	z-Statistic	Prob.
GARCH	0.007375	0.002177	3.387161	0.0007
C	4.685555	0.277324	16.89561	0.0000
INF	-0.033702	0.009515	-3.542168	0.0004
INVF	0.106044	0.023528	4.507144	0.0000
TAX	0.118621	0.012600	9.414621	0.0000

Resource: Data Processed (Eviews 7.0)

In addition, T-test was conducted to test whether a significant regression model were used or not. If the model is significant, then the model can be used for analysis.

Referring to the research objectives and hypotheses exist, then the result is:

The Effect of Inflation on Economic Growth

Inflation-0.033702 coefficient value, which means that if the variable INF rose by 1% economic growth in six ASEAN countries will fall by 0.033702% unit assuming ceteris paribus. This is in line with the theories and hypotheses that inflation has a negative influence on economic growth. Statistical tests showed prob value of 0.0004 <0.05 (5% alpha) showed statistically significant at the 95 percent confidence level are the negative effects of inflation on the economic growth. Inflation is an important factor in the economic growth of a country. This is due to the increase in inflation can affect many of the costs of production and may lead to instability ekonomi.Inflasi rising costs and result in an unstable economic growth.

Investments for Economic Growth

Inflation coefficient sum of 0.106044, which means if the rate of inflation rose by 1%, then economic growth will increase by 0.106044% assuming ceteris paribus. This result is supported by economic theory that is also consistent with the results of this test. Investment in a country is very important for the economic growth of the country. In addition, to convince investors to invest in a country is also not easy. The test results demonstrate the value statistic prob. amounted to 0.0000 <0.05 (5% alpha), the null hypothesis is rejected and it was concluded statistically significant at the 95 percent confidence level are positifInvestasi influence on economic growth.

Acceptance of Taxes on Economic Growth

Tax Revenue coefficient of 0.118621, which means if penerimaanPajak rose by 1% then PertumbuhanEkonomi will increase by 0.118621% assuming ceteris paribus. The test results are consistent with the theory of state revenue. The test results showed statistical prob value of 0.0000 which is smaller than 0.05 (5% alpha) it can be concluded that the statistically significant at the 95 percent confidence level are positif Pajak influence on economic growth.

Table 12. Tax comparison ASEAN-6

Country	Tax System	Tax Funding	
Indonesia	Worldwide income	VAT 10%	Stock, Service, and import
Singapura	Source Income. Teritorial Income	VAT 7%	Stock, Service, and import
Malaysia	Worldwide income	Sales and services *Tax* 5%,20%, or 25%	Stock dand services
Thailand	Worldwide income	VAT 7%	Stock, Service, and import
Philippina	Worldwide income	VAT 12%	Stock, Service, and import
Vietnam	Worldwide income	VAT 5% and 10%	Stock, Service, and import

Resource : www.ibfd.org

Based on data released by general taxes, the results of these tests can be evidenced by the growth of the economy increase with increases of tax revenue in each year. In addition, many sources of tax in each country of ASEAN-6 is another factor increase economic growth.

Conclusions and Implications for Research

Conclusions

Research Analysis of determinants of economic growth in the ASEAN-6 period 2004-2013 using panel regression method 2 step. The result is that in the first step, variable trade openness and no significant negative impact on the investment but its sig value of 0.7831 which express the degree of confidence doubtful. While GCI significant and reaches 95% confidence level. In the second step, where the variables in the test Yag is revenue from taxes, inflation, and investment, all significant variables and according to the theory of economic growth in the ASEAN-6

Implications for Research

Based on the research conclusions can provide advice to the factors of economic growth in the ASEAN-6 can be improved. The discussion is:

- Cooperation between ASEAN countries and make the MEA in December 2015 into economic growth opportunities, not threats of economic growth.
- Increase productivity and innovation in order to increase investment in the country.
- Increase investment opportunities in the ASEAN region by running the ASEAN Comprehensive Investment Agreement (ACIA) and improve the supporting facilities investment activities.
- In terms of taxes, improve tax payment system so that taxpayers easily willing to pay the tax.
- Strengthening the foundations of economic security to prevent malicious inflation due to global economic turmoil.
- Making the rules between ASEAN anticipation of unfair competition. Government support for their respective countries as a commitment in achieving the AEC 2015.

References

[1] Ambarsari, Indah and Purnomo, Didit. (2005). Study on Foreign Investment in Indonesia, *Journal of Economics and Development*, *Volume 6, No. 1, hal. 26- 47*

[2] Anoraga, Pandji. (2005). *Business Management*. Jakarta :RinekaCipta.
[3] ASEAN Investment Report. (2011). *Sustaining FDI Flows in a Post-crisis World,Jakarta: ASEAN Secretariat,November 2011*. accessed December 7, 2011 from http://www.ASEAN.org/22073.htm
[4] Asiedu, Elizabeth. (2002). On the Determinants of Foreign Direct Investment to Developing Countries: Is Africa Different?. *World Development Vol. 30. No. 1, pp. 107-119*.
[5] Bank Indonesia. (2013). *InflatioN*. http://www.bi.go.id/id/moneter/inflasi /pengenalan /Contents/ Default.aspx. Accessed November 5, 2013.
[6] Book Your, Jamal. (2003). The Determining Factors of Foreign Direct Investment. *My Ideas*, Université de Pau et des Pays de l'Adour, France. www.theses.fr/2011**PAU**U1020.pd
[7] Dornbusch, Stanley F. dan Richard Startz.(2011). Macroeconomics. Edisi kesebelas. New York: McGraw-Hill.
[8] Dunning, John H. (1981). Explaining the international direct investment position of countries: towards a dynamic or developmental approach, *Weltwirtschaftliches Archiv, 117, 1, pp. 30-64*
[9] Fuad, Erdal & Ekrem, Tatoglu. (2002). Locational Determinant of Foreign Direct Invesment in a Emerging Market Economy: Evidence from Turkey. *Multinational Business Review, Vol.10, No.1*.
[10] Gujarati, Damodar N. (2003). *Basic Econometrics, forth edition*..Jakarta: Erlangga.
[11] Jhingan M.L. (2008). *Economic Development and Design*. Jakarta: Raja Grafindo Persada.
[12] Jorgenson, Dale W. (1967). *The Theory Investment Behaviour*. Electronic Book from the National Bureau of Economic Research.
[13] Krugman, PR., and Obstfeld, Maurice. (2002). *International Economic Theory and Policy Second Edition*. Jakarta: Raja Grafindo Persada.
[14] Kuncoro, M. (2009). *Economicof Indonesia: the Dynamics of the Business Environment in the Midst of the Global Crisis*. Fourth edition. UPP STIM YKPN Yogyakarta.
[15] Mankiw, N. Gregory. (2002). *Principle Of Macroeconomic*. International Student Edition. Third Edition Singapore: Thomson South-Western
[16] Mankiw, N. Gregory. (2006). *Macroeconomic,* sixth edition. Jakarta. Erlangga.
[17] Todaro, M.P. (2000). *Economic Development, Seventh Edition*, New York University, Addison Mesley.
[18] Nonnemberg, MB. And Mario M. (2004). TheDeterminants of Foreign Direct Investment in Developing Countries, *Proceedings of the 32th Brazilian Economics Meeting*. ANPEC - Brazilian Association of Graduate Programs in Economics.
[19] Rahayu, Tri. (2010). Analysis of the Factors that Affect Foreign Investment in Indonesia (1994: 1-2008: 4). *Journal of Economic Development*, F.0105021-2010, Surakarta .
[20] Rohmana, Yana. (2010). *Analysis of factors Affecting the Indonesian Foreign Direct Investment in the period 1980-2008*, Jakarta.
[21] Romer, D. (2006). *Advance Macroeconomics*.,3rd Edition., New York. McGrawHill
[22] Sukirno, Sadono. (2000). *Makroekonomi Modern: Perkembangan Pemikiran dari Klasik hingga Keynesian baru*. Jakarta: Raja Grafindo Persada.
[23] Salvadori, Neri. The Theory of Economic Growth: A 'Classical' Perspective. *Edited by* Neri Salvadori. Edward Elgar. Cheltenham, UK • Northampton, MA, USA. http://growthbook2.ec.unipi.it/ papers Libro/ Intro.pdf
[24] Sarwedi. (2002). Foreign Direct Investment in Indonesia and the factors that influence, *Journal of Accounting and Finance*, *Vol. 4, No. 1*, University of Kristen Petra, Surabaya.
[25] Tambunan, Tulus. (2006). *Growth of Foreign Investment in Indonesia and Encountering problems*, Jakarta. Ghalia
[26] Waluyo. (2010). *Indonesia Taxation*. Jakarta: Salemba Empat.
[27] World Bank. (2015). http://www.worldbank.org/

The Effect of Global Competitiveness and Trade Openness through the Investment, Tax, and Inflation towards Economic Growth

ORIGINALITY REPORT

24%	21%	9%	13%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	Submitted to Technological Institute of the Philippines Student Paper	2%
2	Submitted to Academic Library Consortium Student Paper	2%
3	123dok.com Internet Source	1%
4	digilib.unimed.ac.id Internet Source	1%
5	repositorii.urindo.ac.id Internet Source	1%
6	serialsjournals.com Internet Source	1%
7	media.neliti.com Internet Source	1%
8	repository.president.ac.id Internet Source	1%

9	Submitted to Asia e University Student Paper	1 %
10	knepublishing.com Internet Source	1 %
11	umexpert.um.edu.my Internet Source	1 %
12	"The International Conference on ASEAN 2019", Walter de Gruyter GmbH, 2019 Publication	1 %
13	Nurwati, Etty, Noer Azam Achsani, Didin Hafidhuddin, and Nunung Nuryartono. "Market Structure and Bank Performance: Empirical Evidence of Islamic Banking in Indonesia", Asian Social Science, 2014. Publication	1 %
14	euacademic.org Internet Source	1 %
15	Submitted to University of Melbourne Student Paper	<1 %
16	jurnal.umuslim.ac.id Internet Source	<1 %
17	www.ontariointernational.org Internet Source	<1 %
18	jurnal.fe.umi.ac.id Internet Source	<1 %

19	jimfeb.ub.ac.id Internet Source	<1 %
20	repository.ub.ac.id Internet Source	<1 %
21	repository.umy.ac.id Internet Source	<1 %
22	garuda.ristekdikti.go.id Internet Source	<1 %
23	www.researchgate.net Internet Source	<1 %
24	Submitted to Segi University College Student Paper	<1 %
25	repository.bsi.ac.id Internet Source	<1 %
26	Amaka G. Metu, Chekwube V. Madichie, Uchenna N. Anyanwu, Chris U. Kalu, Okezie A. Ihugba. "chapter 6 Economic Diversification and Inclusive Growth in Nigeria", IGI Global, 2020 Publication	<1 %
27	Submitted to University of Bradford Student Paper	<1 %
28	My-Linh Thi Nguyen. "Foreign direct investment and economic growth: The role of	<1 %

financial development", Cogent Business & Management, 2022
Publication

29	docplayer.net Internet Source	<1%
30	www.ritsumei.ac.jp Internet Source	<1%
31	bircu-journal.com Internet Source	<1%
32	Submitted to Universitas Jenderal Soedirman Student Paper	<1%
33	eprints.unsri.ac.id Internet Source	<1%
34	Submitted to Trisakti University Student Paper	<1%
35	educationatkekinian.blogspot.com Internet Source	<1%
36	repo.unand.ac.id Internet Source	<1%
37	unsworks.unsw.edu.au Internet Source	<1%
38	www.generatevalue.com Internet Source	<1%

39	Submitted to Management & Science University Student Paper	<1%
40	Sonia Kumari Selvarajan, Rossazana Ab-Rahim, Dyg-Affizzah Awg-Marikan. "Does Financial Liberalization Foster Economic Growth? Empirical Evidence from ASEAN-6 Countries", International Journal of Engineering & Technology, 2018 Publication	<1%
41	Submitted to Universitas Negeri Surabaya The State University of Surabaya Student Paper	<1%
42	ejournal.uin-suka.ac.id Internet Source	<1%
43	john.foeh.staff.gunadarma.ac.id Internet Source	<1%
44	ekonferencije.com Internet Source	<1%
45	jurnal.untan.ac.id Internet Source	<1%
46	www.bjbde.org Internet Source	<1%
47	eprints.ugd.edu.mk Internet Source	<1%

48	ijabr.polban.ac.id Internet Source	<1 %
49	rjoas.com Internet Source	<1 %
50	vdocuments.site Internet Source	<1 %
51	ijisrt.com Internet Source	<1 %
52	journal.unpas.ac.id Internet Source	<1 %
53	publication-bi.org Internet Source	<1 %
54	repository.uhamka.ac.id Internet Source	<1 %
55	uir.unisa.ac.za Internet Source	<1 %
56	webh01.ua.ac.be Internet Source	<1 %

Exclude quotes	On	Exclude matches	Off
Exclude bibliography	On		

The Effect of Global Competitiveness and Trade Openness through the Investment, Tax, and Inflation towards Economic Growth

GRADEMARK REPORT

FINAL GRADE

/1000

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