Relationship of Trade Openness, Financial Openness, and Unemployment Rate in ASEAN

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ABSTRACT
This study discusses the role of economic globalization in reducing unemployment in ASEAN. The purpose of this study is to test and analyze the effect of economic globalization on unemployment in ASEAN. The method used is GMM with the period 1996-2021. Estimation results indicate that economic growth and inflation have a significant negative effect on the unemployment rate in ASEAN, while economic globalization and trade openness have a significant positive effect on unemployment in ASEAN, but financial risk does not have a significant effect on unemployment in ASEAN.

Keyword: *GMM, Unemployment, Economic Growth, Inflation, Economic Globalization, Trade Openness, Financial Openness*

INTRODUCTION

The phenomenon of economic globalization is one of the interesting economic phenomena to continue to be analyzed and developed. This phenomenon is interesting to study because economic systems become more interconnected between countries (Verter & Osakwe, 2015). Economic globalization will improve economic interdependence and increase competition between countries, not only in international trade but also in investment, finance, and production.

The increasing interdependence relationship between countries means that economic activities are increasingly open. The increasing interdependence relationship between countries means that economic activities are increasingly open. Factors that cause economic activity to become more open include increasingly communication and transportation modern; more open foreign exchange traffic; full use of comparative advantage and competitive advantage every country; production and assembly methods with increasingly efficient management organizations; and the development of multinational companies in almost all the world is growing (Hendra, 2005)

A country increasingly opens its economy after World War II, thus encouraging the development of economic globalization. Economic globalization emerged after World War II which was marked by the emergence of interstate trade cooperation, and its development increased in the last 20-30 years due to the

framework of the General Agreement on Tariffs and Trade (GATT), as well as the World Trade Organization. The source of the framework can define economic globalization. Economic globalization is a process of integration of the domestic economy into the global economic system (Kılıçarslan & Dumrul, 2018).

This economic integration causes the economic system to be more open. This is because economic integration has erased economic barriers between countries, thus creating trade liberalization, and resulting in decreasing government control. Government control for countries that support economic globalization decreases because economic activity is determined by global market power, not determined by policies or regulations by individual governments. This condition is one of the negative impacts of economic globalization.

The government individually even though it cannot determine economic activities, but the governments of each country can still measure the degree of globalization of the country's economy. The degree of economic globalization of a country in the world economy can be seen from the two main indicators (Georgantopoulos & Tsamis, 2011). First, the ratio of the number of exports and imports to GDP. The higher ratio of exports and imports to GDP indicates the more open the country's economy. The first indicator is called trade openness. Second, the contribution of the amount of long-term investment or direct foreign investment and indirect or short-term investment (portfolio investment) to GDP. The higher contribution of foreign direct investment and portfolio investment to GDP indicates the more open the country's economy. The second indicator is called the financial openness.

The second measurement of the economic globalization of a country previously described is called the de facto method, while the other method is de jure (Alfaro & Charlton, 2006). De jure measures regulatory restrictions on capital account transactions and does not reflect the development of actual capital inflows while de facto measures the actual degree (Chinn & Ito, 2008).

Financial openness and trade openness implemented by South East Asian countries. Evidence of Southeast Asian countries has implemented economic integration, namely forming the ASEAN (Association of Southeast Asian Nations) (Suci, Asmara, & Mulatsih, 2015). The ASEAN (Association of Southeast Asian Nations) has been established since 1967 to encourage economic development, unity, and stability in its member countries. Since it was formed in 1967, there are still problems in the member countries that have not been answered. One of the problems faced by the ASEAN (Association of Southeast Asian Nations) is the unemployment rate. ASEAN countries if they have a high unemployment rate will encourage economic instability (Maqbool, Mahmood, Sattar, & Bhalli, 2013). Large unemployment also raises criminal problems, decreases human capital, misery, and social instability (Oniore, Bernard, & Gyang, 2015). Leaders in ASEAN countries will be worried if the unemployment rate in each of their countries is high.

The unemployment rate analyzed is focused on ASEAN countries, such as Indonesia, Malaysia, the Philippines, Thailand, Singapore, and Vietnam. This is

because the six countries are classified as developing and developed countries, and have good economic performance, but have a high unemployment rate. The problem of unemployment can actually be solved by five ASEAN countries. This is because potentially ASEAN has the ability to develop its human resources. This ability can be seen from various policies made by each country to increase human capital. The constraints faced are the growth of a high number of workers have not absorbed.

Unemployment in ASEAN is caused by several things. First, unemployment in ASEAN occurs not because it is cyclical but is caused by structural problems. Second, the rigidity of the labor market in ASEAN. This happens because the labor market is largely controlled by the government in terms of labor demand. Third, the economic framework in several ASEAN countries is undergoing a transformation. This condition also means that in some ASEAN member countries it has not been able to manage the existing workforce.

After the global economic crisis and the ASEAN Economic Community (MEA) were formed, the unemployment rate in ASEAN countries was relatively low, even though the unemployment rate in each country was different. Differences in unemployment rates due to different labor market conditions, differences in the number of labor force, and differences in the number of jobs (Kreishan, 2011). Low unemployment means that Governments in each ASEAN country continue to work both individually and bilaterally or multilaterally to improve economic conditions better (Hussin & Saidin, 2012).

Examples of countries that have low unemployment rates during 2000-2017 are Vietnam. The unemployment rate in Vietnam is mostly youth unemployment, so to suppress this problem, the Government of Vietnam implements the unemployment insurance regime (Trang, Tho, & Hong, 2017). Indonesia is also a country that has attention to the problem of the unemployment rate. The unemployment rate in Indonesia is above economic growth before the global economic crisis and before the MEA was formed, but after the economic crisis and the MEA formed the unemployment rate below economic growth. Changes in improving this condition will not be separated from various international cooperation and the Indonesian Government itself. One policy that is useful for improving the quality of human resources is the revitalization of vocational education and the opening of distance universities (BPS, 2016). The Philippines, Malaysia, Singapore, and Thailand have unemployment rate were relatively low every year. The Philippines, Malaysia, Singapore and Thailand have relatively low acceptance rates every year.

This study helps explain the effects of economic globalization on unemployment in ASEAN countries, so that each country can formulate the right economic policies and are expected to solve the problem. Economic globalization with indicators of capital account openness can affect the unemployment rate. Capital account openness raises competition from domestic and foreign companies. The host country government will be worried if foreign companies operating in the

host country have greater economic power than domestic companies, thus reducing the performance of domestic companies. Foreign companies that have greater economic power can monopolize the market and raise prices on competitive markets, which is detrimental to the economic welfare of host countries (Palát, 2011). If foreign companies entering the host country produce output by using capital intensive employment opportunities will decrease and unemployment will increase.

The Austrian business cycle provides a different concept of capital account openness with unemployment. The concept explains that the relationship between openness of the capital account and unemployment is very clear. A country that adheres to an open economy, then foreign direct investment can be a solution to reduce the unemployment rate (Mucuk & Demirsel, 2013). Openness of the capital account has been found empirically to be an important variable in helping to reduce the unemployment rate (Irphan, Saad, Nor, Noor, & Ibrahim, 2016). In general, large openness of the capital account creates a broader labor market for local labor, technology and expertise assistance, and by helping the industrial development process to reduce unemployment.

Empirically economic globalization and unemployment rates have been investigated by Freund & Rijkers, (2014), Dutt, Mitra, & Ranjan, (2009), and Gozgor, (2017). The results of their research differ from one another. Freund & Rijkers, (2014) found that economic globalization with trade openness indicators had a significant positive effect on the unemployment rate, while the indicator of capital openness had a significant negative effect on the unemployment rate. Dutt et al., (2009) and Gozgor, (2017) found that the trade openness variable had a significant negative effect on the unemployment rate. Based on the differences in the results of these studies, it was further developed with this study, so that it could contribute to the academic literature. This study is to use all indicators of economic globalization. The purpose of using all indicators of economic globalization is to know and analyze indicators of economic globalization that have a significant effect on unemployment in ASEAN. Indicators of the globalization economy used include de facto and de jure.

This study does not forget to include control variables of economic growth and inflation rates. The two variables used in this study are based on Okun's law and Phillips's theory. Economic growth and unemployment have a close relationship because people who work contribute to the production of goods and services while unemployment does not contribute. Studies conducted by economists Okun indicate a negative relationship between economic growth and unemployment, so that the higher the economic growth, the lower the unemployment rate (Soylu, Çakmak, & Okur, 2018). The Philips theory explains that low inflation is often followed by high unemployment, and vice versa if high inflation can be followed by a low unemployment rate. So unemployment and inflation have a negative relationship.

This study contains four parts. Part I shows the introduction, part II shows theoretical framework and hypothesis, part III shows research method, part IV shows results and discussion, part V shows conclusion. The research objective in

this study is to test and analyze the impact of economic globalization on the unemployment rate and identify Okun's law and Philips theory in ASEAN. The method used is dynamic panel regression with the period 1996-2016.

THEORETICAL FRAMEWORK AND HYPOTHESES

The theoretical framework and research hypothesis are very useful for this study. The theoretical framework is useful for systematically compiling theories that support research, so the results of this study are in line with the theory. The research hypothesis is also useful in this study, because the temporary income will be tested for true or not, if true then the research hypothesis is proven.

The Philips Theory
The tradeoff between unemployment and inflation is called the Phillips curve. The higher the inflation rate, the lower the unemployment rate. Conditions where simultaneous high unemployment and high inflation are called stagflation. Phillips illustrates how the distribution of the relationship between inflation and the unemployment rate is based on the assumption that inflation is a reflection of the increase in aggregate demand. Increase in aggregate demand, then according to the theory of demand, if demand rises then the price will rise. With high prices (inflation), to meet these demands producers increase their production capacity by increasing labor (the assumption that labor is the only input that can increase output). As a result of labor demand, with rising prices (inflation), unemployment decreases.

The Emund Phelps Theory
Phelps is considered to be of great merit in developing an exchange economic model (trade-off) between inflation and unemployment (Blancard, 2009: 235). Phelps's works are about the relationship between inflation and unemployment. The work is considered to bring major changes in macroeconomic policies and world monetary economics.

Chronologically, Phelps's contribution to the model of exchange economics contradicts inflation with unemployment. Phelps published an article which concluded that the Phillips curve is an illusion because in the long run inflation is not stable, so it cannot be used as a basis for developing economic policies (Muelgini, 2006). The statement shocked economists in Europe, the US, and the world because, at that time, the Phillips curve was getting the attention of all economists and world politicians.

Phelps (1968) argues that the tradeoff between inflation rates and unemployment will only occur in the short term, but in the long run, the tradeoff between inflation and unemployment will not occur because, in the long run, monetary policymakers will face the vertical Phillips curve, where the unemployment rate tends to be at its natural level. Phelps shows that current unemployment depends not only on inflation but also on inflation expectations (Arkelof, 1996). The higher the anticipated inflation rate, the higher the unemployment rate.

Economic Globalization and Unemployment Rate

According to the Ricardian Theory, barrier-free foreign trade can reduce unemployment. This is because foreign trade will increase the domestic price of a product produced domestically, thereby increasing the marginal product of labor. The marginal product of labor has increased will create employment opportunities so as to reduce unemployment.

The Heckscher-Ohlin theory assumes that there are two sectors and two factors (labor and capital). Conditions before conducting foreign trade, the relative prices of labor-intensive products will be lower than the relative prices of capital-intensive products, but the existing labor force is absorbed more so unemployment decreases. Furthermore, a country carries out foreign trade freely, so there will be an increase in the relative price of capital-intensive products. This will lead to an increase in the demand for capital in return for labor, which in the end the average wage rate will decrease and unemployment will increase.

In the previous section, it has been described the explanation of economic globalization and unemployment rate theory. The next step is to describe some reliable previous studies. The study conducted by Soomro, Nasar-ul-eman, & Aziz, (2012) shows that economic globalization has a significant positive effect on the unemployment rate in Pakistan during the period 1971-20019. The study conducted by Siddiqa, Hussain, Qasim, & Javed, (2018) shows that economic globalization has a significant negative effect on the unemployment rate in developing countries during the period 2003-2013. Globalization encourages trade with other countries so that it is useful to minimize unemployment.

Awad & Youssof, (2016) conducted a study of economic globalization with unemployment in Malaysia. The results of Awad & Youssof, (2016) namely economic globalization, inflation and economic growth have a significant negative effect on unemployment in the short and long term. Gozgor, (2017) also conducted research on economic globalization with unemployment in 87 countries with the period 1991-2014. The results of Gozgor, (2017) show that economic globalization has no significant effect on unemployment. Economic growth has a significant negative effect on unemployment in several research models. Freund & Rijkers, (2014) conducted research on economic globalization in middle-income countries. The results of his research indicate that economic globalization with indicators of trade openness has a significant positive effect on unemployment, while economic globalization with capital openness has a significant negative effect on the unemployment rate.

The hypotheses in this study are as follows: (1) economic growth has a negative and significant effect on unemployment in ASEAN; (2) inflation has a negative or positive and significant effect on unemployment in ASEAN; (3) economic globalization has a negative or positive and significant effect on unemployment in ASEAN; and (4) indicators of economic globalization include trade openness and capital openness that has a significant negative or positive on unemployment in ASEAN.

The conceptual framework is in the form of a diagram, so the research problem that the answer will look for is easy to understand. The conceptual framework in this study is shown in figure 1.
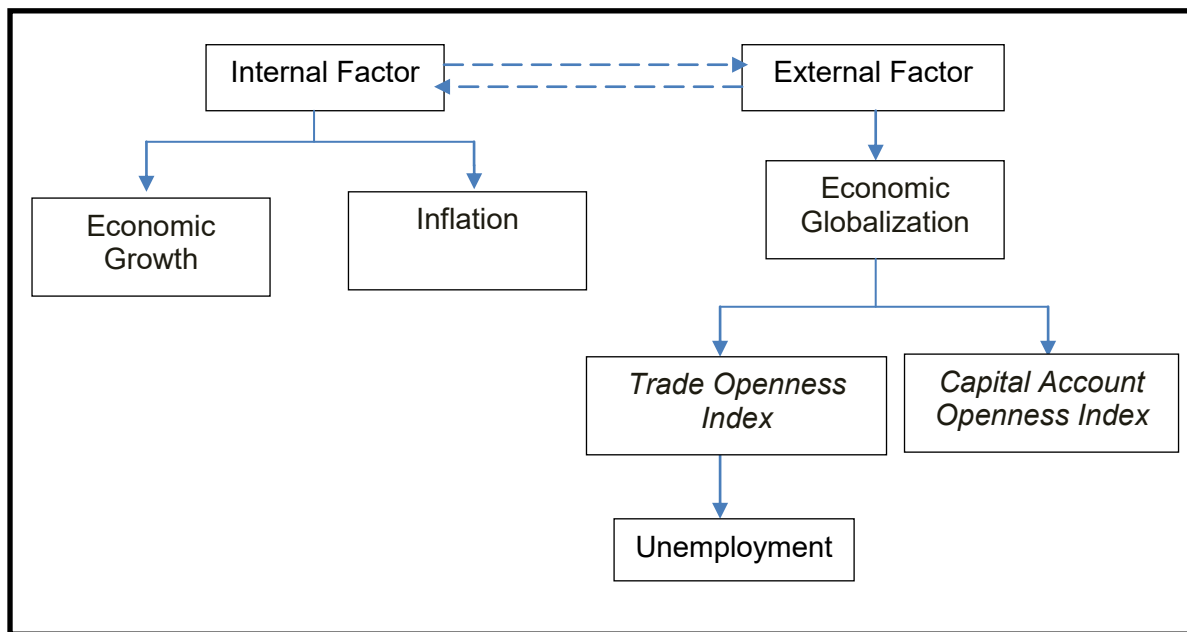

Figure 1. Conceptual Framework

RESEARCH METHOD

This study took research locations in ASEAN countries. Country samples taken include Indonesia, Malaysia, the Philippines, Thailand, Singapore, and Vietnam. These countries are taken as samples because they are classified as developing countries and developed countries that have good economic performance, but high unemployment rates. Period used in 1996-2021. This period was used because ASEAN was affected by the monetary economic crisis and the global financial crisis. The types and sources of data in this study can be seen as follows:

Tabel 1. Types and Data Sources

No	Variables	Code	Data Types	Source Data
1	Unemployment	UN	Secondary	World Bank
2	Economic Growth	EG	Secondary	World Bank
3	Inflation	INF	Secondary	World Bank
4	Economic Globalization Index	KOFEcGI	Secondary	Economic cycle research institute
5	Trade Opennes Index	KOFTrGI	Secondary	Economic cycle research institute
6	Financial Openness Index	KOFFiGI	Secondary	Economic cycle research institute

Table 1 provides information about the types and sources of data used in this study. The data type used in this study is secondary data. Secondary data is data obtained directly from economic institutions. The data source used in this study is from the World Bank and Economic cycle research institute. Econometric data in the form of time series. Time series data have the advantage of being able to estimate, predict, and estimate the value of data in the next period based on previous data.

The method used is dynamic panel regression. This method is used because the data used by the panel can see Okun's law and Philips theory, and can see the influence of the previous period. The analysis model in this study can be written as follows:

$$Lun_{it} = \alpha + \beta_{11}Lun_{it-1} + \beta_{12}EG_{it} + \beta_{13}INF_{it} + \varepsilon_{1it} \dots (1)$$

$$Lun_{it} = \gamma + \beta_{21}Lun_{it-1} + \beta_{22}EG_{it} + \beta_{23}INF_{it} + \beta_{24}KOFEcGI_{it} + \varepsilon_{2it} \dots (2)$$

$$Lun_{it} = \delta + \beta_{31}Lun_{it-1} + \beta_{32}EG_{it} + \beta_{33}INF_{it} + \beta_{34}KOFTrGI_{it} + \varepsilon_{3it} \dots (3)$$

$$Lun_{it} = \theta + \beta_{41}Lun_{it-1} + \beta_{42}EG_{it} + \beta_{43}INF_{it} + \beta_{44}KOFFiGI_{it} + \varepsilon_{4it} \dots (4)$$

Where

$$\beta_{12} \dots \beta_{42} < 0; \ \beta_{13} \dots \beta_{43} < 0; \ \beta_{24} > 0 \text{ or } \beta_{24} < 0; \ \beta_{34} > 0 \text{ or } \beta_{34} < 0; \ \beta_{44} > 0 \text{ or } \beta_{44} < 0$$

Where Lun, eg, inf, EcGI, TrGI, and FiGI, namely the natural logarithm of unemployment (unit of people), economic growth (unit percent), inflation (unit percent), economic globalization (unit percent), trade openness (unit percent), and financial openness (unit percent). Trade openness can be calculated by export + import/GDP, while financial openness can be calculated by means of FDI/GDP. Subscript i shows cross sections (Indonesia, Malaysia, the Philippines, Thailand, Singapore, and Vietnam), while t (1996-2021) shows time series, if the subscript is merged it is called a panel. All data used in this study are sourced from the World Bank.

This study uses the dynamic panel method. Dynamic panel methods were popularized by Arellano-Bond (1991) and Arellano-Bover (1995). They designed a dynamic panel method for situations with 1) panel "T small, big N", meaning that the number of time series is less than the cross section; 2) linear functional relationships; 3) the dependent variable, depending on the realization of his own past; 4) the independent variable is still correlated with εt or εt-1; and 5) improve the cross effect (Roodman, 2016). The Arellano-Bond dynamic panel uses the Generalized of Moments method (Hansen 1982), and is called the "GMM difference." The Arellano-Bover/Blundell-Bond estimator makes additional assumptions, namely the variables used do not correlate with fixed effects. The weakness of GMM's difference is that it is quite complicated and easy to produce invalid estimates.

The dynamic panel data model according to Baltagi, (2005) is as follows:

$$y_{it} = \delta y_{i,t-1} + x'_{it}\beta + u_{it}; \ i = 1, \dots . N; \ t = 1, \dots . , T$$

The lag of the dependent variable causes endogeneity problems, so that if the model is estimated by a fixed effect approach or random effect it will produce

biased and inconsistent estimates. In overcoming this problem, Arellano and Bond use the method of moments approach or commonly called the generalized method of moments (GMM). There are two estimation procedures used in GMM, namely first-difference GMM and GMM system.

First, the equation of the first-difference GMM approach with AR (1) is accompanied by individual-specific effects unobserved:

$y_{it} = α y_{it-1} + η_i + u_{it}$; $|α| < 1$ for $i = 1,…, N$ and $t = 2,…, T$, where $η_i + u_{it} = u_{it}$ has the following component error standards: $E[η_i] = 0$, $E[u_{it}] = 0$, $E[u_{it} η_i] = 0$ for $i = 1,…, N$ and $t = 2,…, T$ It is assumed that transient errors are uncorrelated: $E[u_{it} u_{is}] = 0$ untuk $i = 1,…, N$ dan $s ≠ t$ and initial conditions y_{i1} is *predetermined*: $E[y_{i1}u_{it}] = 0$ untuk $i = 1,…, N$ dan $t = 2,…, T$. Together these assumptions have implications for $m = 0,5 (T-1)(T-2)$ *moment restrictions*: $E[y_{it} - sΔu_{it}] = 0$ untuk $t = 3,…, T$ dan $s ≥ 2$ can be written as: $E(Z'_i Δu_i) = 0$ where Zi is (T-2) x m matrix, namely:

$$Z_i = \begin{bmatrix} y_{i1} & 0 & 0 & ... & 0 & ... & 0 \\ 0 & y_{i1} & y_{i2} & ... & 0 & ... & 0 \\ . & . & . & ... & . & . & . \\ 0 & 0 & 0 & ... & y_{i1} & ... & y_{i,T-2} \end{bmatrix}$$

$Δu_i$ is (T-2) vektor ($Δu_{i3}, Δu_{i4},…, Δu_{iT}$). This is a GMM framework, where lags start from t-2 or FD-GMM. This approach will produce a consistent estimator of α where N is infinite with fixed T. There are limitations to the FD-GMM estimator, if there is a correlation between lags from first-difference so that the instruments used are weak.

RESULT AND DISCUSSION

Result

Table 2 shows four main capitals while the remaining six models are additional models to see de facto and de jure sizes. **) indicates that the variable has a significant effect on the level of 5%. The estimation results show that the lag of the unemployment rate from the initial model to the final model is significantly positive. This gives the meaning that the previous period unemployment plays a role in influencing unemployment in the next period.

Economic growth has a significant negative effect on unemployment from the initial model to the final model. The estimation results give meaning that economic growth plays a role in influencing unemployment, so that economic growth cannot be ruled out. The negative coefficient of economic growth towards unemployment shows that the higher the economic growth of ASEAN countries, the unemployment will decrease.

Inflation has a significant negative effect on unemployment in the first model to model five and model eight and ten, while other models show that inflation has no significant effect on unemployment. The significance of inflation against unemployment makes the government and the Central Bank of each ASEAN

country monitor more closely, because inflation is a short-term problem that can affect the increase in unemployment in ASEAN.

Variabel	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10
Lun_{it-1}	0,8467 (0,0647) [0,0000]**	0,5042 (0,0829) [0,0000]**	0,6325 (0,0969) [0,0000]**	0,5336 (0,0908) [0,0000*]*	0,5996 (0,1054) [0,0000]**	0,5860 (0,1293) [0,0000]**	0,8188 (0,1623) (0.0000)**	0,6370 (0,0930) [0,0000]**	0,4238 (0,1494) [0,0050]**	0,8300 (0,0650) [0,0000]**
EG_{it}	-3,3032 (0,6552) [0,0000]**	-2,0533 (0,6156) [0,0010]**	-2,4175 (0,6679) [0,0000]**	-2,8322 (0,6449) [0,0000]**	-3,5477 (0,7344) [0,0000]**	-2,2711 (0,7876) [0,0050]**	-2,4575 (0,9819) (0,0410)**	-2,4714 (0,6615) (0,0000)**	-1,3150 (0,7647) [0,0080]**	-3,1127 (0,6417) [0,0000]**
Inf_{it}	-0,7110 (0,3512) [0,0450]**	-0,0752 (0,3822) [0,0420]**	-1,1906 (0,4204) [0,0060]**	-0,7943 (0,3822) [0,0400]**	-1,1263 (0,3722) [0,0030]**	-0,7751 (0,4551) 0,0890	--0,1201 (0,5887) 90,8390)	-0,9970 (0,3734) [0,0090]**	-0,7239 (0,3817) [0,0600]	-0,7505 (0,3562) [0,0370]**
KOFEcGI	-	1,3919 (0,6559) [0,0360]**	-	-	-	-	-	-	-	-
KOFEcGIdf	-	-	1,0648 (0,5535) [0,0070]**	-	-	-	-	-	-	-
KOFEcGIdj	-	-	-	1,2213 (0,6102) [0,0480]**	-	-	-	-	-	-
KOFTrGI	-	-	-	-	1,4619 (0,7872) [0,0030]**	-	-	-	-	-
KOFTrGIdf	-	-	-	-	-	1,1748 (0,4924) [0,0190]**	-	-	-	-
KOFTrGIdj	-	-	-	-	-	-	-0,7049 (0,6055) [0,2470]	-	-	-
KOFFiGI	-	-	-	-	-	-	-	0,6597 (0,4822) [0,0640]	-	-
KOFFiGIdf	-	-	-	-	-	-	-	-	1,4351 (0,6199) [0,022]**	-
KOFFiGIdj	-	-	-	-	-	-	-	-	-	0,1714 (0,2194) [0,4370]
AR(1)	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000
AR(2)	0,7480	0,8770	0,7850	9,9240	0,8820	0,8140	0,6840	0,8220	0,8120	0,7850
Sargan Test	0,5040	0,1660	0,1010	0,0552	0,0680	0,9850	0,9870	0,0640	0,1580	0,4750

Economic globalization has a significant positive effect on unemployment in ASEAN countries. Economic globalization with de facto and de jure measurements also has a significant positive effect on unemployment. This means that the higher the economic globalization in ASEAN countries, the higher the unemployment rate. Own trade openness and de facto trade openness in models five and six have a significant positive effect on unemployment, while de jure trade openness has no significant effect on unemployment. De facto financial openness has a positive significant effect on unemployment, while de jure financial openness has no significant effect on unemployment.

Discussion

Difficulties in controlling and reducing the unemployment rate to become full employment are serious problems that are often encountered and sought solutions in ASEAN countries. The relatively high unemployment rate in ASEAN member countries shows that the objectives made by ASEAN member countries have not yet been fully achieved. This condition also gives meaning that ASEAN member countries have not been able to provide employment opportunities to the existing workforce. ASEAN member countries are doing their best to reduce the unemployment rate, but the unemployment rate is still a problem for most ASEAN member countries.

The governments of ASEAN countries still maintain the classic way by maintaining economic growth to reduce unemployment. Large or small economic growth can affect the number of unemployed. The relationship between unemployment and economic growth can be explained through Okun's law. Based on Okun's Law, the number of unemployed is negatively related to the level of economic growth of a country. Legal law states that any increase in economic growth can reduce the unemployment rate (Samuelson & Nordaus, 2004). The growth in the Gross Domestic Product (GDP) which is close to 2 percent will reduce unemployment by 1 percent (Mankiw, 2006).

The results of the negative significance estimation of economic growth on unemployment in Table 2 in this study are in line with Gozgor, (2017). This gives the meaning that economic growth can reduce unemployment in ASEAN. There are several factors that cause economic growth to have a significant effect on the unemployment rate in ASEAN. First, high economic growth in ASEAN will increase employment in the industrial sector and service sector. Second, MEA policies are also used as a way to encourage economic growth and reduce unemployment in ASEAN. Third, the biggest unemployment that occurs in ASEAN is due to cyclical. Fourth, the economic structure of ASEAN countries that has undergone a transformation from agriculture to the industrial sector. Fifth, increasing labor intensive production accompanied by increased skills (informal training).

Inflation affects unemployment based on the Phillips and Emund Philps theories. A.W Theory Phillips appeared as indicated by 1929, when there was an economic depression in the United States, which resulted in a high inflation increase followed by high unemployment. Based on this fact, Phillips observed

the relationship between the inflation rate and the unemployment rate. The observations made, it turns out there is a close relationship between inflation and the unemployment rate, if inflation is high, unemployment will be low.

The estimation results show that inflation has a significant negative effect on unemployment in ASEAN. This shows the tradeoff between unemployment and inflation in ASEAN. The higher the inflation rate, the lower the unemployment rate in ASEAN. The relationship between inflation and the unemployment rate is based on the assumption that inflation is a reflection of the increase in aggregate demand in ASEAN. The increase in aggregate demand in ASEAN, then according to the theory of demand, if demand rises then prices will rise. The high price (inflation) makes producers increase their production capacity by increasing labor (the assumption that labor is the only input that can increase output). As a result of increasing labor demand, with rising prices (inflation), unemployment decreases.

Inflation has no significant effect on the unemployment rate in ASEAN indicating that the unemployment rate in ASEAN is not only influenced by economic factors, but also socio-political factors. Inflation has no significant effect on unemployment caused by several things, especially regarding the structure of the labor market in ASEAN countries which is relatively typical. Unemployment in ASEAN belongs to the category of disequilibrium persistent unemployment without self correcting mechanisms, namely unemployment that is persistent and cannot make its own improvements towards balance or tends to increase at any time or in other words unemployment is higher than the level of work participation.

Fiscal and monetary consolidation in each member of ASEAN countries can reduce inflation so that it does not have a significant impact on the unemployment rate. Monetary policy carried out by the central banks of each ASEAN country dampens the unemployment rate by reducing the money supply in the community while the fiscal policy carried out by the government reduces the inflation rate by reducing government spending. Monetary policy and fiscal policy influence inflation through the impact of the policy on changes in aggregate demand and supply sides. Monetary policy transmission affects inflation through interest rates, exchange rates, money lines and credit lines. The transmission of fiscal policy to inflation can be through aggregate demand, spillover public wages to the private sector, and the effect of taxes on marginal costs and private consumption. In addition, fiscal policy has an impact on inflation through public expectations of the government's ability to pay for its public debt.

Economic globalization has a significant positive effect on unemployment. This result is in line with Awad & Youssof, (2016), Soomro, Nasar-ul-eman, & Aziz, (2012). This result means that the higher degree of economic globalization actually drives an increase in unemployment. This shows that economic globalization is actually detrimental to ASEAN countries. Trade openness has a significant positive effect on unemployment in ASEAN. The relationship between international trade and unemployment is still controversial. International pro-trade

economists do not believe that international trade is an important factor in influencing the unemployment rate, while outside trade economists believe that one of the important effects of trade is the destruction of jobs, which leads to unemployment (Dutt et al., 2009). The Ricardian model explains that trade openness will have an impact on reducing unemployment, while the Heckscher-Ohlin model explains that trade liberalization will result in an increase in unemployment. The Heckscher-Ohlin model criticizing the Ricardian model indicated by the conditions described in the Ricardian Model will occur only if the country concerned is an abundant workforce.

Awad & Youssof, (2016) suggesting that economic globalization tends to increase the unemployment rate in the short term. Economic globalization explains the actual flow and obstacle constraints in certain portions, as well as reducing barriers can result in an increase in unemployment as a result of trade liberalization, because basically workers who work in the import sector will lose their jobs, while employment in the export sector will require adjustment in the long term period. This is because in achieving work in the export sector, labor requires time to increase the capacity of his skills. Economic globalization which is close to trade openness has a positive effect on unemployment, this was found. Every country that conducts trade, whether it is abundant in capital or labor, will have a different impact. In this case the effect of the theory of H-O tends to be positive for a country that is abundant in capital, and negative for a country that has abundant labor. The unemployment rate increases in the short term because of trade openness, but then unemployment will decrease in the long run. That show trade openness can destroy work.

De facto financial openness has a significant positive effect on unemployment. This gives the meaning that financial openness in ASEAN countries is worrying because it increases unemployment. The disadvantages of financial openness are causing competition from domestic and foreign companies. ASEAN governments are concerned that foreign companies operating in host countries may have greater economic power than domestic companies, thereby reducing the performance of domestic companies. Foreign companies that have greater economic power can monopolize the market and raise prices on competitive markets, which is detrimental to the economic welfare of host countries. If foreign companies that enter the host country produce output using capital intensive employment opportunities decrease and unemployment increases. This result also means that financial openness is not one of the best alternatives to reduce unemployment in ASEAN.

CONCLUSION
Based on the estimation results with the GMM method it can be concluded that (1) economic growth has a significant negative effect on the unemployment rate in ASEAN. This gives the meaning that Okun Law applies in ASEAN; (2) inflation has a significant negative effect on the unemployment rate in ASEAN, but there is an estimation model which also shows that inflation does not have a significant effect on unemployment in ASEAN; (3) economic globalization has a significant positive effect on unemployment in ASEAN; (4) trade openness has a significant

positive effect on unemployment in ASEAN; and (5) financial openness does not have a significant effect on unemployment in ASEAN

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