SSRG International Journal of Economics and Management Studies
ISSN: 2393 – 9125 / https://doi.org/10.14445/23939125/IJEMS-V8I6P104

Volume 8 Issue 6, 26-32, June, 2021

Original Article

The Effect of Corruption Perception Index, Debt, Foreign Direct Investment, Balance of Trade, and Labor on Economic Growth

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Received Date: 02 May 2021
Revised Date: 04 June 2021
Accepted Date: 15 June 2021

Abstract *- Penalitian ini bertujuan untuk menganalisis pengaruh indeks persepsi korupsi, utang luar negeri, neraca perdagangan, foreign direct investment, tenag kerja, dan initial growth terhadap pertumbuhan ekonomi di ASEAN pada tahun 2010-2019. Metode yang digunakan ada fixed effect model. Data terdiri dari data 10 negara ASEAN. Hasil penelitian menujukkan bahwa indeks persepsi korupsi, utang luar negeri, neraca perdagangan, foreign direct investment, tenag kerja berpengaruh signifikan terhadap pertumbuhan ekonomi, sedangkan initial growth menunjukan tanda positif yang artinya terjadi konvergensi pertumbuhan ekonomi. Hal ini menunjukan bahwa beberapa negara yang berkembang telah dapat mengejar ketertinggalan terhadap negara yang sudah maju, dilihat dari sisi perekonomian dan pembangunannya.*

Keywords *- ASEAN, Indeks Persepsi Korupsi Neraca Perdagangan, Pertumbuhan Ekonomi, , Utang Luar Negeri.*

I. INTRODUCTION

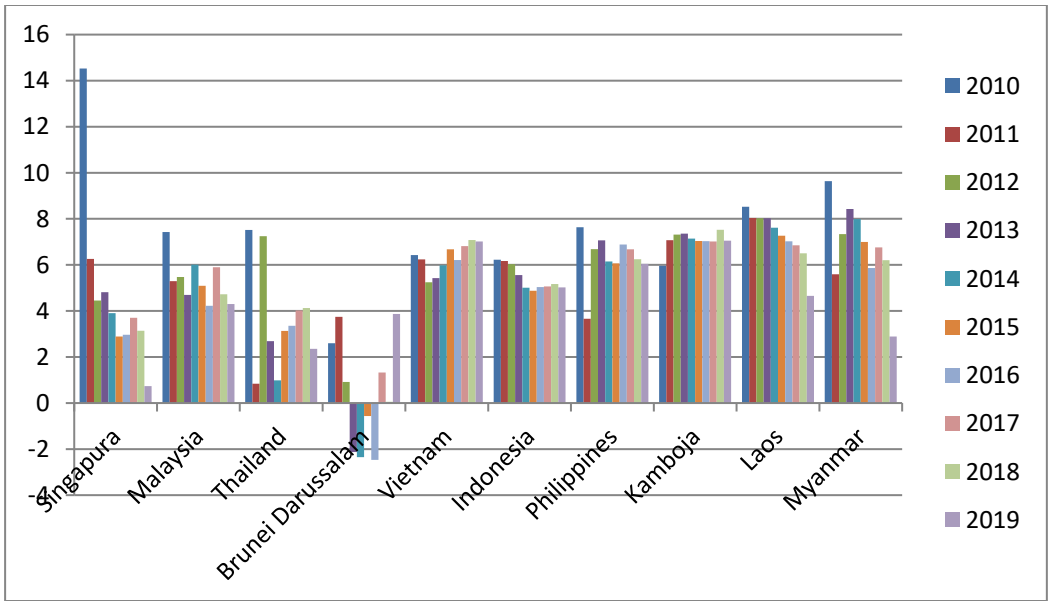
In the economic concept, there is a fiscal policy which is the management of the government budget (budget) contained in the state revenue and expenditure budget (APBN) in order to achieve development goals.. In an effort to improve the welfare of the community, the government concerned must carefully process the potential economic capital resources caused by a budget deficit because government spending is greater than government revenues in the form of taxes, fees, and levies obtained by the government (Hyman, 2005).

Weak tax revenue is one of the problems of developing countries (Wibowo, 2008). To meet the needs of government revenues, some countries can rely on natural resources, while for countries that lack have the resources they have must rely on foreign aid. In addition, developing countries still need to build infrastructure for the real sector as well as institutional capacity where the government's role is very important.

Sources of financing originating from debt in covering the budget deficit will affect economic growth (Waluyo, 2006). Debt financing is determined by the needs of the government, if debt financing is used for investment, it will have a greater impact on the economy and labor, than it is used to finance government consumption and cover loan principal installments and loan interest. When this condition continues, the tendency will be to increase the budget deficit in the future with debt payments or other government expenditures, so that the use of financing will no longer increase investment in accelerating economic growth.

Modern growth models include endogeneity and externality aspects in the process of economic development. The issue of economic growth is still a topic that is often debated. Although various policies have been carried out to continue to improve it, it is not always successful. The period between 2008-2010 was a period of relatively low economic growth. This was due to the global crisis in 2008. The situation at that time was very unstable, thus reducing economic growth. The same situation is also experienced by countries in the ASEAN region. Economic growth and conditions began to improve after 2010. Countries made adjustments and worked very hard to restore economic stability. In the period after 2010 the economic situation began to improve.

The following is data on the rate of economic growth ASEAN countries 2010-2019:



Source: World Bank, 2020

Fig. 1 Data on Economic Growth of ASEAN Countries in 2010-2019

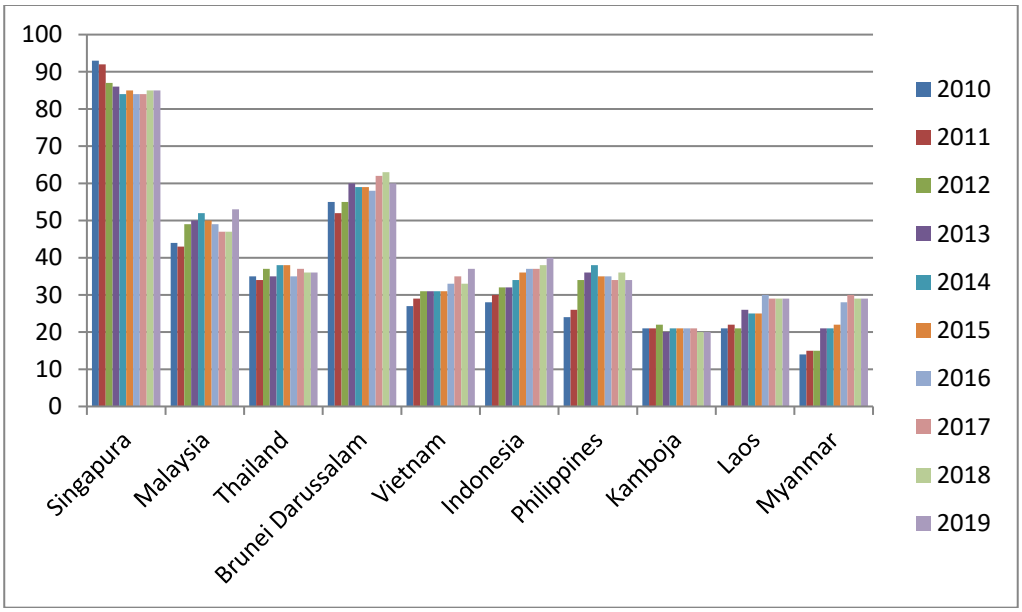
Figure 1 shows that the highest economic growth in 2010 was Singapore, which reached 14.53%. This figure is far above the economic growth of other ASEAN member countries. Meanwhile, the country with the lowest economic growth is Brunei Darussalam, which is 2.60%. In 2019 ASEAN's average economic growth was 5.08%, countries that were above the ASEAN economic growth average were Vietnam (7.08%), Indonesia (5.17%), the Philippines (6.24%) , Cambodia (7.52%), Laos (6.50%), and Myanmar with economic growth of 6.20 percent. Meanwhile, countries that are below the ASEAN economic growth average are Singapore (3.13%), Malaysia (4.72%), Thailand (4.13) and Brunei Darussalam with an economic growth of 0.05 percent.

Economic growth is also influenced by good governance, including controlling corruption. Corruption is still a hot global issue today. Corruption causes losses in various sectors, where the impact suppresses the economic growth of a country (Machmud, 2016). Corruption is the abuse of public office for personal gain and can lead to a high cost economy and hamper economic growth. Economically, the existence of corruption will disrupt the mechanism of income and wealth transmission, resulting in income inequality and increasing poverty, corruption can also affect innovation and community productivity due to the declining role of productive government which has an impact on economic growth.

The results of the Corrruption Perception Index report survey (2018) noted that the Corruption Perception Index that occurred in ASEAN, namely Malaysia was ranked 3, Indonesia ranked 4, the Philippines 5, Thailand 6, and Vietnam ranked 7. Corruption can occur will affect economic growth, the high level of corruption in a country will lead to a high cost economy that can hamper economic growth. Important corruption in a country can reduce income which also has an impact on decreasing economic growth (Blackburn, Niloy, & Emranul, 2006).

Several studies have shown that corruption occurs mostly in poor and developing countries or occurs in authoritarian leadership styles (Sasana, 2004). Low quality institutions lead to increased corruption, unstable state, poor institutions (Todaro & Smith, 2004). There are many developing countries in the world with a fairly low corruption index value. Some of them are found in the Asian region, especially the ASEAN region. The Corruption Perception Index (CPI) is an indicator of corruption. The Corruption Perception Index uses a scale from 0-100. If the GPA score is close to "0" it means that the level of corruption that occurs in the country is very high and vice versa.

The development of corruption in ASEAN which has fluctuated as follows:



Source: Corruption Perception Index 2020, data processed

Fig. 2 Development of the Corruption Perception Index in ASEAN Year 2010 – 2019

Figure 2 shows that the highest Corruption Perception Index occurred in Singapore which reached 85 points in 2018 and the lowest Corruption Perception Index was Cambodia with an index value of 20 points. This illustrates that developed countries have relatively low levels of corruption. Several studies on the corruption perception index on economic growth are described as follows: Boris Podobnik, Jia Shao; Djuro Njavro, & Stanley (2008) on the influence of corruption on economic growth rate which examined 121 countries for the period 1999-2004. The results show that an increase in the control of corruption or the corruption perception index by one point causes an increase in the GDP per capita growth rate of 1.7%. Specifically in Europe, a one-unit increase in GPA increased GDP per capita growth of 2.4%. Corruption has a negative effect but if the quality of political institutions is low, corruption does not affect growth (Toke Aidt, Jayasri Dutta; Vania Sena, 2008). Meanwhile, Zvika Neeman, M. Daniele Paserman, Avi Simhon (2008) stated that in an open economy, corruption is negatively related to GNP per capita, whereas in a closed economy there is no relationship between the two.

The impact of fiscal policy on economic growth is expected to always be positive, but in theory expansionary fiscal policy is carried out by increasing government spending without an increase in tax sources as the government's main source of finance, resulting in an increase in the budget deficit (Anwar, 2012). Fiscal policy from the demand side, according to the classics, concludes that the budget deficit is financed by reducing taxes in the present or increasing foreign debt can increase the wealth of economic actors living in the present. This increase in wealth will increase consumption and reduce savings, so that permanent foreign debt can cause private investment to decline (crowding-out). The Keynesian group assumes that a budget deficit can increase income and welfare, as well as consumption in the next turn. The budget deficit financed by debt makes the current tax burden relatively lighter and causes an increase in disposable income (Kopcke, 2006).

Fiscal policy can be said to be sustainable when the amount of public and private debt does not burden the government budget (Marisa, 2015). In addition, the government does not change taxation policies, reduce spending or expenditures, and increase the money supply in the long run. Debt that does not burden the government budget means that the government can maintain its debt ratio so that it does not exceed the existing limits or provisions and the government can also regulate the financing of the debt. Budget deficit financing aims to maintain fiscal stimulus by increasing welfare and supporting tax incentives. Due to the budget deficit, fiscal and private policies in foreign aid as well as domestic assistance assist the implementation of development to overcome the saving gap, loans and investment,

Investment is one of the policies in overcoming the budget deficit of state revenues and expenditures (Waluyo, 2006). In this regard, the government must implement investment policies in the public sector, but in fact in some developing and underdeveloped countries a problem occurs, namely where voluntary savings are scarce, consumption levels are high and there is investment in unproductive paths from the people of the country. This is due to the unavailability of capital originating from the government, so that a policy of private investment with investment originating from within the country and abroad is given is called domestic investment and foreign investment (PMA).

Both are equally important and affect the economic growth of a country (Mankiw, 2007).

According to the WEF survey (2007), one of the positive impacts of the presence of FDI in ASEAN during the New Order era was the rapid GDP growth, which was on average between 7% and 8% per year which made ASEAN countries with high growth. The role of foreign investment is to cover the foreign exchange gap caused by the deficit in the current account by increasing foreign exchange through exports of Indonesian production abroad, so that it is expected to be a driver of Indonesia's economic growth.

II. METHOD

The data used is panel data using secondary data types, namely data obtained based on information that has been compiled and published by certain agencies. The data starts from 2010 to 2019 for countries in ASEAN. The number of observations in the study was 100 observations using a combination of time series data and cross section data. The data used in this study are economic growth, corruption perception index, foreign debt, foreign direct investment, trade balance, and labor obtained from the World Bank and Transparency International.

Economic growth data (PE) used is GDP growth data in the form of annual data with percentage figures obtained from the World Bank, corruption data used is annual data in the form of an index obtained from Transparency International, the data used is the ratio of foreign debt to GDP, FDI data used is FDI/GDP ratio data in the form of percent, the trade balance is the difference or difference between exports and imports, labor data used is data on the ratio of labor participation rate to the labor force from the World Bank annually in the form of percent of years 2010 – 2019.

A. Data analysis method

The simplest approach in processing panel data is to using the method of ordinary least squares / (OLS) which is applied to data in the form of a pool, often referred to as Pooled Least Square.SalaOne difficulty of the panel data procedure is that it is difficult to meet the assumptions of a consistent intercept and slope. To overcome this, what is done in the data panel is to enter a dummy variable (dummy variable) in this study the dummy variable used is a regional dummy variable used to allow the occurrence of different parameter values both across units (cross sections) and between time (time series). This approach by including dummy variables is known as the fixed effect model or Least Square Dummy Variable (LSDV).

To the decision to include a dummy variable in the fixed effect model will inevitably lead to trade offs. The addition of this dummy variable will reduce the number of degrees of freedom, which in turn will reduce the efficiency of the estimated parameters. Panel data models which involve correlations between error terms due to changes in time and different observations can be overcome by using an error component model approach or also known as a random effect model.

B. Panel Data Regression Model Testing

There are 2 (two) stages in selecting the method in the panel data. First, compare PLS with FEM first. Then the chow test was carried out. If the results show that the PLS model is accepted, then the PLS model will be analyzed. But if the FEM model is accepted, then the second stage is carried out, which is to do another comparison with the REM model. After that, the Hausman test was conducted to determine which method to use, whether FEM or REM.

C. Classic Assumption Test

Normality test is conducted to test whether in the regression model, the dependent and independent variables have a normal distribution or not. The deviation of the normality assumption will have a smaller effect if the number of samples is enlarged. Heteroscedasticity is a deviation from the assumption of similarity of variance (homoscedasticity) which is not constant, ie the error variance is unequal for each fixed combination of X1, X2, …, Xp. The absence of correlation between the disturbance variables of one observation with another observation is known as autocorrelation which is not in accordance with the classical assumption test. The consequence of this problem is that the estimator of the OLS method is still linear, unbiased but has no minimum variance.

The multicollinearity assumption test is to test whether the regression model found a correlation between the independent variables. If there is a correlation, it is called a multicollinearity problem. The existence of multicollinearity still produces a BLUE estimator, but causes a model to have a large variance.

D. Statistical Hypothesis Testing

The t-statistical test was used to test the significance of the estimated coefficient of each independent variable whether it separately had a significant effect on the dependent variable at = 5%. To evaluate the effect of all independent variables on the dependent variable, the F test was used. In this study, in conducting the F test, the researcher used a 95% confidence level with degrees of freedom df 1 = (k-1) and df 2 = (nk), as for the steps in This F test is (Widarjono, 2007):

III. DISCUSSION

Table 4. Chow Test Results

Effects Test	Statistics	df	Prob.
Cross-section Chi-square	24.6715	9	0.0034

Source: Output Eviews 9, appendix 2

Table 4 shows that the value of Prob. Cross-section F of 0.0034 is smaller than the significance level (α) 5 percent, (0.0034 <0.05) then H0 is rejected and Ha accepts so that it can be concluded that the Fixed Effect Model (FEM) method is better than the Fixed Effect Model (FEM) method. Common Effect Model (CEM) to analyze the data in this study.

Table 5. Hausman test results

Test Summary	Chi-Sq. Statistics	Chi-Sq. df	Prob.
Cross-section random	19,9550	6	0.0028

Source: Output Eviews 9, appendix 3

Table 5 shows that the p-value is 0.0028smaller than the significance level of 5% (0.05), it can be concluded that the fixed effect (FEM) method is better used than the random effect (REM) method in this study. After testing to select the best model in the study using the Chow test method, and the Hausman test, it was concluded that the Fixed Effect Model (FEM) was best used in this study compared to the Random Effect (REM).

Based on the regression results with the Fixed Effect Model as Appendix 4, the regression results are as follows.

Table 6. Fixed Effect Model (CEM) Results

Variable	Coefficient	Std, Error	t-Statistic	Prob,
C	4.2644	1.0126	4,2111	0.0001
IPK	0.0809	0.0238	3.3932	0.0010
ULN	0.0294	0.0144	2.0363	0.0446
NPD	0.0851	0.0288	2.9592	0.0039
FDI	0.1834	0.0406	4.5150	0.0000
KNP	0.8112	0.2792	2.9053	0.0046
ING	0.0373	0.0114	3.2611	0.0002
R-squared		0.5998	F-statistics	8.3915
Adjusted R-squared		0.5283	Prob (F-statistic)	0.0000

Source: Output Eviews 9, appendix 4

Based on Table 6, it shows that all variables have a significant effect on economic growth.

1. Constant coefficient of 4.2644, this shows that if all the independent variables used are equal to 0 (zero), then economic growth in ASEAN 4.3458 percent.
2. The coefficient of corruption perception index (GPA) is 0.0809, corruption eradication has a positive and significant effect at = 5% (0.05). These results show that if there is an increase in the eradication of corruption by 1 point ceteris paribus, then economic growth will increase by0.0809 percent.
3. The coefficient of foreign debt (ULN) is 0.0294, foreign debt has a positive and significant effect on = 5% (0.05). These results show that if there is an increase in foreign debt of 1 percent ceteris paribus, then economic growth will increase by 1 percent.0.0294 percent.
4. The trade balance coefficient (NPD) is 0.0851, the trade balance has a positive and significant effect on = 5% (0.05). These results show that if there is an increase in the trade balance by 1 percent ceteris paribus, then economic growth will increase by0.0851 percent.
5. The coefficient of Foreign Direct Investment (FDI) is 0.1834, the Foreign Direct Investment variable has a positive and significant effect on = 5% (0.05). These results show that if there is an increase in Foreign Direct Investment of 1 percent ceteris paribus, then economic growth will increase by0.1834 percent.
6. The labor coefficient (TNK) is 0.8112, the trade balance has a positive and significant effect on = 5% (0.05). These results show that if there is an increase in the workforce of 1 percent ceteris paribus, then economic growth will increase by0.8112 percent.
7. The coefficient of initial growth (ING) is 0.0373, the Foreign Direct Investment variable has a positive and significant effect on = 5% (0.05). These results show that if there is an increase in initial growth of 1 percent ceteris paribus, then economic growth will increase by0.0373 percent.

From the results of the tests that have been carried out, it is found that Corruption Perception Index, foreign debt, trade balance, Foreign Direct Investment, employment, and initial growth positive and significant effect on economic growth, this is indicated by the probability value which is smaller than = 5%. Coefficient of determination0.5998 or 59.98%. This shows thatCorruption Perception Index, foreign debt, trade balance, Foreign Direct Investment, employment, and initial growth able to explain 59.98% economic growth, the remaining 40.02% are factors not included in the study.

The study of Boris, Jia, Djuro, & Plamen (2008) examines the influence of corruption on economic growth rate and foreign investment, case studies of 121 countries for the period 1999-2004. The results show that a one-unit increase in corruption control causes an increase in the GDP per capita growth rate of 1.7%. Specifically in Europe, a one-unit increase in corruption control increased GDP per capita growth of 2.4%. Research conducted by Huang (2016) in his research in Asia Pacific countries shows that the impact of corruption is not significant on economic growth, but for South Korea corruption has a positive effect and can increase economic growth.

Foreign debt is a source of financing for the government's budget and economic development. Rachmadi (2013) who concludes that Foreign Debt is able to encourage Economic Growth. Economic sectors that absorb foreign debt are quite high, it is proven that GDP growth continues to increase.This study is in line with Malik and Kurnia (2017) partially the influence of foreign debt, thus there is a significant influence between foreign debt on economic growth. Khair and Rusydi (2016) stated that the foreign debt variable has a positive and significant effect on Gross Domestic Product. This means that foreign debt can increase the value of GDP. The above statement indicates that an increase in foreign debt will increase GDP. Because to support domestic economic development, the budget deficit used by the government is not able to fully support development financing, therefore the government and the private sector use a lot of foreign debt to support economic development.

An increase in the trade balance will increase economic growth. This indicates that they are still dependent on imported goods, which illustrates the country's independence. Apart from that, the government also often chooses imports as a strategy to fulfill basic needs. Economic conditions that have been more dominant so far are supported by other factors. This indicates that trade between countries and their trading partners makes a major contribution to increasing economic growth.

With the entry of Foreign Direct Investment will cause the transfer of capital, technology, managerial capabilities, and knowledge from developed countries to developing countries. The transfer will stimulate productivity and increase national output which has an impact on increasing economic growth. Research conducted by Alzaidy Ghaith, Mohd Naseem Bin Niaz Ahmad and Hichem and Lassad Ben Dhiab (2018) states that economic openness (trade openness), incoming foreign direct investment (Foreign Direct Investment), domestic investment, government spending, and the workforce have an effect on positive and significant to economic growth in six ASEAN countries. Alzaidy, Mohd & Zakaria (2017) shows that Foreign Direct Investment and government spending have a positive and significant impact on the economic growth of Malaysia.

The results of this study indicate that the labor variable has a positive effect on economic growth according to the theory of total output growth and the theory of Solow-Swan and Levine & Renelt. The rapid increase in the number of workers can also accelerate the growth rate of gross domestic product (GDP) because the workforce is the actor and manager of other production factors so that an increase in the number of workers will have a positive impact on increasing the GDP growth rate.

Initial Growth shows a positive sign which means that there is a convergence of economic growth in ASEAN for the 2010-2019 period. This shows that some developing countries have been able to catch up with developed countries, in terms of their economy and development. This result is also in accordance with research conducted by Levine & Renelt (1992) which shows that initial growth has an effect and has a positive impact on economic growth. This shows that a high convergence speed will increase economic growth.

IV. CONCLUTION

Based on the results of data processing and discussions that have been carried out, it can be concluded that the Corruption Perception Index, foreign debt, trade balance, Foreign Direct Investment, employment, and initial growth have a positive and significant impact on economic growth in ASEAN in 2010-2019. Improvements in eradicating corruption will encourage investors' interest to invest in ASEAN so that it can become a source of capital for economic expansion that can have an impact on increasing economic growth. In an effort to increase economic growth, policy makers need to pay attention to the allocation of funds from debt proceeds, because they can be used for the productive sector so that the results of managing these funds can be used to encourage economic growth.

An increase in the workforce, trade balance and Foreign Direct Investment can encourage an increase in the ASEAN economy, so it is necessary to pay attention to factors that can influence these variables. ASEAN's economic growth has converged, so that income distribution will be easier to do, therefore the government should pay attention to equitable development to encourage higher economic growth.

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