

The Determinants of Indonesia's Economic Growth

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Abstract:

Background: The indicator of economic performance in Indonesia is economic growth. With the hope that the high level of economic growth and sustainability will be an effort to achieve prosperity for the people of Indonesia. As a developing country, Indonesia continues to strive to achieve an increase in the country's economic growth. According to the World Bank, one of the factors that cause low economic growth in the ASEAN region is the uncertain global fiscal condition. This research purposed to analyze the effect of oil and gas export, exchange rate, and foreign debt on the Indonesia's economic growth.

Materials and Methods: This research was done using the secondary data in the form of time series data period 1991-2021 obtained from the Central of Bureau of Statistic, Indonesian Bank, and World Bank. The analyze method used in this research is Error Correction Model (ECM).

Results: The result of this research indicated that all of the independent variables simultaneously had influence toward Indonesia's economic growth. Partially, the oil and gas export and foreign debt have a significant positive effect, while the exchange rate has a significant negative effect to Indonesia's economic growth.

Keyword: Economic Growth; Oil and Gas Export; Exchange Rate; Foreign Debt.

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I. Introduction

Economic growth is a significant indicator in analysing the country's economic development. Economic development can be said to increase total income and capital income by taking into account the population growth and accompanied by fundamental changes in the economic structure of a country and income distribution for the residents of a nation. In the economic growth of a country, there is a form of continuity between other economic factors and mutual influence for the long term. A country can be said to be successful in its development seen from the country's economic growth. The higher the economic growth of a country, the higher the welfare of the people. The problem of economic growth is a macroeconomic problem in the long term. According to the World Bank, one of the factors that cause low economic growth in the ASEAN region is the uncertain global fiscal condition. For example, higher oil prices trigger a slowdown in domestic and government consumption, geopolitical, economic turmoil, and so on. Economic growth must be supported by increased productivity and efficiency of quality human resources, with increased industrial development, it will become an efficient, highly competitive economic driver and have a strong structure in developing production patterns. The indicator of economic performance in Indonesia is economic growth. With the hope that the high level of economic growth and sustainability will be an effort to achieve prosperity for the people of Indonesia. As a developing country, Indonesia continues to strive to achieve an increase in the country's economic growth. It is sustainable because relatively high and sustainable economic growth is the elaboration of the success of economic development.

II. Research Methodology

The type of data used in this study is quantitative data in the form of numbers. The data used is occasional secondary or time series in 1991-2021 which consists of:

1. GDP economic growth from 1991-2021 in a million US\$.
2. Oil and gas exports from 1991-2021 in units of US\$ million.
3. The exchange rate of the rupiah against the US dollar in 1991-2021.
4. Total Foreign Debt in 1991-2021 in units of million US\$.

The data in this study has 31 years, from the period 1991 to 2021. Sources of data in this study came from the website of the Central Statistics Agency, the World Bank and Indonesian Bank. This study examines how much influence oil and gas exports, exchange rates, and foreign debt have on Indonesia's economic growth using the Error Correction Model (ECM) research model. The data analysis tool used is the ECM method as a tool for econometric calculations. The descriptive method also identifies the long-term and short-term cointegration

relationship between research variables. Several tests will be carried out before performing the ECM estimation test and descriptive analysis, namely the stationary data test, the lag length and the cointegration degree test. Then after being estimated with ECM, data analysis was carried out using the IRF method and variance decomposition.

III. Result & Analysis

This section will explain the results of the research and discussion of the Error Correction Model (ECM) analysis model of the influence of oil and gas exports, exchange rates, and foreign debt on Indonesia's economic growth from 1991 to 2021.

Table 1: Long-term Equation Cointegration Test Results

Variabel	Coefficient	Probabilitas
LOG(EM)	0.083829	0.0049
LOG(KURS)	-0.097097	0.0031
LOG(ULN)	0.777916	0.0000
C	4.064672	0.0000
Prob(F-statistic)	0.000000	

The table above shows that the Prob (F-statistic) is 0.0000, which means it is smaller than 0.05 or a-5%, indicating that the long-term equation is valid. The probability value of oil and gas export variables (0.0049), an exchange rate (0.0031), and foreign debt (0.0000). From the probability values of all the variables above, it can be concluded that all variables have a long-term influence on the growth of the economic growth because the probability value of all variables is below 0.05 or a-5%.

Table 2: ECM Model Test Results

Variabel	Coefficient	Probabilitas
D(LOG(EM))	0.084452	0.0119
D(LOG(KURS))	-0.122694	0.0019
D(LOG(ULN))	0.250222	0.0425
ECT(-1)	-0.277822	0.0428
C	0.035610	0.0016
R ²	0.596231	
Adjusted R ²	0.531627	
Prob(F-statistic)	0.000101	

Short-term oil and gas export variables and foreign debt have a positive and significant impact on economic growth. The exchange rate variable has a negative and significant effect on economic growth. The amount of ECT, which is 0.277822, means that the difference between economic growth and its equilibrium value of 0.277822 will be adjusted over one year.

A. The Effect of Oil and Gas Exports on Economic Growth

The short-term coefficient value of oil and gas exports is 0.084452, and the probability is 0.0119. This means that in the short term, an increase in oil and gas exports by 1% can increase economic growth by 0.084452%. Then it is known that the long-term coefficient value of oil and gas exports is 0.083829, and the probability value is 0.0049. In the long term, a 1% increase in oil and gas exports can increase economic growth by 0.083829%. Judging from the short-term and long-term coefficient values showing positive results with a probability value of less than 0.05 or $\alpha = 5\%$, it can be concluded that exports have a positive and significant impact on Indonesia's economic growth. If there are more goods or services exported to foreign countries, the production of goods or services in the country must also increase. The more goods are shipped abroad, the flow of domestic capital is also in large quantities. The capital flows will be managed through capital funding for large, small and medium enterprises. This will increase the output, both goods and services, which will increase the domestic economy. The development of exports will lead to aggregate spending, which has a good impact on national income growth (economic growth).

B. The Effect of Exchange Rates on Economic Growth

The short-term coefficient value of the exchange rate variable is -0.122694 with a probability of 0.0019. This means that in the short term, an increase in the exchange rate of 1% can cause a decrease in the economic growth of 0.122694%. While the value of the coefficient in the long-term exchange rate is -0.097097, and the probability value is 0.0031. it means that in the long term if the exchange rate rises by 1%, it can cause a decrease in the economic growth of 0.097097%. Judging from the short-term and long-term coefficient values showing negative and the short-term probability value is less than 0.05 or 5%, it can be concluded that the exchange rate has a negative and significant effect on economic growth. If the exchange rate continues to depreciate, it will result in inequality in export goods and companies engaged in imported raw materials. This causes export goods to be more competitive, but on the other hand, the costs will be more expensive. In international trade, transactions are carried out according to the prevailing exchange rate. If the exchange rate appreciates, it causes export goods to be costly for the exporting country. This can affect the income derived from exports due to declining demand for commodities. But if, on the contrary, the price of export goods is low, the need for the item will increase. This can affect the amount of capital income obtained, affecting the country's economic growth.

C. The Effect of Foreign Debt on Economic Growth Indonesia

The value of the short-term coefficient of foreign debt is 0.250222 with a probability value of 0.0425. This can be interpreted if, in the short term, foreign debt increases by 1%, it can boost economic growth by 0.250222%. For a long time, the coefficient of foreign debt is 0.777916 with a probability value of 0.0000. This can be interpreted for a long time if foreign debt increases by 1%, it will increase economic growth by 0.777916%. When viewed from the coefficient value in the short term and long term, it is positive with a long-term probability value shorter than 0.05 or a 5%, it can be concluded that foreign debt has a positive and significant effect on economic growth. The increase in foreign debt can affect the country's economic growth at a specific time because it can be used as an additional cost to increase economic growth. The principle of foreign debt based on Government Regulation of the Republic of Indonesia No. 10 of 2011 explains that loan processing must be by the needs, and the utilisation must be appropriate to produce. It is better if the allocation of foreign loans is projected for productive things.

IV. Conclusion

Based on the results of the analysis and discussion of the research described in the previous chapter, the conclusions are Oil and gas exports have a positive and significant impact on Indonesia's economic growth in the short term and long term. This explains that if there is a change in oil and gas exports, it can affect Indonesia's economic growth. If exports increase, it will cause an increase in Indonesia's economic growth. The exchange rate has a negative and significant effect on Indonesia's economic growth in the long and short term. This explains that if there is a change in the exchange rate, it can hurt economic growth. In other words, if the exchange rate increases or appreciates, it will cause a decrease in Indonesia's economic growth. Foreign debt has a positive and significant impact on Indonesia's economic growth both in the long term and in the short time. This explains that changes in foreign debt will affect Indonesia's economic growth. If foreign debt increases, economic growth will also increase.

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