The Impact of Investment, Consumption, Government Spending and Net Exports on Economic Growth in Indonesia

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Abstract

This research studies investment, consumption, government spending and net exports on economic growth in Indonesia. This study uses secondary data from world banks and processed regression using the moving average autoregression method. We find that consumption, government expenditure, net exports are the backbone of the economy, which shows that the Indonesian economy relies on the informal sector or micro, small and medium enterprises.

Keywords: Investment, Indonesia, Economic growth **JEL Classification:** C0, J24, J64

Background

Investment is part of the production process, namely the procurement of capital factors, which is one of the factors of production. Production is the management of capital and human labor to produce products needed by humans (Oqubay & Lin,2020).

Products needed by humans will be absorbed in both the domestic market and the international market so that the term net export is born, which is the difference between exports and imports. Another factor besides labor and capital or money is technology. Technology makes human performance increase. Technological investment is sometimes required to increase production yields (Yates & Rice, 2020).

The absorption of the domestic market can be indicated by consumption, which is the process of absorbing products in the domestic market. When consumption increases, it will have an impact on increasing demand which in turn increases production and has an impact on encouraging economic growth (Hancock & Allison, 2020).

Literature review

Investment is the process of developing money through investment instruments to obtain future income or profit. Investment is generally an investment in the business sector such as opening a new business and developing it into a strong and profitable business (Ross,2020).

Consumption is the process of absorbing production products to meet needs and generate economic activity. Increased consumption has an impact on increasing demand which is responded to by increased production and has an impact on economic growth (Mahan & Raymond,2016).

In supporting business activities, infrastructure and a variety of public goods that are managed and procured by the government are needed so that government spending occurs. The production process produces products which are the result of production. These products can be absorbed in the domestic market as well as the international market so that they are known as net exports, which are the results of exports minus imports (Kim et al,2020).

Research methods

This research studies Investment, Consumption, Government Expenditure and Net Exports on Economic Growth in Indonesia. This study uses secondary data from world banks and processed regression using the moving average autoregression method with the following equation:

 $GDP_{t} = C_{t} + \beta_{1}I_{t1} + \beta_{2}G_{t2} + \beta_{3}Nx_{t3} + \beta_{4}Co_{t4} + e_{t}$

Where, GDP = Gross Domestic Product C = Constant C0 = Consumption I = Investment G = Government Expenditure Nx = Net Exports e = Error Term

All financial data is calculated in USD.

Results and Discussion

The estimation results are as follows:

GDP = -14695034172.2 + 1.32438995221*CO + 1.8294348887*G - 2.11992118611*I + 0.104849153444*NX

From the estimation results, Consumption (Co), Government Expenditure (G), Net Exports (Nx) are positively related to economic growth. And, investment (I) is negatively related to economic growth. This indicates that Consumption (Co), Government Expenditure (G), Net Exports (Nx) are the drivers of economic growth. Table 1 illustrates the estimation results as follows:

Table 1. Estimation Results						
Variable	Coefficient	Std. Error	t-Statistic	Prob.		
С	-1.47E+10	1.36E+10	-1.083719	0.2956		
СО	1.32439	0.166123	7.972355	0		
G	1.829435	1.091175	1.676573	0.1143		
1	-2.119921	1.28553	-1.649064	0.1199		

Table 1. Estimation Resul	ts
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NX	0.104849	0.358973	0.292081	0.7742
R-squared	0.99893	Mean dependent var		6.24E+11
Adjusted R-squared	0.998645	S.D. dependent var		3.39E+11
S.E. of regression	1.25E+10	Akaike info criterion		49.54714
Sum squared resid	2.34E+21	Schwarz criterion		49.79607
Log likelihood	-490.4714	Hannan-Quinn criter.		49.59573
F-statistic	3501.561	Durbin-Watson stat		0.988499
Prob(F-statistic)	0)	

Based on the estimation results described in Table 1., it can be seen that the R-square is quite high, namely 0.99893, so the quantitative calculation results show a 99% level of truth. Figure 1. Shows the forecasting of economic growth in Indonesia



Figure 1. Forecasting Economic Growth in Indonesia

From the forecasting results, it can be seen that the economic growth in Indonesia is experiencing very rapid growth by taking into account investment, consumption, government spending and net exports to economic growth in Indonesia. This shows that Consumption (Co), Government Expenditure (G), Net Exports (Nx) are the driving factors for economic growth. Meanwhile, investment in the business sector decreases when economic growth grows. This shows that the Indonesian economy relies on the informal business sector or the micro, small and medium business sector which has not been recorded in world bank data.

Conclusion

Consumption (Co), Government Expenditure (G), Net Exports (Nx) are the backbone of the economy which shows that the Indonesian economy relies on the informal sector or micro, small and medium enterprises.

Reference:

Hancock,K.J., Allison,J.E.(2020).The Oxford Handbook of Energy Politics. Oxford : Oxford University Press

Kim,J.H., Fallov,J.A. ,Groom,S.(2020).Public Investment Management Reference Guide. Washington D.C : The World Bank

Mahan.L.K., Raymond,J.L.(2016).Krause' s Food& the Nutrition Care Process, MeaEdition E-Book. Amsterdam : Elsevier

Oqubay,A., Lin,J.Y.(2020).The Oxford Handbook of Industrial Hubs and Economic Development. Oxford: Oxford University Press

Ross,A.(2020).Investing To Save The Planet: How Your Money Can Make a Difference. London : Penguin

Yates, S., Rice, R.E. (2020). The Oxford Handbook of Digital Technology and Society. Oxford : Oxford University Press