



Analysis of Indonesia's Economic Growth Sources (Study 1998-2006)

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ARTICLE INFO	ABSTRACT
Article history: Received Oct 9, 2020 Revised Nov 12, 2020 Accepted Dec 20, 2020 Keywords: <i>domestic investment, foreign investment, export, import, foreign debt, economic growth.</i>	This paper attempts to describe the sources of Indonesia's post-crisis economic growth (1998) up to the end of the analysis period (2006). The methodology used is qualitative and quantitative description. The quantitative approach is carried out in the form of calculations in a systematic formulation that focuses on hypothesis testing, while the qualitative approach is carried out by studying literature and accompanied by data analysis. The observed variables include domestic and foreign investment, exports and imports and foreign debt. The results showed that during the post-crisis period until 2006 the variables of domestic investment, exports and imports had a positive effect on economic growth. Meanwhile, the foreign investment variable, foreign debt, which should have had a positive impact on economic growth, turned out to be the opposite, this was because foreign investors brought most of their profits back to their country. Meanwhile, foreign debt provides a large burden because of the interest and installments. <i>This is an open access article under the CC BY-NC license.</i>



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1. INTRODUCTION

Economic development implies an effort made by a country with the aim of developing economic activity or can be interpreted as a process that encourages per capita GNP or people's income to increase over a long period of time (Arsyad, 1988).

As a process, economic development has links and influences between the factors in it that produce economic development. Furthermore, economic development will be reflected in an increase in per capita income and an improvement in the welfare level of the community. One of the indicators of a country's economic growth rate is indicated by the growth rate of Gross Domestic Product or Gross National Product.

In developing countries, the economic growth that was obtained was also accompanied by the emergence of macroeconomic problems which in theory should not have occurred, for example, high economic growth was also followed by an increase in the number of unemployed. Whereas based on the theory, high economic growth should increase the number of new investments which in turn will absorb more workers.

Indonesia's economic growth, which has increased since entering the 2000s, namely 4.9% in 2000 to 5.1% and 5.6% in 2004 and 2005, was not able to suppress unemployment, which in fact rose to 10.3%. According to a study by the Indef (Institute for Development of economics and Finance) growth so far has been fictitious because people's welfare is not getting better, because the contribution of economic drivers in that period was more due to the ongoing decline in imports so that Indonesia's net exports seemed to be improving. And this growth does not take place in sectors that absorb a large number of workers such as agriculture, the manufacturing industry and the building sector (Kompas, 4/8/2005).

The high rate of economic growth is also not accompanied by an even distribution of income among residents, BPS data shows that the level of income distribution is unequal and the inequality continues to widen. Data that reflects income inequality is data on average income per capita by household group in Indonesia. If we look at the data on Average Per Capita Income by Household Class (Statistics Indonesia 2005/2006), we know that the level of income inequality between household groups is getting wider. In 1990, inequality, or the difference between Average Household Per Capita income. Farm laborers with non-agricultural households in the upper class are only around Rp. 1,443,800,-. In 2000 the inequality had reached Rp. 8,244,300,

This condition indicates that there is something not quite right about the high economic growth, especially what has happened to the factors that drive the economic growth. This paper tries to identify the sources of Indonesia's post-crisis economic growth from 1998 to 2006.

2. RESEARCH METHOD

2.1 The scope of research

This study aims to determine the magnitude of the effect of macroeconomic variables on economic growth in Indonesia.

2.2 Types of research

This type of thesis research uses a qualitative and quantitative descriptive approach. The quantitative approach is in the form of calculations in a systematic formulation that focuses on hypothesis testing, while the qualitative approach is carried out by studying literature and accompanied by data analysis.

2.3 Population and Research Sample

The population of this study are food and beverage companies listed on the Indonesia Stock Exchange (IDX). The sample companies in this study were selected based on certain criteria, namely: Food and beverage companies listed on the Indonesia Stock Exchange from 2010 to 2016 did not experience a minus return on assets; Independent commissioners may not have two positions in the structure of the board of commissioners; Total assets in the company above 500 billion; The percentage of managerial ownership is above 50%.

2.4 Data Types and Sources

The type of data used is time series data, which is the process of collecting data at a certain time based on a time sequence starting from 1998 to 2006. The data used is secondary data, namely data that is not taken directly from the field, but data that has been processed and published by the statistical office and other relevant agencies.

2.5 Method of collecting data

The data collection procedure carried out by the author is through a library study, namely by studying the literature relating to the problems to be studied and then connecting them to each other so that results can be obtained that will really help in answering the existing problems.

2.6 Data Analysis Method

After the regression equation has been determined and the regression coefficient has been obtained, then statistical tests can be carried out which show the relationship between the dependent and independent variables.

a. Classic assumption test

The classical assumption test has the aim of knowing and testing the feasibility of the regression model used in this study. The conditions that must be met are that the data must be normally distributed, multicollinearity, heteroscedasticity and autocorrelation.

b. Hypothesis testing

Testing this hypothesis is useful for checking or testing whether the regression coefficient obtained is significant or statistically its value is not equal to zero. Hypothesis tests include testing the coefficient of determination R², simultaneous testing (F test) and individual parameter significant tests (t-test).

3. RESULTS AND DISCUSSIONS

3.1 Data Analysis Results

In analyzing the data, Eviews 4.0 and SPSS 13.0 software were used using the variables of Foreign Investment (IA), Domestic Investment (ID), Exports (EK), Imports (IM) and External Debt (ULN) using data that had been collected from 1998-2006, and then performed multiple linear regression analysis using the OLS method, the following regression results can be seen in the table below:

Table 1. The results of the estimation of variables IA, ID, EK, IM and external debt to GDP

Coefficients								
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics		
	B	Std. Error	Beta			Tolerance	VIF	
1 (Constant)	18.070	25.532		.708	.485			
lia	-.090	.130	-.099	-.693	.494	.796	1.256	
lid	.052	.134	.051	.387	.701	.929	1.077	
lek	1.123	1.213	.294	.926	.362	.160	6.268	
lim	.912	.745	.391	1.223	.231	.158	6.316	
luln	-2.933	1.394	-.294	-2.103	.044	.827	1.209	

a. Dependent Variable: lgdp

3.2 Hypothesis Testing Results

The results of hypothesis testing in this study include: statistical test results and classical assumption test results in influencing gross domestic product.

a. normality test

Good data is data that is normally distributed which has a significance level > 0.05. The normality test used is the Kolmogorov-Smirnov (KS) non-parametric statistical test. The following are the results of normality testing.

Table 2. Skewness and Kurtosis calculation results

Descriptive Statistics									
	N	Minimum	Maximum	Mean	Std.	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Unstandardized Residual	36	-.69599	2.18394	.0000000	.4241978	1.872	.393	3.969	.768
Valid N (listwise)	36								

From the results of the calculation of Zskewness and Zkurtosis obtained $Z_{\text{count}} < Z_{\text{table}}$, namely Zskewness ($4.58 < 5.72$) and Zkurtosis ($4.86 < 5.72$). So it can be concluded that the residual data is normally distributed.

b. Multicollinearity Test

Multicollinearity test is used to show the existence of a linear relationship between the independent variables in a regression model. The way to detect the presence or absence of multicollinearity in an empirical model is to look at the VIF and TOL values. If the VIF value is < 10 and the TOL value is > 0.1 , then there is no multicollinearity in the model. On the other hand, if the VIF value is > 10 and the TOL value is < 0.1 , it can be concluded that there is multicollinearity in the model.

c. Heteroscedasticity Test

Heteroscedasticity test was conducted to see whether the variance (σ^2) of a dependent variable (Y) increased as a result of increasing variance (σ^2) of the independent variables (X1, X2, X3, and X4). To determine the presence or absence of heteroscedasticity can be done by using the white test (no crossterms). If the results of Obs* R-Squared $< X^2$ table, there is no heteroscedasticity. In addition, it can be seen that if the calculated probability is > 0.05 , then there is no heteroscedasticity.

Table 4. Results of Heteroscedasticity Test with White . Test

White Heteroskedasticity Test:			
F-statistics	0.488674	Probability	0.868792
Obs*R-squared	5,208,565	Probability	0.815761

From the table, the results obtained are Obs* R-Squared ($N^*\text{-squared} = X^2$) = 5.208565 while the value of X^2 (2) with $\alpha = 0.05$ is 5.99147, because X^2 table is larger than Obs*R-Squared, there is no heteroscedasticity in the regression.

d. Autocorrelation Test

Autocorrelation test was conducted to determine whether there was a correlation between the independent variables and the correlation series arranged according to time (time series) or according to cross section (cross section). One of the methods used to detect autocorrelation symptoms is the Lagrange Multiplier Test (LM Test). If X^2 count is smaller than X^2 table and probability count is greater than 0.05, then H_0 cannot be rejected in the sense that there is no autocorrelation.

Figure 5. Autocorrelation Test Results with LM Test
Breusch-Godfrey Serial Correlation LM Test:

F-statistics	0.543891	Probability	0.586494
Obs*R-squared	1,346,275	Probability	0.510105

From the table, the results are Obs*R-Squared ($N^*\text{-squared} = X^2$) = 1.346275, while with a df of 4 and $\alpha = 0.05$, it is obtained that X^2 table = 9.487, because X^2 table is larger than Obs*R-Squared, then there is no Autocorrelation in regression. This can be seen from the probability that the resulting Obs*R-Squared is greater than the significance level of 0.05, so in the regression model it can be concluded that there is no autocorrelation.

From the results of the F test, it is shown that the variables of Foreign Investment (IA), Domestic Investment (ID), Exports (EK), Imports (IM) and External Debt (ULN) together significantly affect the

Gross Domestic Product in Indonesia. This means that changes that occur in the independent variables will also cause changes in the Gross Domestic Product.

From the regression results, we see that during 1998-2006 there were three variables, namely Domestic Investment, Exports and Imports that had a positive impact on Gross Domestic Product. The largest contribution was provided by Exports (with a regression coefficient of 1.123) this means that if exports increase by 1%, it will result in an increase in Gross Domestic Product of 1.123% *ceteris paribus*. Meanwhile, the smallest contribution is given by Domestic Investment (with a coefficient of 0.052), which means that if Domestic Investment increases by 1%, it causes Gross Domestic Product to increase by 0.052% *ceteris paribus*. Meanwhile, two other variables, namely Foreign Investment and External Debt, have a negative impact on Gross Domestic Product with regression coefficients -0.090 and -2.933.

Exports have a positive impact on economic growth. This is in accordance with the theory put forward by Ricardo, namely foreign trade as a means of improving economic conditions because foreign trade will bring maximum use of resources and increase income. International trade creates profits by providing opportunities for each country to export goods that most of its production uses the country's abundant resources. So far, Indonesia's exports have been dominated by industrial products. The agricultural sector, which used to be an idol sector, is now experiencing a decline, even though our country is an agricultural country (Wijono, 2005). Therefore, In the future, exports must be managed properly in order to remain a reliable source of economic growth. In this case, the government must strive to encourage export growth, especially manufacturing through reducing import duty rates, as well as reducing export barriers.

Domestic investment has a positive impact on economic growth. This is in accordance with the theory put forward by Adam Smith, capital stock (investment), is an element of production that actively determines the level of output. Its role is very central in the process of output growth, the amount and growth of output depends on the rate of stock growth. Thus, in the future, domestic investment must be managed properly in order to remain a reliable source of economic growth. In this case, the government must strive to improve the health and security of the financial system in order to encourage investment productivity, especially domestic investment, as well as control deposit and credit interest rates so that investment and savings increase.

External Debt has a negative impact on economic growth. This is not in accordance with what was stated by Tambunan (2001), Capital inflows consist of foreign loan flows and investment flows, foreign loans are urgently needed by developing countries for sustainable development because developing countries often experience current account deficits, low savings and structural inefficiency. This is due to foreign debt which is supposed to be a helper in driving the wheels of development because limited capital resources are allocated to various projects or programs incorrectly, in other words, there is a large leak due to corruption. and the increase in foreign debt plus the accumulation of pre-crisis debt, the greater the installments that must be paid and the interest on the debt which is increasingly burdening the State. So that foreign debt does not increase the burden on the State, the government must be able to maintain the balance of the State Budget by increasing revenues (especially from taxes) and reducing spending to cover the principal and interest installments on large foreign debts and encouraging the allocation of foreign debt to sectors. productive and export oriented.

4. CONCLUSION

From the results of data analysis, it is known that:

- Domestic Investment variable has a positive impact on Indonesia's economic growth. Domestic investment has always been proven to be a significant source of economic growth even though the portion is very small.
- Exports make the biggest contribution to Indonesia's economic growth. Indonesian exports are dominated by industrial products.
- Indonesia's economic growth was also driven by external factors, considering that the manufacturing sector, which gave the largest contribution to economic growth, used imports more in its production process.
- Foreign investment, which has been considered to be a driver of economic growth, turned out to have a negative impact on economic growth.
- Although Foreign Debt can help create a balance of state finances, in reality the interest expense and Foreign Debt installments are very burdensome. Indonesia should try to increase financial independence so that it does not always rely on foreign debt.

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