

THE EFFECT OF GOVERNMENT POLICY ON THE ECONOMIC GROWTH IN INDONESIA (FROM FISCAL AND MONETARY ASPECTS)

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ABSTRACT

Fiscal policy and monetary policy are the two main things in financing policy and has an important role in the development realization. Along with the global economic crisis that happened in the year 2008, the public's confidence in the economy fell sharply, giving rise to the emergence of macro-economic issues, which can be influenced by the government through fiscal and monetary policy. Fiscal policy is an economic policy in order to drive to a better economy circumstances by changing the government's revenues and expenditures. Meanwhile, through monetary policy, the government controls the money supply. This study aims to determine the effect of government policy on economic growth in Indonesia (from the aspect of Fiscal and Monetary). The independent variable in this study is fiscal policy and monetary policy (government spending, the money supply, and taxes), while its dependent variable is economic growth (Gross Domestic Product). The research data is secondary data obtained from the Central Bureau of Statistics and the Ministry of Finance during the years of 1988-2013. The method used in this research are Double Linear Regression. The results showed that: the fiscal and monetary aspects have a significant effect on economic growth in Indonesia. While the partial test results indicate that: (1) government spending for the finance routine has a positive and significant effect on economic growth in Indonesia; (2) government spending on development financing and tax revenues has a positive but not significant on economic growth in Indonesia; (3) the money supply and economic conditions has a negative effect and significant on economic growth in Indonesia.

Keywords : Fiscal policy, Monetary Policy, Economic Growth.

Introduction

Fiscal policy and monetary policy are the two main things in financing policy and has an important role in the implementation of the Development. Fiscal policy and monetary policy influence one another in economic activity. Along with the global economic crisis that happened in the year 2008 resulted the public's confidence in the economy fell sharply, giving rise to the emergence of macro-economic issues, which can be influenced by the government through fiscal and monetary policy. Both of these policies are generally carried out by two different institutions, including: fiscal institutions by the Ministry of Finance and Bank Indonesia's as a monetary institutions. Thus the coordination between the two institutions is indispensable to achieve the macroeconomic targets that have been set. In Indonesia, as well as in other countries, the coordination between fiscal policy and monetary policy has always been a problem. Coordination between the Ministry of Finance as fiscal manager and Bank Indonesia as monetary manager needs to be done. Each side needs to take advantage of the information and data published by others, to be used in the determination of targets (Djojosoebroto, 2014: 1).

The existence of the globalization that makes financial markets and the economy become integrated on a global scale, resulting an increased trade in goods and services, capital, investment and labor, so that the world economy is also evolving towards more advanced. In addition, economic liberalization has also made the world economy becoming increasingly complex in a financial and economic volatility or also higher, so the risk faced by economic agents is increasing, which means managing the economy right now also is not easy. Thus the economic authorities face problems and an increased challenge to maintain macroeconomic stability or the financial system. Therefore, a good coordination of fiscal and monetary is no longer an option, but a necessity (Adiningsih, 2012: 1). If you look back the economic crisis that hit the country of Indonesia in 1997 and the global financial crisis that hit in 2008, it shows that the importance of coordination between fiscal policy and monetary policy as measures to prevent and overcome the crisis. So in the end the impact of the crisis can be minimized.

Through monetary policy, the government controls the money supply, while revenues and expenses are controlled through fiscal policy. In this case, the government seeks to increase revenue through fiscal policy and to fund current expenditure for transfer payments to people who became their responsibility. One of the income sources are obtained from collecting the tax. Fiscal policy is a policy to control the macroeconomic balance. Fiscal policy aims to influence aggregate demand side of the economy in the short term. In addition, this policy can also affect the supply side of the long-term nature, through increased economic capacity. In the management of macroeconomic stability, fiscal policy will interact with monetary policy. (Surjaningsih, et al; 2012: 390). The economy will be affected by fiscal policy, namely through state revenues and expenditures, including the difference between revenues and expenditures (deficit or surplus) as well as a source of state revenue and expenditure activities funded by the state (it is associated with State Budget). State spending is all spending on government operations and financing of various projects in the state sector or Badan Usaha Milik Negara (State Owned Enterprises, hereinto SOEs). So the instrument of fiscal policy are government revenues and expenditures that are closely related to taxes.

Monetary policy is one of the policy that plays an important role in an economy. The role is reflected in its ability to affect price stability, economic growth, employment expansion, and the balance of payments (Gulo, 2008: 19). So monetary policy is basically a policy that aims to achieve internal balance (high economic growth, price stability, equitable development) and external balance (balance of payments) as well as the achievement of macroeconomic objectives, namely maintaining economic stabilization that can be measured by employment opportunities, price stability and balanced international balance of payments. To that end, the Central Bank or Monetary Authority tried to adjust the balance between the supply of money with inventory to control or restrain inflation, employment expansion (welfare) and smoothness in the distribution of goods so that the goal of monetary policy can be realized.

Fiscal policy is an economic policy in order to drive the economy to a better condition by changing the way of government revenues and expenditures. When viewed from the aspect of the tax by changing the applicable tax rate, it will affect the economy. Thus, if the tax lowered, the purchasing power of the people will increase and the industry will be able to increase the amount of output. Instead of tax increases, it will reduce purchasing power and lower industrial output in general. In Keynes approach, fiscal policy can move the economy due to the increase in government spending or tax cuts have a multiplier effect by stimulating additional demand for household consumption goods. Similarly, if the government made tax cuts as economic stimulus, it has the same impact. Tax cuts will increase disposable income and in turn affect demand (Surjaningsih, et al, 2012: 393)

Table 1. The development of government spending, the money supply and tax revenue in Indonesia in 2007-2008 (in billion rupiah)

Year	Government Expenditures		The Money Supply	Tax
	Routine	Development		
2007	504.623	253.263	1.649.662	706.108
2008	693.356	292.434	1.895.839	979.305

Source : Central Bureau of Statistics, 2014

Based on Table 1 above shows that an increase in government spending from 2007 to 2008 amounting to Rp 188,733 billion. So is the amount of money in circulation increased from 2007 to 2008 amounted to 246 177 billion. Then, from the tax sector also increased from 2007 to 2008 amounting to Rp 273,197 billion. With the increase in expenditure, it is expected to increase economic growth indicated by an increasing Gross Domestic Product (GDP), it is in line with the objectives of government spending to increase the economic growth and stable so as to improve the prosperity and welfare of the community (Gulo 2008 : 20). To calculate the percentage growth can be calculated as follows (Tambunan, 2001):

$$\Delta PDB (t) = [GDP (t) - GDP (t-1)] \times 100\%$$

$\Delta PDB (t)$ = growth year (t) given in absolute value; t-1 = the previous year.

Table 2. Percentage Distribution of Gross Domestic Product Constant Market Prices in 2007-2008 (Percent)

Type Expenditure	2007	2008
Household Consumption	57,57	57,20
Government Consumption	7,80	8,13
Domestic Fixed Capital Formation	22,47	23,71
Inventory Changes	-0,01	0,10
Statistic Discrepancy ¹⁾	2,76	1,30
Goods and Services Export	47,98	49,57
Reduced with Goods and Services Import	38,57	40,02
GDP	100,00	100,00

Source : Central Bureau of Statistics, 2014

World Bank put the Indonesian economy in the order of 10 of the world based on GDP and purchasing power parity. Indonesia entered the ranks of the elite in a row after the United States, China, India, Japan, Germany, Russia, Brazil, France, and the UK (Warsito, 2014: 3).

This study refers to a previous study conducted by Gulo (2008) that analyzes the effect of fiscal and monetary aspects of the economic growth in Indonesia. Research results show that the fiscal and monetary aspects have a significant effect on economic growth in Indonesia. Partially the result of research shows that government spending both routine and development does not have a significant positive effect on economic growth in Indonesia. While the money supply and tax revenues in the previous year have a significant and positive effect on economic growth in Indonesia. The analytical method used is *ordinary least squares* (OLS).

Problem Formulation

Based on the above background, the formulation of the problem can be stated as follows:

- How does government spending effects the finance routine in economic growth in Indonesia?
- How does government spending effects the finance of the construction in the economic growth in Indonesia?

- c. How does the money supply to economic growth in Indonesia?
- d. How does tax revenue to economic growth in Indonesia?
- e. How does the influence of economic conditions on economic growth in Indonesia?

Research Objectives

This study aims to:

- a. Determine the effect of government spending in finance routine to economic growth in Indonesia.
- b. Determine the effect of government spending in finance development to economic growth in Indonesia.
- c. Determine the effect of money supply on economic growth in Indonesia.
- d. Determine the effect of tax revenue to economic growth in Indonesia.
- e. Determine the effect of economic conditions on economic growth in Indonesia

Research Hypothesis

H1: government spending to finance routine have a positive effect on economic growth in Indonesia.

H2: government spending to finance the construction have a positive effect on economic growth in Indonesia.

H3: The money supply have a positive effect on economic growth in Indonesia.

H4: Tax revenue have positive effect on economic growth in Indonesia.

H5: Economic conditions negatively affect the economic growth in Indonesia.

METHODS

2.1 Types of Research

This research is descriptive quantitative research that uses existing figures on government expenditure for recurrent and development funding, the money supply, as well as tax revenue, to then be interpreted to mean strong in an attempt to answer the research problem and described according to the quality of the findings.

2.2 Source of Data Research

Secondary data used in this study is the government spending to finance routine and development, the money supply, as well as tax revenue for the period before and after the crisis of the years 1988-2013 were obtained through the website of the Central Bureau of Statistics and Ministry of Finance of the Republic of Indonesia.

2.3 Method of Analysis Research

2.3.1. Normality test

Normality Test (using the Kolmogorov-Smirnov statistic);

2.3.2. Classical Test Assumptions

According to Ghozali (2011: 103), the classic assumption test is carried out as follows: Multicollinearity Test (can be seen from the value of the variance inflation factor (VIF)); Test autocorrelation (Durbin-Watson method is used (DW Test)); Heteroskedasticity test (test used is Glejser).

2.3.3. Research Hypothesis Testing

This study used a multiple linear regression analysis. Statistical equations used are as follows:

$$GDP_t = \alpha + \beta_1 GR_t + \beta_2 GP_t + \beta_3 M_t + \beta_4 T_{t-1} + \beta_5 Dm + \varepsilon$$

GDP = GDP year t

α = Constants

$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5$ = Regression Coefficient

GR_t = Government revenue for a routine funds in t period;

GP_t = Government revenue for development in t period;

M_t = Money supply in t period

T_{t-1} = Tax Revenue in the previous period ($t-1$)

Dm = Dummy variabel for the economic condition. 0=before crisis; 1=after crisis.

ε = Error

2.3.4. Coefficient of Determination

This study uses Adjusted R2 (can go up or down when the independent variable is added to the model (Ghozali 2011: 97)).

2.3.5. Simultaneous Significance Test (Test Statistic F)

If $P_{value} < 0.05$, it can be said that all independent variables simultaneously and significantly affect the dependent variable.

2.3.3. Significant Parameter Test Individual (Test Statistic t)

If $P_{value} < 0.05$ then the independent variables affect the dependent variable individually.

RESEARCH FINDINGS

3.1. Descriptive Statistics

Descriptive statistics are presented in this study to provide information about the characteristics of the study variables to be included in the research model as presented in Table 3 below:

Table 3

Table 3. Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
GR	25	-,4186	,7167	,196543	,2335224
GP	25	-,2327	1,1043	,204374	,2618527
M	25	,0472	,6235	,188699	,1186248
T	25	-,0589	,4734	,199435	,1109710
PDB	25	-,1324	,0954	,050203	,0425268
Dummy	25	0	1	,68	,476
Valid N (listwise)	25				

3.2. Normality Test

Statistic test used to test the normality is the One-Sample Kolmogorov - Smirnov (KS) test. The criteria used are H_0 is accepted when Sig. K-S > 0.05. On the contrary, if the Sig. K-S < 0.05 then H_0 is rejected.

Table 4. One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		25
Normal Parameters ^{a,b}	Mean	,000000
	Std. Deviation	,0198358
Most Extreme Differences	Absolute	,152
	Positive	,152
	Negative	-,114
Kolmogorov-Smirnov Z		,759
Asymp. Sig. (2-tailed)		,612

a. Test distribution is Normal.

b. Calculated from data.

The test obtained Sig. K-S = 0.612. Therefore, the value of $KS > 0.05$ then H_0 is accepted as such. This means that the data is processed to have normally distributed residuals.

3.3. Classical Assumption Testing

3.3.1. Heteroskedasticity Test

To detect the presence or absence of heteroscedasticity using Glejser test (Test Glejser) regressing the absolute value of the residuals against the independent variables. If the partial no significant effect of each independent variable on the dependent variable (Sig. > 0.05) then stated there is no problem of heteroscedasticity. Glejser test results, obtained show that no significant effect of the independent variables as shown in Table 5.

Table 5. Heteroscedasticity Test

Independent Variable	Significancy
(Constants)	0,577
GR	0,916
GP	0,243
M	0,655
T	0,887
Dm	0,204

3.3.2. Autocorrelation Test

To detect the presence or absence of autocorrelation will be tested Durbin-Watson (DW.test). When the figure to be around DU $DW < 4 - DU$, means no autocorrelation (Ghozali 2011: 110). Test results obtained by the DW value = 0.852 while the value of DU = 0.756 (N = 25, k = 5). Based on these criteria, the $0.756 < 0.852 < 4 - 0.756$ so it can be concluded that there is no autocorrelation. DW calculation results are presented in Table 6:

Table 6. Autocorrelation Test (Durbin-Watson Test)

	D _w Value	D _U Value	Conclusion
Regression Equation	0,852	0,756	No autocorrelation

3.3.3. Testing Multicollinearity

The results of the calculation of the value of tolerance showed no independent variables that have a tolerance value of less than 0.10. VIF value calculation results also show the same thing none of the independent variables have VIF values over 10 It can be concluded that the regression model does not occur a multicollinearity symptoms among independent variables. The test results shown in Table 7 below :

Table 7. Results of Multicollinearity Test

Free Variable	Tolerance	VIF	Description
GR	0,888	1,126	Non Multicollinearity
GP	0,809	1,236	Non Multicollinearity
M	0,819	1,221	Non Multicollinearity
T	0,849	1,177	Non Multicollinearity
Dm	0,804	1,244	Non Multicollinearity

3.3.4. Testing Goodness of Fit Model

1) The coefficient of determination (R^2)

The coefficient of determination reflects how much of the variation of the dependent variable can be explained by variations in the independent variable. From Table 7 obtained coefficient of determination (adjusted R^2) of 0.725 This means that 73% of GDP variation can be explained by the variation of the variable GR, GP, M, T and Dm. While the remaining 27% is explained by other factors or variables outside the model regression. The results of coefficients of determination are shown in Table 8:

Table 8. Value of coefficient of determination (R^2)

Model	R	R Square	Adjusted R Square
1	0,885	0,782	0,725

1) The F test statistics

Based on the test results of F obtained F_{value} of 13.667 with a probability value of 0.000 which is significant at $\alpha = 0.05$, it can be concluded that the independent variables jointly affect the dependent variable (GDP). F test results are shown in Table 9:

Table 9. Results of F Test ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	,034	5	,007	13,667	,000 ^a
	Residual	,009	19	,000		
	Total	,043	24			

a. Predictors: (Constant), Dummy, T, GR, M, GP

b. Dependent Variable: PDB

2) The test statistics t

T Statistical tests (t test) and the results of the regression effect of independent variables on GDP are presented in Table 10:

Table 10. Results of t test statistics (t test) and Regression Analysis

Regression	Variable	t	B	Sig
Equation $GDP_t = \alpha + \beta_1 GR_t + \beta_2 GP_t + \beta_3 M_t + \beta_4 T_{t-1} + \beta_5 Dm + \varepsilon$	Constants	5,956	0,108	0,000
	GR	3,374	0,383	0,003
	GP	0,435	0,052	0,668
	M	-5,281	-0,624	0,000
	T	0,058	0,007	0,955
	Dm	-4,376	-0,522	0,000

From the results of multiple linear regression as shown in Table 9, the equation of GR, GP, M, T and Dm on GDP are:
 $GDP_t = 0,108 + 0,383GR_t + 0,052GP_t - 0,624M_t + 0,007T_{t-1} - 0,522Dm + \varepsilon$

Based on Table 10, the results of hypothesis testing is partially described as follows:

- 1) Hypothesis 1: government spending to finance routine positive effect on economic growth in independent Indonesia. Variabel GR has a positive regression coefficient of 0.383 and t-test result of 3.374 with a significance level of 0.003. It shows that the GR variable is statistically significant at $\alpha = 0.05$, so that based on the results of Hypothesis 1 is accepted.
- 2) Hypothesis 2: government spending to finance the construction of a positive effect on economic growth in Indonesia. Independent variables GP, have a positive regression coefficient of 0.052 and t-test results of 0.435 with a significance level of 0.668. It shows that the GP variables are statistically insignificant at $\alpha = 0.05$, so that based on the results of Hypothesis 2 was rejected.
- 3) Hypothesis 3: The positive effect of money supply on economic growth in independent Indonesia. Variable M has a negative regression coefficient of -0.624 and -5.281 for the results of the t test with a significance level of 0.000. This shows that the variable M statistically significant at $\alpha = 0.05$, so that based on the results of Hypothesis 3 is rejected.
- 4) Hypothesis 4: tax revenue positive effect on economic growth in Indonesia. Independent variables T, has a positive regression coefficient of 0.007 and t-test results of 0.058 with a significance level of 0.955. This shows that the variable T is not statistically significant at $\alpha = 0.05$, so that based on the results of Hypothesis 4 was rejected.
- 5) Hypothesis 5: economic conditions negatively affect economic growth in independent Indonesia. Variable Dm has a negative regression coefficient of -0.522 and -4.376 for the results of the t test with a significance level of 0.000. This shows that the variable Dm is statistically significant at $\alpha = 0.05$, so that based on the results of Hypothesis 5 is accepted.

Conclusion

1. Results of testing hypothesis 1 which states that government spending to finance routine positive effect on economic growth in Indonesia. The test results concluded that any increase in government spending to finance routine will increase by 1 unit of gross domestic product amounted to 0.383. So the issuing government to finance routine positive and significant impact on economic growth in Indonesia.
2. Results of testing hypothesis 2 which states that government spending to finance the construction of a positive effect on economic growth in Indonesia is not acceptable. Test results using the data of observation in this study concluded that
3. Results of testing hypothesis 3 which states that the positive effect of money supply on economic growth in Indonesia is not acceptable. The test results concluded that the increase in the money supply is quite volatile and rose sharply in 1997 to 1998, from 23.21% to 62.34%, then declined sharply in 1999 amounted to 11.92%.
4. Results of testing hypothesis 4 which states that tax revenue positive effect on economic growth in Indonesia is not acceptable. Test results using data of observation in this study concluded that the possibility of excessive tax imposed on the private sector resulting decline in the rate of economic growth.
5. Results of testing hypothesis 5 which states that economic conditions negatively affect economic growth in Indonesia is received. The test results concluded that the economic crisis resulted in a decline in economic growth in Indonesia. Dummy variable coefficient value of -0.522 means that after the economic crisis led to a decrease in economic growth in Indonesia amounted to 0.522 percent. economic conditions in the period before and after the crisis affecting the probability of increase in gross domestic product, which means that the economic conditions are taken into account in determining the gross domestic product when viewed as partial. In the aftermath of the global crisis led to an increase in economic growth of 9.5% percent.

Suggestions

This study, in the analysis did not include other factors that can also affect the economic growth as fiscal and monetary aspects of the other. Based on these limitations, it is recommended for further research, in order to incorporate these factors and a more complete discussion. In addition, further research can add to the period of the study so the results may represent existing conditions.

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