

IMPACT OF GOVERNMENT CAPITAL EXPENDITURE ON POVERTY LEVELS IN MALUKU

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ABSTRACT

Fiscal policy is an inseparable part of macroeconomic policy both in the short and long term. Fiscal policy is set to achieve economic growth. The policy of opening faucets and stimulating the investment climate is expected to be able to create job opportunities which in turn increase income, thereby reducing poverty. Expansive policy also means that government spending aims at infrastructure development and labor-intensive projects that will reduce unemployment and poverty in Maluku. Although government capital expenditures continue to increase, economic growth in several districts / cities has not shown the same level of economic growth. This study measures two variables, namely Government Investment and Government Consumption. To identify it, an analysis was carried out using the linear regression method with the type of panel data. The regression results found that government investment has a very positive and significant effect with a significance level of 0.04 on the poverty level in Maluku while for the Government consumption variable, it also has a positive and significant effect of 0.03 on poverty.

Keywords: Fiscal Policy, Capital Expenditures, Investment and Consumption

ABSTRAK

Kebijakan fiskal merupakan bagian yang tak terpisahkan dari kebijakan makroekonomi baik dalam jangka pendek maupun dalam jangka panjang. Kebijakan fiskal ditetapkan untuk mencapai pertumbuhan ekonomi. Kebijakan membuka kran dan merangsang iklim investasi diharapkan akan dapat menciptakan kesempatan kerja yang pada akhirnya adanya peningkatan pendapatan, sehingga dapat mengurangi kemiskinan. Kebijakan ekspansif juga berarti dimana pengeluaran pemerintah bertujuan kepada pembangunan infrastruktur dan proyek-proyek padat karya yang akan mengurangi tingkat pengangguran dan kemiskinan di Maluku. Meskipun belanja modal pemerintah terus meningkat namun pertumbuhan ekonomi di beberapa kabupaten / kota belum menunjukkan tingkat pertumbuhan ekonomi yang sama. Penelitian ini mengukur dua Variabel yaitu Investasi Pemerintah dan Konsumsi Pemerintah. Untuk mengidentifikasi maka dilakukan analisis dengan menggunakan metode regresi linier dengan jenis data panel. Hasil regresi ditemukan bahwa Investasi pemerintah sangat berpengaruh positif dan signifikan dengan tingkat signifikansi sebesar 0.04 terhadap tingkat kemiskinan di Maluku sedangkan untuk variable Konsumsi Pemerintah, juga memiliki pengaruh positif dan signifikan yaitu sebesar 0.03 terhadap kemiskinan.

Kata Kunci : Kebijakan Fiskal, Belanja Modal, Investasi dan Konsumsi

INTRODUCTION

Fiscal policy is an inseparable part of macroeconomic policy both in the short and long term. Fiscal policy is set to achieve economic growth. This in turn has led to the emergence of trade-offs between achieving price stability and economic growth, especially in the short term. A high fiscal deficit policy can cause an increase in the inflation rate, on the other hand an economy with a high inflation rate also has a negative impact on economic growth. Economic developments that are increasingly dynamic and integrated with the Indonesian economy have important implications for economic actors, especially in macroeconomic policy making. Management of fiscal policy through good coordination will provide positive signals for the market and maintain macroeconomic stability.

The policy of opening taps and stimulating the investment climate is expected to be able to create job opportunities which in turn increase income, thereby reducing poverty. The investment climate is all policies, institutions and the environment, both ongoing and expected in the future, which can affect the rate of return and risk of an investment (Stern 2002).

In Maluku Province, local revenue is still relatively small so that to finance expenditures, both direct and indirect, the Maluku Provincial government still relies on funds from the central government in the form of general allocation funds, special allocation funds or assistance or grants. This is to support the enormous expenditure of the

province, especially for development, although the high level of provincial government spending is not proportional to the resulting economic growth, so it is necessary to have a targeted fiscal policy in order to increase economic growth in Maluku Province.

The development of regional expenditure in the proxy with the value of consumption and investment, is that for the city of Ambon, the increase in local revenue is very significant, which can be seen at 46.84%, while the increase in government consumption and investment can be seen, namely 24.35% and 37.83%.

For Buru Selatan district, the increase in local revenue is very significant, it can be seen that is equal to 98.98%. In the same period there was also an increase in government consumption and investment, namely by 30.75% and 68.75%.

METHODOLOGY.

To identify the impact of government spending and government revenue on economic growth in Maluku Province, an analysis was carried out using the linear regression method, with the specification below:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + e \dots (3.1)$$

Where:

Y = Poverty rate in Maluku

X₁ = Government Investment

X₂ = Government Consumption

After determining the estimated parameters, the next step to take is to test the estimated parameters so that a model can be said to be good. These tests are statistical tests on the estimator model through the F test and testing for regression parameters through the t test and see how many percent of the independent variables can be explained by the dependent variables through the coefficient of determination (R-squared). Econometric tests that will be carried out include heteroscedasticity test, autocorrelation test, multicollinearity test, and normality test.

And to clarify the estimation models we will perform the classical assumption test that will further explain below:

a) Normality Test

This test is done because the data used is less than 30. This test is used to see if the error term is close to the normal distribution. The test criteria used:

1. If the Jarque Bera probability value \geq real level (α) is obtained, then the model does not have a normality problem or it can be said that the error term is normally distributed.
2. If the Jarque Bera probability value \leq real level (α) is obtained, then the model has a normality problem or it can be said that the error term is not normally distributed.

b) Multicollinearity Test

Multicollinearity occurs when in multiple regression there is no relationship between independent variables or occurs

because of a significant correlation between independent variables. Violation of this assumption will make it difficult to predict what is desired. To detect the presence or absence of multicollinearity is to pay attention to the probability of t-statistical regression results (Gujarati, 1997). If many parameter coefficients are assumed to show insignificant results, this indicates multicollinearity. One of the easiest ways to overcome this violation is to eliminate one of the insignificant variables. This is often not done because it can bias the parameters specified in the model. Then another way is to look for instrumental variables that are correlated with the dependent variable but are not correlated with other independent variables. However, this is somewhat difficult to do considering the absence of information about the type of variable.

There are several ways to detect the presence or absence of multicollinearity. One way according to Gujarati (2007) is through the correlation matrix, where the limit of correlation between independent variables is not more than $| 0.80 |$.

In addition, there is another way according to Gujarati (2007) to detect the presence or absence of multicollinearity, namely by using the Klein test. According to the Klein test, if there is a correlation value that is higher than $| 0.80 |$, multicollinearity can be neglected as long as the correlation value does not exceed the Adjusted R-squared.

c) Heteroscedasticity Test

A function is said to be good if it fulfills the homoscedasticity assumption (heteroscedasticity does not occur) or has the same error range. The existence of heteroscedasticity will cause the expected parameters to be inefficient. Heteroscedasticity does not impair the irregularity and consistency of the Ordinary Least Square (OLS) estimator, but the OLS estimator is no longer efficient in both small and large samples (i.e. asymptotics) (Gujarati, 1997). To detect the presence or absence of this violation using the White Heteroscedasticity Test. The probability value $Obs * R\text{-squared}$ is used as a reference for rejecting or accepting H_0 : homoscedasticity.

- Probability $Obs * R\text{-squared} < \text{real level } \alpha$, then reject H_0
- Probability $Obs * R\text{-squared} > \text{real level } \alpha$, then accept H_0

If H_0 is rejected, there will be heteroscedasticity symptoms, and vice versa if H_0 is accepted, there will be no heteroscedasticity symptoms.

d) Autocorrelation Test

Kendall and Buckland in Gujarati (1997) say the term autocorrelation can be defined as the correlation between members of observations that are ordered according to time (such as periodic series data) or space (such as cross-sectoral data). As with the heteroscedasticity problem, the OLS estimator is no longer efficient or the variety is no longer

minimum if there is autocorrelation. To detect the presence or absence of autocorrelation, the Breusch-Godfrey Serial Correlation LM Test can be used.

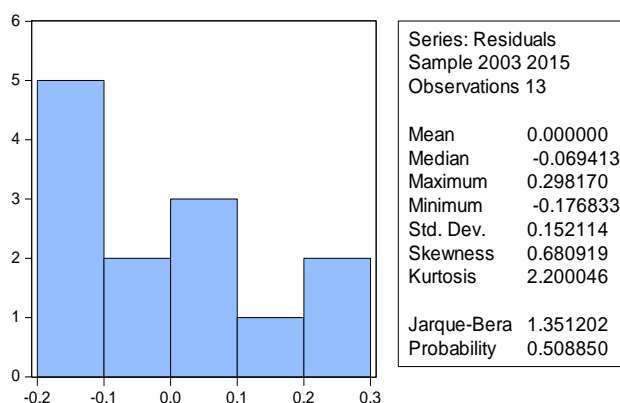
- Probability $Obs * R\text{-squared} < \text{real level } \alpha$, then there is autocorrelation
- Probability $Obs * R\text{-squared} > \text{real level } \alpha$, then there is no autocorrelation

RESULT

a) **Normality Test**

Normality aims to see whether the data for the independent variable and the dependent variable are normally distributed. This normality test is carried out using the normal probability plot analysis, histogram graphs and the Kolmogorov-Smirnov Test with the results:

Graph 1. Histogram Analysis



Source: Data Processing Results

Based on the results of the Kolmogorov-Smirnov test, it can be concluded that the data has a normal distribution. If the significance of the Kolmogorov Smirnov value

is greater than α ($0.508850 > 0.1$), it can be stated that the data has a normal distribution.

b) Multicollinearity Test

Tabel 2 Hasil Tabel Corelation Matrix

	LOG(TKI)	LOG(IP)	LOG(KP)
LOG(TK)	0.1891	-0.0246	-0.0940
LOG(IP)	-0.0246	0.01285	0.01154
LOG(KP)	-0.09402	0.01154	0.05035

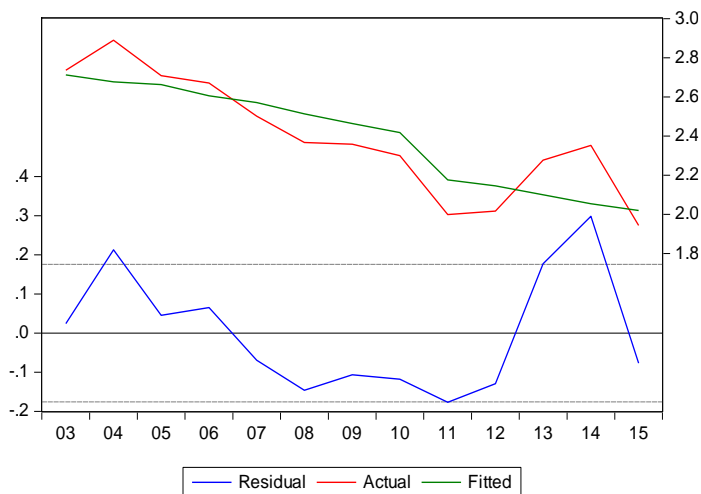
Source: Data Processing Results

From the table above, it can be seen that there is no multicollinearity problem in the equation in question. This is because the Corelation Matrix value of all variables is less than 0.8

c) Heteroscedasticity test

Heteroscedasticity test aims to test whether in the regression model there is an inequality (variance) between one observation to another. The author uses Actual, Fitted, Residual Graph to perform this test with the following results:

Graph 3. Actual, Fitted, Residual Graph



Source: Data Processing Results

From the graph above, it can be seen that the dots spread out randomly and do not

form a certain or irregular pattern. This indicates that there is no heteroscedasticity in the regression model so that the regression model is feasible to use.

In addition to using the actual, fitted, residual graph above to determine whether or not heteroscedasticity exists, the author also uses the white test (white test) to see whether or not there is a heteroscedasticity element in the model.

Table 3. White Heteroskedacity Test

Heteroskedasticity Test: White

F-statistic	4.254138	Prob. F(9,3)	0.1909
Obs*R-squared	11.879349	Prob. Chi-Square(9)	0.2043
Scaled explained SS	3.451393	Prob. Chi-Square(9)	0.8459

Source: Data Processing Results

White hypothesis testing shows that:

- H0: no heteroscedasticity
- H1: there is heteroscedasticity

If the p-value Obs * R-squared $<$ from α then H0 is rejected because p-value $0.2254 >$ $\alpha = 0.01$ then H0 is accepted

the conclusion is that with a confidence level of 99%, there is no heteroscedacity in this model.

d) Autocorrelation Test

To detect auto-correlation problems, the LMTest test is used. This test is very useful to identify auto-correlation problems not only in the first degree (first order) but also used at the degree level. If the LM test results are from the null hypothesis (Ho), namely the calculated chi squares value (χ^2)

<than the critical value of chisquares (χ^2), then the estimation model does not have auto correlation, and vice versa if it is in the alternative hypothesis (H_a), namely the value Chi squares count (χ^2) > than the critical value of schi squares (χ^2), then there is auto correlation. With the LM test obtained:

Table 4. Autocorelation Test (BG-Serial Correlation LM Test)

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	1.895637	Prob. F(2,7)	0.3287
Obs*R-squared	4.678621	Prob. Chi-Square(2)	0.1086

Source: Data Processing Results

From the regression results above, it can be seen that the calculated Chi square value (χ^2), amounting to 4.678621 at indolence 2 we accept the null hypothesis because the significance level of α is greater than 5%, namely 10.86%. Based on the LM test, this means that the model does not contain autocorrelation.

e) Regression Result

Table 5. Regression Result

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LOG(IP)	0.062665	0.434922	0.144082	0.0406
LOG(KP)	0.016518	0.113378	0.145693	0.0374
C	7.633944	2.497468	3.056674	0.0136
R-squared	0.742594	Mean dependent var		2.393820
Adjusted R-squared	0.656792	S.D. dependent var		0.299820
S.E. of regression	0.175646	Akaike info criterion		-0.393027
Sum squared resid	0.277665	Schwarz criterion		-0.219196
Log likelihood	6.554674	Hannan-Quinn criter.		-0.428757
F-statistic	8.654745	Durbin-Watson stat		1.241545
Prob(F-statistic)	0.000008			

Source: Data Processing Results

Model yang digunakan adalah :

$$LOG(Y) = \beta_0 + \beta_1 LOGX_1 + \beta_2 LOGX_2 + \beta_3 LOGX_3$$

DISCUSSION

Based on the regression results above, it can be seen that government investment has a very positive and significant effect with a significant level of 0.04 on the poverty level. This is in accordance with several previous studies which stated so. Research conducted by Abdullah (2001) to determine the role of the public sector in regional economic growth in Indonesia derives an equation in which the GRDP growth rate can be broken down into the contribution of labor, private investment and development expenditures and routine expenditures, as well as revenues from local revenue, share of tax and non-tax revenues in terms of productivity and their contribution to GRDP. From the estimation results, the conclusion is that the revenue from the original regional income, tax and non-tax revenue sharing is significantly negative for regional economic growth, while routine expenditures and development expenditures are significantly positive for regional economic growth.

In this way, massive government investment or government capital expenditure will provide employment opportunities because capital expenditure (Government investment) will require a lot of manpower. And when this workforce is absorbed, it will have an impact

on reducing unemployment so that it will reduce the rate of poverty.

Meanwhile, the Government Consumption variable also has a positive and significant effect of 0.03 on poverty. This shows that government consumption will trigger demand for goods and services. This request will certainly have an impact on people's income. Besides that, it will also have an impact on increasing production capacity due to demand. This increase in production capacity certainly requires manpower. In this way, job opportunities are opened, there is labor absorption and wages are paid. This will certainly reduce the unemployment rate so that the poverty rate can be suppressed.

This result is in line with research conducted by several researchers who took cases in provinces in Indonesia.

CONCLUSION

Based on the results of the background, theory, empirical findings and the results of the discussion, several conclusions can be made, namely

1. Government capital expenditures or Government Investments have a strong influence and impact on job creation so as to reduce the rate of unemployment and poverty.
2. Government consumption will reduce the rate of poverty because government consumption will trigger demand for goods and services. This request will certainly have an impact on people's income.

3. Poverty can be reduced by the rate of development by increasing government capital spending and government consumption. Because these two factors can encourage the creation of demand and the creation of job opportunities.

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