Analysis the Effect of Regional Original Income, Balance Funds, and Capital Expenditure on Economic Growth in Malang City

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ABSTRACT
This study aims to determine the influence of regional original income, balance funds, and capital expenditure on economic growth in Malang from 2006 to 2022. This research approach uses a quantitative approach. Using independent variables, namely regional original income variables, balance funds, and capital expenditures, and dependent variables are economic growth variables. Data analysis techniques use multiple linear regression analysis with the Ordinary Least Square (OLS) model with IBM SPSS 26 as a data processor. My research shows that regional real income and balance funds have a positive and significant impact on economic growth, while capital expenditure does not affect economic growth.

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INTRODUCTION

Indonesia is one of the developing countries with a relatively less economy. In this sense, the role of the government is essential to conduct policy interventions to improve development standards. In the field of fiscal policy, where economic policy, economic stability, and income distribution are evenly distributed, the government has undertaken various efforts.

Economic growth is a long-term problem in development. Economic growth is also a rejection of a country's capacity to produce products and services. A country's income and expenditure programs can make it easier to achieve higher growth rates or reduce that growth rate. To understand the economic growth of a region, we can look at the regional gross domestic product (GDP) and examine the economic conditions of a region (Sisilia and Harsono, 2021).

In economic growth, there has been continuous change in the economic conditions of a country to realize a better economic situation during a certain period (Arini and Kusuma, 2019). According to both assessments, sustainable economic expansion will increase the prosperity and well-being of the local community, as economic growth is an indicator of successful development within a country. Economic growth is a long-term economic problem, because it is the main measure of successful development and the results will be enjoyed by the people up to the very bottom. Below is a graph of the economic growth rate in Malang from 2006-2022:

![Graph of Economic Growth Rate in Malang City 2006-2022](image)

Figure 1. Development of Economic Growth Rate in Malang City 2006-2022
Source: BPS 2023, (processed)

Figure 1 shows the economic growth of Malang City from 2006 to 2022 fluctuated. However, the highest decline can be seen in the economic growth chart of Malang City in 2020 at -2.26%, this is due to the COVID-19 pandemic which caused a decline in the regional and national economic sectors even worldwide due to social restrictions.

To address the problems in the government's economic growth assistance, the government is required to find the right solution to increase the opinion of natural regions overcoming the economic growth problem. This
region can then be used as a means of boosting economic growth. The regional opinion in question is the Regional Original Opinion, the Balancing Fund and Capital expenditure.

Each region or region needs funding not only from the State Revenue and Expenditure Budget but also from regional revenues to achieve economic growth. The ability of the region to distribute resources originating from the region in the form of Regional Original Revenue depends heavily on its ability to manage existing economic potential into a form of economic activity that can generate revolving funds for regional development in the long term. The regional government must adapt and try to adapt. The government is working to improve public services and various industries that have grown to become the original revenue source of the region after the establishment of regional self-reliance (Achsanuddin UA et al., 2021). Regional Original Income (PAD) is the income obtained by local taxes according to local regulations in accordance with the law. The development of the original revenue of the Malang City area can be seen from the following chart:

![Figure 2. Development of Regional Original Income Rate in Malang City 2006-2022](processed)

Figure 2 shows the original income of Malang City from 2006 to 2022 tends to increase. The highest increase can be seen in the original revenue chart of Malang City in 2019 amounting to Rp. 675,931,656,41. This is inseparable from the role the government plays in supporting development and public services.

In order to implement the principles of decentralization, the central government grants authority, freedom, and freedom, and the right to local governments to manage their own regional households is included in the revenue generated by local governments in the form of Regional Original Income, but the central government does not immediately release local
governments. However, the central government is still providing assistance to local governments in the form of balance funds (Qomariyanti and Hermanto, 2017).

The Balancing Fund is a fund sourced from the APBN income allocated to the region (autonomous) to fund regional needs in order to implement decentralization. According to (Ferdiansyah, Deviyanti and Pattisahusiwa, 2018), balance funds have a goal to close the fiscal gap and align fiscal capabilities between regions in order to help local government independence perform its functions and duties to serve the community. The development of the Malang City Balancing Fund can be seen from the following chart:

![Balance Funds Chart](image)

Figure 3. Development of Balance Funds Rate in Malang City 2006-2022
Source: BPS 2023, (processed)

Figure 3 shows the balance funds of Malang City from 2006 to 2022 tend to increase. The highest increase can be seen in the balance fund chart of Malang City in 2019 amounting to Rp. 1,203,245,896.32. This is independent of the central government's role in implementing policies that support decentralization and greater local autonomy, which can lead to an increase in the allocation of balance funds to support the ability of local governments to organize government and public services.

Capital expenditures are expenditures made by the government to acquire or increase the physical assets or infrastructure necessary to support the implementation of various government programs and activities in the long term. This includes investments in the construction and maintenance of infrastructure such as roads, bridges, buildings, health facilities, educational facilities, etc. The development of capital expenditure in Malang can be seen from the following chart:

![Capital Expenditure Chart](image)
Figure 4 shows the capital expenditure of Malang City from 2006 to 2022 fluctuated. In 2006 the capital expenditure of the poor city amounted to Rp. 83,989,493,60. Subsequent periods of the following years underwent changes. The change with the highest value occurred in 2020 amounting to Rp. 363,227,224,63. This is due to the government’s aggressive economic transition after the pandemic.

Judging from the data on Regional Original Income, the Balancing Fund, Capital Expenditure and Economic Growth above, it can be seen that for the past ten years it has fluctuated. A white flux is a state in which the conditions are not fixed or variable. In the last 10 years, economic growth in Malang has experienced the lowest decline in 2020, which is -2.26%. This happened independently of the Covid-19 pandemic that occurred in Indonesia during 2020.

Based on the phenomenon that occurs above due to the factors of Regional Original Income, Balancing Funds and Capital Expenditure in order to encourage an increase in economic growth, the authors conducted a study entitled "Analysis the Effect of Regional Original Income, Balance Funds, and Capital Expenditure on Economic Growth in Malang City".

LITERATURE REVIEW

Economic Growth

An important indicator of an economic development in a country is economic growth. According to Sadono Sukirno (2014), economic growth is a measure that explains the development of an economy in a period of years if compared to the previous year. Based on his opinion, there are several theories of economic growth, which are described as follows:

1. Neo-Classical Theory of Economic Growth

Neo-Classical economic growth theory is a theory developed since the 1950s by two economists Robert Sollow and Trevor Swan. In this theory, economic growth is determined by regional capabilities.
Economic growth also depends on the increase in supply of a number of factors in production such as population, capital accumulation, labor, and technological advancement. If the value of productivity increases, economic growth will also increase. Regional economic growth is determined not only based on regional potential but also labor mobility and capital mobility between regions. If the mobility of production, capital, and labor factors in the development process is not smooth, then capital and labor tend to choose concentration to more developed regions, which causes the economic gap to widen.

2. Theory of Endogenous Economic Growth

The theory of endogenous economic growth has developed since the 1980s, pioneered by Robert Lucas and Paul Romer. This theory further optimizes human resources in key factors that can help improve productivity and the economy. Based on the findings presented by Lucas and Romer, the workforce has broad knowledge insights, high education and professional training can help shorten the time in developing industry and technology. If industry and technology can develop well, of course it can accelerate production activities and will help increase national income.

Regional Original Income

Regional Original Income is the revenue derived from the region itself that is taxed based on local regulations that comply with the applicable legislation. Regional original income is the main source of income used with local government funds to finance regional development and efforts to reduce dependence on central government (Marianus Manek, 2017). Regional Original Income is a reflection of a region that makes it the main capital in a regional development and financing system, in implementing a regional autonomy system as a city or kabupaten, it is required to be able to increase the original income of the region, which makes it a benchmark for implementing and implementing the regional autonomy system it is part of the regional autonomy movement (Mahardika and Riharjo, 2019).

The increase in regional original income will encourage regional economic growth. According to (Ningsih and Noviaty 2019), sustainable regional original income growth will increase economic growth in some regions. Regional original income is one of the sources of regional expenditure, if regional original income increases, the funds held by local governments will also be high and the level of regional independence will also increase, so that local governments will be more interested in exploring regional potentials and increasing economic growth. 

H1 : Regional Original Income has a positive influence on economic growth

Balance Funds

According to (Ferdiansyah, Deviyanti and Pattisahusiwa, 2018), the government's direction will depend on the available balance funds. Balancing funds can be a crucial factor in effective and continuous government operation. Without adequate balance funds, local governments may not be able to meet
the needs of the community optimally, such as providing public services, accelerating development, and improving public welfare in their regions.

Balancing funds have a function to finance the needs of a region. In addition, balance funds are also useful to reduce the fiscal gap between regions and centers, as well as horizontal relationships between regions. Balance funds are an important source of funds in affecting regional economies. Similar to other regional income, balance funds are used to fund the regional development process through direct spending in order to encourage general economic growth and to create welfare across the community (Mirda Syan, Dahlia and Nair Hamzah 2021)

H2 : Balance Funds has a positive influence on economic growth

Capital Expenditure

Mardiasmo (2021) said that Capital Expenditure is an expenditure whose benefits tend to exceed one fiscal year and will increase government assets or wealth, and in turn will increase the regular budget for its operational and maintenance costs. Allocation of capital expenditure means allocating every expenditure made by the government to build the infrastructure in its area.

Continuous economic growth can be achieved by an area if it can always improve the infrastructure in the area. Capital expenditure is intended to get fixed assets of local governments, namely buildings, equipment, infrastructure, and other fixed property. With an increase in capital expenditure expenditure, it is hoped that it will be able to encourage people's economic improvement which in turn can spur per capita income growth (Arini and Kusuma, 2019).

H3 : Capital Expenditure has a positive influence on economic growth

From the hypothesis described above, this study has the following conceptual framework :

![Figure 5. Conceptual Framework](image)

**METHODOLOGY**

This research approach uses a quantitative approach. By using independent variables, namely the regional original income variable (X1), the balance funds variable (X2), and the capital expenditure variable (X3), the dependent variable is the economic growth variable (Y).
This study was conducted by researchers covering the Malang City area with data used as secondary data type. Data were obtained from the Central Statistical Agency (BPS) of Malang City for the period 2006-2022.

The data analysis technique uses multiple linear regression analysis with the Ordinary Least Square (OLS) model. Multiple linear regression analysis is a method used to determine whether or not there is an influence of the independent variables (X1, X2, X3....c) on the dependent variable (Y).

Multiple Linear Regression Model Equation:

\[ Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + e \]

Explanation:
- \( Y \) = Economic Growth
- \( X_1 \) = Regional Original Income
- \( X_2 \) = Balance Funds
- \( X_3 \) = Capital Expenditure
- \( \beta_0 \) = Constant (Y value if X1, X2, X3 = 0)
- \( \beta \) = Regression coefficient (increasing or decreasing value)
- e = remainder (error)

RESULT

Results of Classical Assumption Test Analysis:

Normality Test

A normality test is one part of a classical assumption test used to see or know whether in a regression model between bound variables, free variables or values both have a normal distribution. One way to find out if a normal distributed data is to use Kolmogorov Smirnov's normality test by looking at the following test criteria:
1. If the significance value is < 0.05 then the data is distributed abnormally
2. If the significance value is > 0.05 then the data are normally distributed.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Sig</th>
<th>Limit</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unstandar Residual</td>
<td>0,200</td>
<td>&gt; 0,05</td>
<td>Normal</td>
</tr>
</tbody>
</table>

Source: Research Results SPSS 26, 2023

Based on Table 1, it can be seen that the asymp.sigt (2-tailed) value is 0,200 > 0,05 so it can be concluded that the data are normally distributed and the data from this study pass the normality test and can be carried out with further tests.

Multicollinearity Test

The Multicolinearity Test is used to determine whether in the regression model there is a correlation between free variables using the following provisions:
1. If the VIF value is > 10 then there is a multicollinearity problem.
2. If the VIF value is < 10 then there is no multicollinearity problem.

Table 2. Multicollinearity Test

<table>
<thead>
<tr>
<th>Model</th>
<th>Colinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tolerance</td>
</tr>
<tr>
<td>(Constant)</td>
<td></td>
</tr>
<tr>
<td>Regional Original Income</td>
<td>0,320</td>
</tr>
<tr>
<td>Balance Funds</td>
<td>0,761</td>
</tr>
<tr>
<td>Capital Expenditure</td>
<td>0,301</td>
</tr>
</tbody>
</table>

Source: Research Results SPSS 26, 2023

Based on the results of the multicollinearity test above it can be seen that all variables used in this study have a Variance Inflation Factor (VIF) of less than 10 and a tolerance value of more than 0.10 it can be concluded that there is no multicollinearity problem between independent variables in the regression model.

Heterokedasticity Test

The Heterokedasticity Test has the purpose of being able to determine whether the regression equation model used has a difference in the residual variance in the observation period between one and the other. To detect symptoms of heterokedasticity in a data, a pattern can be seen in the scatterplot as below:

Figure 6. Heterokedasticity Test Results
Source: Research Results SPSS 26, 2023

In Figure 6 the results of heterokedasticity testing using SPSS software are clear that in Figure 6 does not form any particular pattern. The points spread freely without forming a clear pattern above and below the 0 axis on the
Y axis. Thus, it was concluded that in the regression model of this study there were no symptoms of heterocedasticity.

**Autocorrelation Test**

Autocorrelation tests are used to determine whether test results in multiple linear regression models exist in a correlation between the disturbance error in period t and the disturbance error in period t-1 (previous). A good regression model is a regression model that is free from autocorrelation.

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. The error In the Estimate</th>
<th>Durbin Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0,897a</td>
<td>0,805</td>
<td>0,760</td>
<td>0,02905</td>
<td>2,343</td>
</tr>
</tbody>
</table>

Source: Research Results SPSS 26, 2023

From the output data above, the results of the analysis for the autocorrelation test in this study obtained a Durbin Watson (DW) test value 2,343. To find out whether there is an autocorrelation symptom we can prove it by using the DW curve. The equation in this study uses the number of independent variables (k) as 3 and the number of data (n) as 17 so that the DW values obtained are dL : 0,897 and dU : 1,710, can be seen in the figure bellow for the results of the autocorrelation test:

Based on the above curve results it can be concluded that the DW test value is between dL and dU. The data used in this study are precise in areas of doubt. So that it can be tested in another way, which can give a definite conclusion, namely by the Rum Test. The decision-making alloy in the Run Test is:

1. If it's an Asymp. Sig. (2-tailed) is less than 0.05 and there are problems or symptoms of autocorrelation.
2. On the other hand, it's an Asymp. Sig. (2-tailed) is greater than 0.05 and there are no problems or symptoms of autocorrelation.

For Run Test testing, see the following:

![Figure 8. Run Test Results](source)

Based on the results of the Run Test above it can be concluded that the value is Asympt. Sig. (2-tailed) is 0.605 where the value is greater than 0.05 so it can be concluded that there are no symptoms or autocorrelation problems.

**Multiple Linear Regression Analysis**

In this study, the formula for multiple linear regression equations was created as follows:

\[ Y = -2,676 + 0,125X_1 + 0,263X_2 + 0,012 + e \]

The model of the multiple linear regression equation above can be described as follows:

1. The constant value of -2,676 so that if the Regional Original Income (X1), Balancing Funds (X2), and Capital Expenditure (X3) are assumed to be 0 or unchanged, economic growth falls by 2,676%.
2. The value of Regional Original Income (X1) has a value of 0,125 indicating that the regional original income variable (X1) has a positive effect on Economic Growth (Y). This means that if the original income of the regions increases by a thousand rupiahs, economic growth will increase by 0,125%.
3. The value of the Balanced Fund (X2) has a value of 0,263 indicating that the variable of the Balanced Fund has a positive effect on economic growth. This means that if the balance funds increase by a thousand rupiahs, economic growth increases by 0,263%.
4. The value of capital expenditure has a value of 0,012 indicating that the variable of capital expenditure has a positive effect on economic growth. This means that if capital expenditure increases by a thousand rupiahs, economic growth increases by 0,012%.
**Coefficient Determination Test (R2)**

The determination coefficient test (R2) serves to see how far the ability of an independent variable explains the variation of the dependent variable, namely economic growth. The results of the determination coefficient test are shown in the table below:

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjust R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.897a</td>
<td>0.805</td>
<td>0.760</td>
<td>0.02905</td>
</tr>
</tbody>
</table>

Source: Research Results SPSS 26, 2023

Based on the Table of R Square values of 0.805, which explains that the contribution of the variables Regional Original Income (X1), Balance Fund (X2), and Capital Expenditure (X3) to Economic Growth (Y) was 80.5% and the rest was 19.5% was another variable that was not explained in this study.

**Simultaneous Testing (F Test)**

The test f is used to determine whether or not a simultaneous effect or relationship exists on the bound variable. The criteria for test decision making are shown in the ANOVA table at a significance probability value of > 0.05 and do not show any influence. Whereas if the probability value of significance is < 0.05 then there is an influence. The results of the test f are shown in the table below:

<table>
<thead>
<tr>
<th>N</th>
<th>F Count</th>
<th>F table</th>
<th>Sig</th>
<th>Ketentuan</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>17,928</td>
<td>3.41</td>
<td>0.000</td>
<td>0.05</td>
</tr>
</tbody>
</table>

Source: Research Results SPSS 26, 2023

The results from the test in the table above show that the F count of 17.928 with a significance value of 0.000 < 0.05 so it can be concluded that in the independent variables (Regional Original Income, Balance Fund and Capital Expenditure) have a simultaneous effect on the dependent variable (Economic Growth).

**Partial Hypothesis Testing (t-test)**

The partial t-test was carried out to determine the partial effect between the independent variables and the dependent variable.

1. The results of the significance test show that there is a probability value of 0.004 < 0.005. This value can prove that Ha1 is accepted, which means that "Regional Original Income has a positive effect on Economic Growth"
2. The results of the significance test show that there is a probability value of 0.018 < 0.005. This value can prove that Ha2 is accepted, which means that "Balance Fund has a positive effect on Economic Growth"

3. The results of the significance test show that there is a probability value of 0.870 > 0.005. This value can prove that Ha3 is rejected, which means that "Capital Expenditure is suspected of not affecting Economic Growth"

DISCUSSION

The Influence of Regional Original Income on Economic Growth in Malang City

Based on the data processing results presented above, it can be seen that the regional original income variable partially had a positive and significant influence on the Economic Growth variable in Malang City in 2006-2022. This shows that if the original income of the region in Malang City increases, it can cause economic growth in Malang City to increase. The results of this study are in line with the assessment conducted by Mutiara Rizka Djayanti (2020), which shows that Regional Original Income has a positive effect on economic growth.

The Influence of Balance Fund on Economic Growth in Malang City

Based on the data processing results presented above, it can be seen that the partial balance fund variable has a positive and significant influence on the Economic Growth variable in Malang City in 2006-2022. This means that if balance funds increase, it can cause the economic growth of Malang City to increase. The results of this study are in line with the research conducted by Dwi Saraswati (2017), Mutiara Rizka Djayanti (2020), Mirda Syam (2021).

The Influence of Capital Expenditure on Economic Growth in Malang City

Based on the data processing results presented above, it can be seen that partial capital expenditure variables have no effect on economic growth in Malang City. This is because the capital expenditures used by local governments are allocated to infrastructure expenditures that are less productive, In addition, it can also be because the results of capital expenditure allocation have not been enjoyed in a short period of time / infrastructure development is still running so that they have not obtained the results from the capital expenditure. This study is in line with research conducted by Ni Wayan Ratna Dewi (2017), Wardhiah (2018), and Nova Dwi Qomariyaha (2017).

CONCLUSIONS AND RECOMMENDATIONS

Based on the results of the studies conducted, so the following conclusions can be obtained:

1. Regional income is a source of income generated by the local government of Malang City and comes from its own regional output that serves to increase economic growth and welfare of the people in Malang City. The results of this study show that the original regional income had a positive effect on economic growth in Malang. This shows that the
Malang City government can maximize its original regional income to boost economic growth.

2. The Balancing Fund is a source of local income transferred from the central government to the local government for regional development funding in accordance with local autonomy to improve the welfare of the people. The results of the study showed that the Balancing Fund had a positive effect on economic growth. This shows that the Malang City government can properly allocate balance funds to boost economic growth.

3. Capital expenditures issued by the government to be allocated in infrastructure development that are expected to provide multiplier effects so that they can help boost economic growth in some regions. Research results show that Capital Expenditure has no effect on economic growth. This is because the capital expenditures used by local governments are allocated to infrastructure expenditures that are less productive, but also because the results of allocation of capital expenditures have not been enjoyed in a short period of time.

ADVANCED RESEARCH

1. In an effort to increase economic growth in some regions, local governments are expected to optimize in terms of increasing Regional Original Income and Balancing Funds. The local government is expected to optimize the potential and the regional economic sector to increase Regional Original Income and Balancing Funds as wisely as possible. This is because if regional income is abundant, then the local government will be easier in allocating its income to the capital expenditure sector which includes infrastructure and infrastructure so that it is expected to be able to increase economic growth and prosper the community.

2. For further researchers, this study is expected to provide insights and knowledge related to regional original income, Balancing Fund, and capital expenditure on economic growth in Malang City and provide a longer period of time or period so as to know trends in the long term. It is also expected to add more variables to capture more factors that can affect economic growth.
REFERENCES


