Effect of Local Taxes and other Factors on Economic Growth in Java

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Abstract

Financial Relations between Central Government and Local Government Law (HKPD) has been issued and will have an impact on the local government financial system. Regional taxes are one component of the regional financial system that will also be affected by the enactment of the HKPD Law. Some regional government observers are concerned that the tax provisions in the HKPD Law will slow down regional economic growth. This research aims to investigate the effect of taxes in an area on its economic growth. It uses panel data of all provinces in Java with a time period of 2016 to 2021. This study also embraces other variables such as capital expenditure, government spending, unemployment rate and inflation as control variables. The results find that the growth of tax revenue realization and the growth of government spending significantly and positively affects the economic growth of a region, while the growth of capital expenditure and inflation has a significant and negative effect on the economic growth of a region. It implies that an increase in local tax revenue tends to increase regional economic growth in the current year. In addition, regional economic growth in the current year might also increase when there is an increase in government spending and suppress inflation as well as reduce capital expenditure.

Keywords: economic growth, local government, local taxes

INTRODUCTION

Law Number 1 of 2022 concerning the Financial Relations of the Central Government and Regional Governments (HKPD) was finally passed by the Government and the House of Representatives of the Republic of Indonesia. These provisions not only regulate local taxes but also the financial relationship between the central government and local governments as stated in article 1 of the HKPD Law. The HKPD Law was issued to ensure that every right and obligation in the financial administration system between the central government and local governments can run well, this provision is also the rule of the game of the relationship system. The relationship between the central government and local governments includes local taxes which are part of the delegation of authority from the central government to local governments.

Before it was passed, the HKPD Law had received some input from local government observers. Local government observers are concerned that the enactment of the HKPD Law, especially related to changes in local tax provisions, may hinder economic growth in the regions because it will increase the burden on business actors in the regions. Meanwhile, Indonesia's condition is currently still in the post-pandemic recovery phase (Masitoh, 2021a). Local government observers expect that after the pandemic, the government will provide relaxation or subsidies to business actors in the regions so that regional economic growth will be spurred. Local government observers do not want an increase in the tax rate that may occur with the issuance of the HKPD Law which will hamper the regional economy (Masitoh, 2021b).

In contrast to what was revealed by local government observers, the Director General of Financial Balance actually hopes that the enactment of the HKPD Law can reduce inequality in and between regions and can increase fiscal capacity and community welfare.
(Kristianus, 2021). The head of the Financial Education and Training Agency also stated that the process of fiscal structural improvement at the central and regional levels must continue to be implemented no matter the circumstances.

Based on existing theories, taxes can indeed be double-edged, especially if they are associated with their impact on the economy. Mankiw (2016) in his book states that a high tax rate will produce a negative multiplier effect on the economy. However, when referring to the neoclassical theory of economic growth as expressed by Solow-Swan, capital supply or capital accumulation and the number of labor force and the level of technology have a significant effect on the production of goods and or services (economic growth) in a country. Meanwhile, several studies as revealed, one of which was by Mutiara (2015) that regional taxes and regional levies are included in capital accumulation.

DGT data (2022) in 2020 in Central Java Province, which is the author's area of residence, also shows that the economic decline (which is indicated by constant price GRDP) is in line with the decrease in the realization of regional taxes and regional levies in Central Java Province. Although it must be admitted that not all regions may experience conditions similar to Central Java Province and there are other indicators that may also affect the economy of a region such as the unemployment rate and inflation of the area.

One of the wider areas that can be a benchmark for the economy in Indonesia is all regions on the island of Java. This is because all regions in Java Island contribute significantly to Indonesia's GDP, as in the GRDP data throughout Indonesia that in 2019 all regions on the island of Java contributed almost 60% to Indonesia's GDP. Based on the fact that the high contribution of Java Island to the Indonesian economy, in addition to being able to be used to attract the growth of other islands outside Java, significant economic growth also indirectly means encouraging Indonesia's economic growth.

Based on previous research, the relationship between taxes and economic growth has been studied, one of which is by Darusman (2019) with his qualitative research. The study concluded that to increase national economic growth, it needs to be supported by funding for productive projects. Productive projects according to Darusman (2019) must be funded from a budget derived from sustainable revenues, one of the sources of these revenues is tax revenue so that tax revenues used to fund productive projects will increase economic growth.

In addition to qualitatively, research on the effect of taxes on quantitative economic growth has been carried out by Saragih (2018). The research conducted using data from 34 provinces in Indonesia with a study period in 2013 to 2016. The results of this study state that provincial tax revenues have a significant and positive effect on economic growth in Indonesia. Based on the results of this study, Saragih (2018) stated that to encourage economic growth means that sustainable tax revenues are needed. As stated by Darusman (2019), Saragih (2018) also suggested that local tax revenues should be used for productive spending so that they can continue to encourage the economic growth of the area.

Complementing the research of Darusman (2019) and Saragih (2018), Mutiara (2015) conducted a study entitled Regional Taxes and Their Effect on GRDP in East Kalimantan Province. Unlike the previous two researchers, Mutiara (2015) conducted research with a similar theme but with a narrower research area than the previous two researchers, namely limited to East Kalimantan Province.

Mutiara's research (2015) concluded that statistically local taxes and regional levies have a significant and positive effect on GRDP. In the study conducted with the research period from 2004 to 2013, it was stated that capital expenditure did not have a significant influence on the GRDP of East Kalimantan Province. Mutiara (2015) explained that the positive relationship between local taxes and regional levies with regional economic growth (GRDP) according to solow-Swan's theory which states that economic growth is strongly influenced by capital accumulation which according to Mutiara (2015) is represented by regional taxes and levies. Meanwhile, the insignificant capital expenditure variable described by Mutiara (2015) is due to the low capital expenditure...
post of the total local government expenditure in East Kalimantan Province so that its role also becomes insignificant.

In addition to affecting GRDP (economic growth), regional taxes together with regional levies and capital expenditures also affect regional financial independence as revealed by Novitasari and Novitasari (2019) in their research conducted based on data from 2014 to 2017. Novitasari and Novitasari research (2019) has loci in 29 districts and 9 cities, all of which are in East Java Province.

Other variables that may affect the economic growth of the region in addition to local taxes are the number of residents and regional expenditures or expenditures. Based on research by Damaningrum (2015) local taxes and population have a significant and positive effect on the economic growth of the regions represented by the GRDP of the region. It was explained, that the increase in local taxes and the increase in the number of residents will increase the GRDP of a region. Still in the same study, it was explained that simultaneously regional levies and government expenditures also affect GRDP. The research area conducted by Damaningrum (2015) is the city of Surakarta with a research period of 1990 to 2013.

Sari et al., (2019) in research related to regional economic growth explained that inflation can also affect the economic growth of a region. The study concluded that inflation negatively affects the economic growth of a region. The area of research studies conducted by Sari et al., (2019) is Java Island with a range from 2006 to 2016. It is explained that the negative influence of inflation on economic growth is in line with the theory as expressed by Keynes who states that in the long run high inflation will lead to a slowdown in economic growth.

In addition to the research of Sari et al., (2019), Priambodo research (2015) also discusses related to regional economic growth. Priambodo (2015) in his research stated that PAD or regional revenue has a positive and significant effect on the economic growth of a region. In addition to the PAD variable, the results of priambodo’s research (2015) also show that the labor variable has a positive and significant effect on the economic growth of a region. Meanwhile, the variable that has a negative and insignificant effect in priambodo research (2015) is the capital expenditure variable. Priambodo (2015) explained that the insignificant effect of capital expenditure on economic growth is due to the low allocation of capital expenditure compared to other allocations of local government expenditures such as employee spending so that the impact of the capital expenditure budget on the economy is also insignificant.

Regarding the effect of capital expenditure or investment on economic growth in Java Island, Diana (2022) based on her research shows that joint investment with government spending or expenditure affects economic growth in Java Island in the study period from 2016 to 2020. It is stated that the increase in government spending and investment increases economic growth in Java. The study also stated that unemployment had no effect on economic growth in Java in the study year.

If according to previous research unemployment has no effect on economic growth in Java Island, it is still the same discussing labor but from a different perspective, scope of study and time, Hidayat and Nalle (2017) in their research entitled Analysis of the Effect of Government Spending, Labor, and Regional Original Income on Regional Economic Growth of East Java Province in 2010-2015, concluded that labor has a positive and significant effect on regional economic growth. In addition to the labor variable, Hidayat and Nalle (2017) also explained that the variables of government spending and PAD also have a positive and significant effect on regional economic growth.

In contrast to the conclusions of Hidayat and Nalle's research (2017), with different loci and study periods, Afrizal's research (2013) stated that in South Sulawesi Province with the range of research from 2001 to 2011, government spending actually had a significant and negative effect on economic growth. In addition to government spending, according to research by Afrizal (2013) the number of workers also negatively affects economic growth in South Sulawesi Province. Based on this research, practically
only investments consisting of PMDN and PMA have a significant and positive effect on the GRDP of South Sulawesi.

Putri's research (2014) which also discusses the influence of domestic investment, with different loci and periods and independent variables that are not entirely the same provides different conclusions. Putri (2014) in her research on the effect of investment, capital expenditure/ expenditure, number of workers, infrastructure in the form of asphalt roads, non-asphalt roads and electricity infrastructure on economic growth in Java Island explained that investment in the form of PMDN and FDI, the number of workers, capital expenditures carried out by the government and infrastructure including asphalt roads and electricity have a positive and significant effect on economic growth in Java Island. As for other variables, roads are not asphalt having a positive but not significant effect on economic growth in the study area. The study period conducted in this study was in 2007 – 2014.

With a locus that is almost similar to Putri's research (2014), only narrower by only being in East Java Province, Qomariyah (2013) in her research also discusses the number of workers seen with the perspective of the unemployment rate in East Java Province. The period of the study carried out was in 2001 to 2011. Qomariyah (2013) in his research, one of them stated that the inflation variable does not have a significant effect on the unemployment rate while economic growth is the opposite, a significant effect on the unemployment rate. Based on Qomariyah's research (2013), it should also be studied whether the unemployment rate variable also affects economic growth.

Based on data and facts as well as previous research that the author has conveyed in the previous paragraphs, the establishment of the provisions of the HKPD Law may affect how the regional tax system is established and implemented which may then also affect the economic growth of a region. Based on data from 2016 to 2021, the study wants to find out how the influence of regional taxes on economic growth in all regions of Java Island and other factors (as a control variable) that may also affect economic growth such as capital expenditure, government spending, inflation and the unemployment rate by raising the research title: "The Effect of Regional Taxes and Other Factors on Economic Growth in Java Island".

**METHOD**

The analysis technique used in this study is multiple linear regression of data panels. The selection of the data panel regression model is because the data used is a combination of cross section data and time series data. This is in line with Sihombing's explanation (2022) that if the data used is a combination of data between cross section and time series with the number of independent variables of more than 1 and normal distributed data, the regression model used is a panel data regression model. Sihombing (2021) explained the advantages of using panel data including:

1. There is a greater degree of freedom so that researchers can overcome the problem of variable reduction.
2. Can reduce bias in estimation because the data used can be quite a lot.

The linear regression model built on dependent and independent variables as already mentioned in the introduction is as follows:

\[
\log Y_{it} = \beta_0 + \beta_1 \log X_{1it} + \beta_2 \log X_{2it} + \beta_3 \log X_{3it} + \beta_4 \log X_{4it} + \beta_5 \log X_{5it} + e_{it} \ldots \ldots (1)
\]

\[Y = \text{PDRB}
\]

\[X_1 = \text{Realization of local tax revenues}
\]

\[X_2 = \text{Realization of local government capital expenditures}
\]

\[X_3 = \text{Realization of local government spending}
\]

\[X_4 = \text{Inflation rate in the regions}
\]

\[X_5 = \text{Unemployment rate in the regions}
\]
\( \beta_0 \) = Intercept constant  \\
\( \beta_n \) = Regression coefficient  \\
\( e_i \) = error

Here's a breakdown of the definitions of the variables used in the model,

1. Regional Economic Growth

Regional economic growth is represented by the Provincial GRDP in Java Island which was then transformed using logarithms. The use of grDP or regional GDP as an indicator of economic growth is in accordance with the explanation of BPS (2022) which states that constant price GDP can be used to show the overall rate of economic growth from year to year. The nominal GRDP is obtained through the website of the Central Statistics Agency (BPS) in the form of a full Rupiah nominal.

2. Changes in the realization of local tax revenues

Changes in the realization of regional tax revenues from year to year between regions in Java Island come from the overall value of regional taxes collected by all local governments in a province located on the island of Java. Then for modeling purposes, the tax value of the area is transformed by logarithms. The value of regional taxes for each region comes from the website of the Directorate General of Financial Balance with full Rupiah units.

3. Changes in the realization of local government capital expenditures

The change in the realization of local government capital expenditure is the amount of capital expenditure realization from each local government contained in a province located on the island of Java from year to year. The realization value of capital expenditure obtained from the page of the Directorate General of Financial Balance initially used billions of Rupiah, for the purposes of the research model the value was transformed using logarithms.

4. Changes in the realization of local government spending

The change in the realization of local government spending from year to year between regions in Java Island comes from the overall value of local government expenditures issued by all local governments in a province located on the island of Java. Then for modeling purposes, the value of the local government's expenditure was transformed by logarithms. The value of local government spending for each region comes from the website of the Directorate General of Financial Balance with full Rupiah units.

5. Inflation rate in the regions

The inflation rate in each province in Java is obtained from the annual inflation rate published by the BPS of each province. The inflation value used in the model has a unit as contained in the BPS page, namely with a percent unit.

6. Unemployment rate in the regions

The unemployment rate in each province in Java is obtained through the national BPS website. The unemployment rate used is the unemployment rate in February of the current year with a unit of percent.

After the multiple linear regression model is determined then the data panel linear regression model is selected which is best for the research model. Sihombing (2021) in his book explained that in the event that the panel data has been distributed normally, three general approaches can be used that can be used in determining the best model, the three approaches include

1. Common Effects/Pooled Effect (PE),  
2. Fixed Effects (FE) and  

Details on the selection of the use of the three PE/FE/RE approaches as the best model can be seen in the following table.
After the best model is determined, followed by a hypothesis test consisting of a coefficient of determination test or $R^2$, an $f$ test and a $t$ test to measure the *goodness of fit* of the regression function. Finally, before the interpretation of the model, it is necessary to first test classical assumptions which include tests of normality, multichainlinearity, heteroskedasticity and autocorrelation (Sihombing, 2022). The results of assumption testing conducted using the Stata 16 application state that,

1. Normality Test
   Normality tests are carried out to determine the distribution of data. Normal distributed data occurs when the sign.prob value is greater than $\alpha$ or does not reject H0.
2. Multichainlinearity Test
   The multichainlinearity test is used to show the presence of correlations or relationships between independent variables in the selected model. The model is called free from the symptoms of multichainlinearity when rejecting H0.
3. Heteroskedasticity Test
   The data variant has homogeneous (non heteroskedastic) occurring when the sign.prob value is greater than $\alpha$ or does not reject H0.
4. Autocorrelation Test
   The autocorrelation test is used to test for the presence of correlations or relationships between the same variables with different time periods. The model is called free from autocorrelation symptoms when it does not reject H0.

### RESULTS AND DISCUSSION

**Results**

Based on the data used, it is known that the area with the highest economic growth in the study range is the DIY Province. In 2019, the economic growth of DIY Province reached 6.59%. Meanwhile, the average economic growth that occurred in the study range was 3.95%. The low average value of economic growth in the study range is due to the pandemic in the study time span so that growth in that year (2020) is negative. The following details the descriptive statistical values of the variables used in this study.

#### Table 2. Explanation of the Distribution of Data Used

<table>
<thead>
<tr>
<th>Research Data</th>
<th>Mean</th>
<th>Min</th>
<th>Max</th>
<th>Std. dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic Growth (%)</td>
<td>3.95</td>
<td>-3.39</td>
<td>6.59</td>
<td>0.31</td>
</tr>
<tr>
<td>Realization of Tax Revenue (Trillion)</td>
<td>19.83</td>
<td>2.4</td>
<td>40.29</td>
<td>11.38</td>
</tr>
<tr>
<td>Realization of Capital Expenditure (Trillion)</td>
<td>11.48</td>
<td>2.04</td>
<td>21.12</td>
<td>6.43</td>
</tr>
<tr>
<td>Realization of Government Spending (Trillion)</td>
<td>74.05</td>
<td>13.04</td>
<td>130.72</td>
<td>42.51</td>
</tr>
<tr>
<td>Open Unemployment Rate (%)</td>
<td>5.67</td>
<td>2.81</td>
<td>9.01</td>
<td>2.07</td>
</tr>
<tr>
<td>Inflation Rate (%)</td>
<td>2.65</td>
<td>1.41</td>
<td>4.19</td>
<td>0.84</td>
</tr>
</tbody>
</table>

*Source: BPS and DJPK processed by the author with Stata 16*

Table 2 shows how the data spread is used. It is noted that the only minus occurs in economic growth. The absence of a minus value at the inflation rate indicates that the level of prices of goods on an annual basis has never experienced a decrease in prices (deflation). In addition to the inflation rate, the unemployment rate has never been worth 0.0 or there has never been what is called full employment. Based on the distribution of
data described in Table 2, the best regression model for testing the data used is further described.

Based on the determination of the best data panel linear regression model carried out with chow test, hausman test and Lagrange Multiplier Breusch Pagan test, it was concluded that the best model for this study was a fixed effect or FE model. Details of the results of the best model selection test can be seen in the following table.

<table>
<thead>
<tr>
<th>Test</th>
<th>Prob.value</th>
<th>α</th>
<th>Best Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chow Likelihood Ratio</td>
<td>0,00</td>
<td>0,05</td>
<td>Fe</td>
</tr>
<tr>
<td>Hausman</td>
<td>0,00</td>
<td>0,05</td>
<td>Fe</td>
</tr>
<tr>
<td>Lagrange Multiplier Breusch Pagan</td>
<td>1,00</td>
<td>0,05</td>
<td>Pe</td>
</tr>
</tbody>
</table>

Source: stata 16 test results by the author

The results of classical assumption tests carried out to test normality, heteroskedasticity, multicholinearity and autocorrelation showed that the variables used had passed the classical assumption test. The normality test performed showed that the data had been normally distributed with a Prob>chi2 value of more than 0.05 or H0 reject. The heteroskedasticity test also showed similar results, the Value of Prob>chi2 was more than 0.05 or reject H0. This indicates that the variables used have been freed from the symptoms of heteroskedasticity. The results of the multicholinearity test also showed that the variables used were free of multicol symptoms or there was no close correlation between the variables used. The multicholinearity test showed that the average vif value was less than 10. Finally, the autocorrelation test also showed that there was no close attachment between variables in the year-to-year time span. The autocorrelation test value shows that the Prob > F = 0.621 or more than 0.05 and failed to reject H0 so that it can be declared that the variables used are free from autocorrelation symptoms.

<table>
<thead>
<tr>
<th>Test</th>
<th>Prob&gt;chi2</th>
<th>Vif</th>
<th>Prob&gt;F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normalitas</td>
<td>0,4263</td>
<td>Not significant</td>
<td>Normal</td>
</tr>
<tr>
<td>Heteroskedastisitas</td>
<td>0,5023</td>
<td>Not significant</td>
<td>Non Hetero</td>
</tr>
<tr>
<td>Multikolinearitas</td>
<td>8,06</td>
<td>Not significant</td>
<td>Non Multikol</td>
</tr>
<tr>
<td>Autokorelasi</td>
<td>0,6208</td>
<td>Not significant</td>
<td>Non Autokol</td>
</tr>
</tbody>
</table>

Source: stata 16 test results by the author

The selected FE model has an Adjusted R2 value of 0.935. This means that the economic growth in an area can be explained, amounting to 93.5%, with the growth of tax revenue realization, growth of local government capital expenditure realization, growth of local government spending realization, inflation rate and unemployment rate. While the remaining 6.5% is influenced by other variables outside the model.

<table>
<thead>
<tr>
<th>Uji</th>
<th>Keterangan</th>
<th>Nilai Probabilita</th>
<th>Hasil Uji</th>
<th>Keterangan</th>
</tr>
</thead>
<tbody>
<tr>
<td>R2</td>
<td>Significant</td>
<td>0,9349</td>
<td>-</td>
<td>Significant</td>
</tr>
<tr>
<td>Uji f Simultan</td>
<td>Significant</td>
<td>0,0000</td>
<td>-</td>
<td>Significant</td>
</tr>
<tr>
<td>Log Penerimaan Pajak (Uji t)</td>
<td>Significant</td>
<td>0,005</td>
<td>0, 2242</td>
<td>Significant</td>
</tr>
<tr>
<td>Log Belanja Modal (Uji t)</td>
<td>Significant</td>
<td>0,008</td>
<td>(0, 0552)</td>
<td>Significant</td>
</tr>
<tr>
<td>Log Belanja Pemerintah (Uji t)</td>
<td>Significant</td>
<td>0,000</td>
<td>0, 4673</td>
<td>Significant</td>
</tr>
<tr>
<td>Tingkat Pengangguran (Uji t)</td>
<td>Not significant</td>
<td>0,077</td>
<td>0,0050</td>
<td>Not significant</td>
</tr>
<tr>
<td>Tingkat Inflasi (Uji t)</td>
<td>Significant</td>
<td>0,012</td>
<td>(0, 0076)</td>
<td>Significant</td>
</tr>
</tbody>
</table>

Source: BPS dan DJPK diolah penulis dengan Stata 16

In addition to showing the value of Adjusted R2, the table of test results for the FE model shows that simultaneously, the independent variables used are able to explain changes in the dependent variable. This is shown through the f test or simultaneous significance test which shows that the value of Prob > F = 0.00 or less than 0.05 and
rejects H0 so that all or some of the independent variables have a significant effect on the dependent variable used.

If the f test is used to test the independent variables simultaneously, the t test or individual significance test is used to determine the effect, significant or not, of each independent variable on the dependent variable. Based on the table above, at the 95% significance level, the independent variable growth in the realization of local tax revenues has a significant effect on the economic growth of a region. Another independent variable which is a control variable in the form of growth of local government capital expenditure, growth of local government spending and inflation also individually have a significant effect on the dependent variable (α = 5%). Only the independent variable, the unemployment rate, partially has no significant effect on the dependent variable, with > 5%, to be exact at 7.7%.

Based on the results of determining the best model, classical assumption test and hypothesis testing, the equation estimation is obtained as follows:

$$\log PDRB_{it} = 2.908 + 0.224 \log X_{2it} - 0.055 \log X_{3it} + 0.467 \log X_{3it} - 0.008 \log X_{4it} + 0.005 \log X_{5it}$$

Based on the results of the best model test along with hypothesis testing and classical assumption testing, in general it can be stated that the growth of local tax revenue realization significantly affects the economic growth of a region. In addition to these variables, control variables in the form of growth in the realization of local government capital expenditures, growth in realization of local government spending and inflation rates in the regions also have a significant effect on economic growth in the regions.

**Discussion**

Tax revenue is very likely to have a positive effect on economic growth. Several regions have shown that when local tax revenues increase so does their GRDP or economy. Empirically several studies that have been carried out previously also show that with the increase in local tax revenues, the economy of the area also increases.

Data on the economic growth of regions on the island of Java which are divided by province when juxtaposed with the realization of growth in tax revenues also shows that economic growth goes hand in hand with the realization of tax revenues. When tax revenues increase, so will the realization of economic growth in the area, and vice versa. Data on economic growth and the realization of tax revenue growth in 2017 to d. 2021 shows that regional economic growth is indeed in line with the realization of regional tax revenue growth. DKI Jakarta Province in 2017 s.d. 2019 had economic growth that was around 5%, before finally dropping sharply in 2020 due to the pandemic which caused DKI Jakarta's economic growth to be -2.39% compared to the previous year. Conditions in 2021 will improve, with economic growth compared to the previous year of 3.56%. According to the theory, the realization of tax revenue growth is in line with economic growth, although the value is more volatile than the percent of economic growth in DKI Jakarta. It was recorded that the realization of tax revenue growth in Jakarta from 2017 to 2017 was recorded. 2019 ranged from 15% s.d. 2%, while during the 2020 pandemic the growth of the realization of the DKI Jakarta Province regional tax reached -20.85%. Meanwhile, in 2021, it has reversed growth compared to the previous year to grow by 8.4%.

Apart from DKI Jakarta, other provinces on the island of Java are also experiencing similar conditions. In the provinces of East Java and West Java, economic growth is relatively very similar to that of DKI Jakarta Province. The realization of tax revenue growth is also almost the same direction, only the percentage growth of tax revenue realization is different, relatively less volatile when compared to DKI Jakarta Province. Details of the movement of the percent of economic growth and the growth of local tax realization can be seen in the following table.
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Based on a direct mathematical comparison, it can be seen that the growth in the realization of local tax revenues does go hand in hand with economic growth in the region, especially the area on the island of Java in the range of 2017 s.d. 2021. To find out scientifically how the actual growth of regional tax revenue realization affects regional economic growth, a test is carried out as described in the introduction. economy of a region. This is in line with the results of research conducted by Darusman (2019), Saragih (2018), Mutiara (2015) and Damaningrum (2015) which state that tax revenue has a significant and positive effect on economic growth.

Realization of local tax revenues can affect the economic growth of a region because tax revenues can be a source of funding for local spending itself. This is as explained by Darusman (2019) and Saragih (2018) which state that to encourage economic growth it is necessary to have a sustainable source of revenue with taxes being the source of that revenue. Furthermore, it was explained that to further spur economic growth, sources of revenue should be used for productive spending.

In line with the thoughts of Darusman (2019) and Saragih (2018), tax revenue can also be considered as capital accumulation. According to the Solow-Swan theory that the amount or accumulation of capital as a factor of production greatly affects the amount of output produced by an economy. It is stated that the greater the value of capital accumulation, the greater the output generated from the economy. Todaro and Smith (2020) in their book and as mentioned in the research of Shoviaty et al., (2019) stated that the results of tax collection as capital accumulation can be used for investment, both in the form of physical investment (infrastructure) and investment to increase human capacity, taxes that This is of course no exception to local taxes.

The statement that tax revenue is an accumulation of capital has also been conveyed by Mutiara (2015) in his research which also concludes that tax revenues significantly and positively affect the economic growth of a region. It was explained that tax revenues which then became capital can be used to carry out development so that it will spur the economy. In addition to spurring the economy through development, tax revenues can also be used to spur the economy through direct government spending, such as education or health spending.

Tax revenue can affect economic growth also occurs if the government can regulate, allocate and utilize a well-accepted budget. The government in collecting taxes from the community is not appropriate if it is only based on the understanding that the greater the tax revenue of a region, the greater its economic growth. Damaningrum (2015) in his research also states that local taxes do have a positive effect on the economy of a region. This is in line with the research conducted by Darusman (2019), Saragih (2018), Mutiara (2015) and Damaningrum (2015) which state that tax revenue has a significant and positive effect on economic growth.
economic growth of a region but it is also explained in his research that what is meant by local taxes includes the management of local taxes themselves.

In addition to tax revenue, another variable that also affects the economic growth of a region is the local government's capital expenditure. The results of this study indicate that capital expenditure actually has a significant and negative effect on the economic growth of a region. The results of this study may seem inconsistent with the Solow (neoclassical) growth model theory as mentioned in Todaro and Smith (2020) which states that the amount of output is strongly influenced by the number of factors of production provided, where capital is included as a factor of production so that government capital expenditure should be region has a positive effect on the economic growth of the region. The discrepancy between the results of this study, especially regarding the effect of capital expenditure on economic growth, can be explained by the period used to relate when the capital is spent and when the impact on the capital is taken into account. It is very possible that the capital spent in the current year has not yet produced any impact on the economy. The results of previous studies also show that the impact of capital expenditures does not directly affect the economy of a region in the same year. The results of Mutia (2015) and Priambodo (2015) research state that local government capital expenditures do not affect the economic growth (GDP) of the area.

If the local government's capital expenditure has a negative effect on economic growth, the opposite is for local government spending. The test results show that local government spending has a significant and positive effect on the economic growth of a region. This is in accordance with the theory presented by Mankiw (2016) that government spending has a multiplier effect on the economy, the greater the amount of government spending, the greater the output generated by the economy. He also explained that government spending can be a trigger as well as a guardian of aggregate demand so that the economy continues to grow even though market conditions are sluggish.

The results of previous studies also state that government spending in a region has a positive and significant effect on the economic growth of the region. Diana (2022) and Hidayat and Nalle (2017) stated in their research that government spending has a positive effect on the economic growth of a region. Diana (2022) in her research explains that the role of the government through government spending is needed, especially related to the implementation of fiscal policies that can encourage economic growth or reduce economic turmoil other than through direct regulation in the form of regulation. Meanwhile, Hidayat and Nalle (2017) in their research state that government spending in the form of goods and services will create a multiplier effect that can trigger and encourage economic growth. Hidayat and Nalle (2017) explain that with increased spending on goods and services by the government, household production will also increase so that it will also increase people's purchasing power as a result of increased household production.

The last control variable based on the test in this study that significantly affects the economic growth of a region is the inflation rate of that area. The results of the tests that have been carried out show that the inflation rate has a negative effect on the economic growth of a region. This happens because the higher the inflation rate, the lower the economic growth that occurs in an area. This can be explained by Keynes's theory which states that in the long term high inflation will cause a slowdown in economic growth. Sari et al. (2019).

The results of this study along with the results of research by Sari et al., (2019) are also in line with what is explained by Mankiw (2016) that when inflation is too high, the incentive for producers to increase production decreases. The condition of reduced incentives to increase production is due to high inflation conditions, the price of raw goods also increases so that the increase in the price of goods/services produced is no longer very profitable for producers. Then according to the measuring instrument of an economy, when production is no longer increasing, it means that there is no longer economic growth.
CONCLUSION

Based on the tests that have been carried out, it can be concluded that local taxes, which are represented by the growth in the realization of local tax revenues, have a significant and positive effect on the economic growth of an area as indicated by the GRDP of the area in question. In addition to local taxes, local government spending also has a significant and positive effect on the economic growth of a region. Meanwhile, capital expenditure and inflation rate have a significant and negative effect on the economic growth of a region. The variable that has no significant effect on the economic growth of a region is the unemployment rate of the region.

The implication of the conclusion as stated in the previous paragraph is that economic growth in a region in the current year will increase if the realization of regional tax revenues and regional government expenditures in the current year increases. In addition, economic growth in an area in the current year will also increase when the inflation rate decreases and capital expenditure in the current year decreases.

BIBLIOGRAPHY


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