The Effect of Number of Hotels, Number of Restaurants, Per Capita Income, and Population on Original Local Revenue in East Java Province

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Abstract
Original Local Government Revenue of East Java Province makes a high contribution compared to other provinces in Indonesia, being ranked third largest. During the period from 2010 to 2019, there was a continuous increase in Original Local Government Revenue. However, in 2020 there was a decrease due to the COVID-19 pandemic. An increase in Original Local Government Revenue will occur again in 2021 due to the implementation of the new normal policy. The objective of this study is to comprehend and examine how the quantity of hotels, restaurants, individual income, and population size impact the Original Local Government Revenue within the region of East Java Province. This study uses a quantitative approach and focuses on East Java Province from 2010 to 2022. The results show that the number of hotels and restaurants does not affect Original Local Government Revenue. Nonetheless, both individual income per person and population size exert a favorable impact on the Original Local Government Revenue in East Java.
INTRODUCTION

As a developing country that is rich in resources, Indonesia should aim to maximize prosperity through the effective and efficient use of its potential. In achieving national development, the central government implements decentralization to give full autonomy to regional governments. Through the process of decentralization, local administrations gain the authority to oversee and fund their specific requirements while addressing local concerns. This empowers local governments to handle their own financial inflows and outflows, reducing reliance on the central government. The Original Local Government Revenue is sourced from levies implemented according to regional and legal statutes.

Diverse origins of the Original Local Government Revenue comprise regional taxes and fees, autonomous administration of regional assets, and lawful channels of regional earnings (Republic of Indonesia Law Number 33 of 2004 on Financial Balance between the Central Government and Regional Governments, n.d.). Notably, East Java Province's self-generated income significantly outperforms other provinces across Indonesia. The province holds the third position for the highest Original Local Government Revenue nationwide.

Based on the graphic data above, there are variations in own-source Original Local Government Revenue during the period 2010 to 2022. Original Local Government Revenue in East Java Province shows an increasing trend from 2010 to 2019. However, in 2020 there was a significant decline due to the COVID-19 pandemic. In order to curb the transmission of the virus, stringent measures like the Large-Scale Social Restrictions (PSBB) policy and travel limitations were enforced throughout the extended holiday duration. This has an impact on people's economic activities, which are more focused on meeting basic needs and reducing consumption of goods subject to regional taxes in East Java Province (East Java Provincial Revenue Agency, 2020). However, in 2021, there
is a comeback in Original Local Government Revenue after a period of decline due to the pandemic. This was due to the "new normal" policy in which economic activity gradually began to operate again.

Currently, tourism activities are becoming popular and considered a necessity by many people. In carrying out tourism activities, it is important to have restaurant facilities that provide food and drinks, as well as hotels as places to stay. The population also has a significant economic impact and can contribute to Original Local Government Revenue if it increases. Interestingly, East Java Province has the second highest population density in Java Island after Central Java Province. Income per capita refers to the amount of average income per individual in a country or region in a certain period. This factor can also affect tax revenue and, consequently, Original Local Government Revenue.

THEORETICAL REVIEW

Locally-Generated Revenue
The term Original Local Government Revenue pertains to the earnings acquired within a specific region and gathered in accordance with local regulations as stipulated by the prevailing law. This revenue stream is acquired via charges established by regional regulations, along with legal provisions such as regional taxes and levies, management of distinct regional assets, and other lawful sources of regional income (Republic of Indonesia Law Number 33 of 2004 on Financial Balance Between the Central Government and Regional Governments, n.d.).

According to Prana (2016), local governments are responsible for managing and managing their finances by generating the financial resources needed to carry out organizational functions, such as community empowerment and the development of local government economic capabilities.

Number of Hotels
In research by Mularsari and Farika (2022), a hotel is described as a business or company that provides accommodation services in the form of guest rooms equipped with eating and drinking facilities, as well as other public facilities. According to Law Number 28 of 2009, the definition of a hotel includes facilities that provide lodging or resting services that charged a fee, including inns, motels, tourism guesthouses, tourism huts, guest houses, boarding houses with more than ten rooms, as well as other types that provide accommodation. (Law (UU) Regarding Regional Taxes and Regional Retribution, 2009).

Number of Restaurants
A dining establishment is a provider of food and beverages, furnished with the necessary tools and facilities for storage, preparation, and service, with the intention of generating financial gain. This description originates from the guidelines outlined in Regulation Number 11 of 2014 issued by the Minister of Tourism and Creative Economy of the Republic of Indonesia, which pertains to the standards for operating a restaurant business. The restaurant tax rate of 10%
relates to the tax revenue associated with the number of restaurants in existence. The greater the number of restaurants, the more consumers are attracted and have an impact on regional revenues through paying taxes to the government.

**Income Per Capita**

Income per capita refers to the average amount of income received by residents in an area during a certain period. This revenue is computed by dividing the Gross Regional Domestic Product (GRDP), primarily using fixed prices, by the population count. The results reflect the community’s real per capita income (Igir et al., 2018). Calculation of Per Capita Income can be done by:

\[
\text{Income per capita} = \frac{\text{GRDP at constant prices}}{\text{Total population}}
\]

**Total Population**

The number of residents in a region is an important factor in development. Nonetheless, when population growth outpaces the capacity to contribute to development, it can transform into a hindrance that obstructs both the development process and economic advancement (Hutasoit, 2017). Residents refer to a group of people who live in an area and are subject to the rules that apply. As individuals, residents will interact with fellow human beings. An increasing population or a high population growth rate will increase demand, which in turn will have an impact on the use of natural resources. The more population, the greater the need for natural resources, which can lead to depletion of natural resource reserves and become a problem in the region. Therefore, the government needs to estimate population growth every year to plan and improve policies that can prevent or overcome this problem.

**METHODOLOGY**

**Research Approach and Location**

This research adopts a quantitative methodology and is carried out within East Java Province. The variable under investigation is Per Capita Income, acting as the dependent variable, while the independent variables encompass the quantity of hotels, the quantity of restaurants, individual income per capita, and population size.

**Descriptive Statistical Analysis**

Descriptive statistical analysis was conducted to portray the attributes of the examined variables. The STATA software version 14 was employed to compute the minimum, maximum, mean (average), and standard deviation values of the variables within the study.
Classic Assumption Test

Prior to proceeding with additional analysis, the data underwent a classical assumption test. The purpose of this test is to verify whether the regression model adheres to the criteria of being the Best Linear Unbiased Estimator (BLUE). The classical assumption tests encompassed assessments for normality, heteroscedasticity, multicollinearity, and autocorrelation.

Regression Test

Additionally, the study conducted a multiple regression analysis utilizing STATA 14 software. This analysis was carried out to investigate the impact of the variables including the quantity of hotels, the quantity of restaurants, individual income per capita, and population size on the Original Local Government Revenue. The employed regression model in this research is as follows:

\[ Y(\text{pad}) = \alpha + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + e \]

Information:

- \( Y \) = Locally-generated revenue
- \( \alpha \) = Constant
- \( b \) = Regression Coefficient
- \( X_1 \) = Number of Hotels (hotels)
- \( X_2 \) = Number of Restaurants (restaurants)
- \( X_3 \) = Per Capita Income (pp)
- \( X_4 \) = Number of Population (jp)
- \( e \) = Standard Error

Determination Coefficient Test (R2)

The Coefficient of Determination Test (R2) is employed to gauge the degree to which the model can account for the variances observed in the dependent variable. This gives an idea of how well the model can predict or explain changes in the dependent variable (Ghozali, 2013).

Simultaneous Significance Test (F test)

The Simultaneous Significance Test (F-test) is utilized to assess whether the combined influence of all independent variables on the dependent variable is significant. The significance probability value (p-value) is employed to either accept or reject the hypothesis. If the p-value is <0.05, the hypothesis can be accepted; conversely, if it is ≥0.05, the hypothesis is rejected.
**Individual Parameter Significance Test (t test)**

The Individual Parameter Significance Test (t-test) is employed to assess the individual impact of each independent variable on the dependent variable. The t statistical test is utilized to compare the computed t value against the critical t table value at a significance level of 0.05. Should the calculated t value surpass the t table value, the null hypothesis is declined in favor of the alternative hypothesis, and the reverse holds true (Ghozali, 2013).

**RESULTS AND DISCUSSION**

**Descriptive Statistical Analysis**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Obs</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>padrupiah</td>
<td>13</td>
<td>1.51e+13</td>
<td>4.47e+12</td>
<td>7.28e+12</td>
<td>2.13e+13</td>
</tr>
<tr>
<td>hotel</td>
<td>13</td>
<td>3009.385</td>
<td>1051.707</td>
<td>1594</td>
<td>4572</td>
</tr>
<tr>
<td>resto</td>
<td>13</td>
<td>3028.231</td>
<td>1562.894</td>
<td>1287</td>
<td>5467</td>
</tr>
<tr>
<td>pp</td>
<td>13</td>
<td>3.53e+07</td>
<td>5636407</td>
<td>2.54e+07</td>
<td>4.27e+07</td>
</tr>
<tr>
<td>jp</td>
<td>13</td>
<td>3.92e+07</td>
<td>1155385</td>
<td>3.76e+07</td>
<td>4.11e+07</td>
</tr>
</tbody>
</table>

Based on the results of descriptive analysis, Original Local Government Revenue in East Java Province from 2010 to 2022 has a minimum value of 7.28 trillion rupiahs, a maximum of 2.13 trillion rupiahs, an average of 1.51 trillion rupiahs, and a standard deviation 4.47 trillion rupiahs. The dependent variable, the Number of Hotels, has an average of 3009 units, a standard deviation of 1051.707, with a maximum number of 4572 and a minimum of 1594 units.

The Number of Restaurants variable has a maximum number of 5467, a minimum of 1287, an average of 3028 units, and a standard deviation of 1562.894. Per capita, income has an average of 35.3 million rupiahs, a standard deviation of 5,636,487, with the highest per capita income reaching 42.7 million rupiahs and the lowest reaching 25.4 million rupiahs. The Population Variable has a maximum number of 41.1 million people, a minimum of 37.6 people, an average of 39.2 million people, and a standard deviation of 1,155,385.

**Classic Assumption Test**

**Normality Test**

| Variable | Obs  | W     | V    | z     | Prob>|z |
|----------|------|-------|------|-------|-----|
| padrupiah| 13   | 0.92715 | 1.283 | 0.488 | 0.31264 |
| hotel    | 13   | 0.88889 | 1.964 | 1.322 | 0.09303 |
| resto    | 13   | 0.87732 | 2.161 | 1.509 | 0.06559 |
| pp       | 13   | 0.94527 | 0.964 | -0.072 | 0.52862 |
| jp       | 13   | 0.94844 | 0.908 | -0.189 | 0.57481 |
For assessing data normality in this study, the Shapiro-Wilk W test was employed. The outcomes of the test indicated that the Prob>z values for all the variables examined exceeded 0.05. Thus, it can be deduced that all variables demonstrate a normal distribution.

**Heteroscedasticity Test**

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity  
Ho: Constant variance  
Variables: fitted values of padrupiah

<table>
<thead>
<tr>
<th>chi2(1)</th>
<th>Prob &gt; chi2</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.36</td>
<td>0.5458</td>
</tr>
</tbody>
</table>

In this investigation, the Breusch-Pagan test method was employed to examine data heteroscedasticity. The results of the test indicate that the probability value (prob) of 0.5458 exceeds 0.05. Consequently, it can be inferred that there are no indications of heteroscedasticity in the data analyzed for this study.

**Autocorrelation Test**

Breusch-Godfrey LM test for autocorrelation

<table>
<thead>
<tr>
<th>lags(p)</th>
<th>chi2</th>
<th>df</th>
<th>Prob &gt; chi2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2.532</td>
<td>1</td>
<td>0.1115</td>
</tr>
</tbody>
</table>

Ho: no serial correlation

Based on these findings, a significance value of 0.1115 was derived, surpassing the threshold of 0.05. Consequently, it can be inferred that there are no indications of autocorrelation within the dataset under scrutiny for this study.

**Multicollinearity Test**

<table>
<thead>
<tr>
<th>Variable</th>
<th>VIF</th>
<th>1/VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>resto</td>
<td>17.08</td>
<td>0.058534</td>
</tr>
<tr>
<td>jp</td>
<td>15.03</td>
<td>0.066518</td>
</tr>
<tr>
<td>pp</td>
<td>14.40</td>
<td>0.069421</td>
</tr>
<tr>
<td>hotel</td>
<td>5.99</td>
<td>0.166810</td>
</tr>
</tbody>
</table>

Mean VIF: 13.13

Within this investigation, the assessment of multicollinearity was conducted through a Variance Inflation Factor (VIF) examination. The outcomes of the test reveal that the VIF value surpasses 10, indicating the manifestation of multicollinearity characteristics. Despite the presence of multicollinearity, parameter estimation remains the Best Linear Unbiased Estimator (BLUE). This is due to the fact that the issue of BLUE estimation is not contingent upon the presumption of no correlation existing between the independent variables, as elucidated by Basuki (2017).
Regression Test

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>Number of obs = 13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>2.3513e+26</td>
<td>4</td>
<td>5.8783e+25</td>
<td>F(4, 8) = 112.74</td>
</tr>
<tr>
<td>Residual</td>
<td>4.1713e+24</td>
<td>8</td>
<td>5.2141e+23</td>
<td>Prob &gt; F = 0.0000</td>
</tr>
<tr>
<td>Total</td>
<td>2.3930e+26</td>
<td>12</td>
<td>1.9942e+25</td>
<td>R-squared = 0.9826</td>
</tr>
</tbody>
</table>

Based on the aforementioned regression equation, the following conclusions can be drawn:

1. An increment of one unit in the number of hotels leads to a reduction of 187,000,000 rupiahs in Original Local Government Revenue.
2. An increase of one unit in the number of restaurants results in a decrease of 868,000,000 rupiahs in Original Local Government Revenue.
3. For every one rupiah rise in per capita income, Original Local Government Revenue will experience a rise of 945,665 rupiahs.
4. An augmentation of one person in the population leads to an increase of 497,287.7 rupiahs in Original Local Government Revenue.

CONCLUSIONS AND RECOMMENDATIONS

In light of the findings from the conducted analysis, several conclusions can be inferred as follows:

1. The quantity of hotels does not exert a detrimental and statistically insignificant influence on the Original Local Government Revenue in the East Java Province. Even though there was an increase in the number of hotels, this did not directly increase Original Local Government Revenue revenue. The increase in hotel tax revenue which contributed to Original Local Government Revenue occurred due to the occupancy rate and the average length of stay of hotel guests.
2. The number of restaurants does not have a negative and insignificant effect on Original Local Government Revenue in East Java Province. This shows that the increase in the number of restaurants has no significant impact on increasing local revenue in East Java Province. One of the contributing factors is the existence of restaurant taxpayers who are not compliant in paying taxes so the contribution of restaurant taxes to Original Local Government Revenue is not optimal.
3. The income per capita has a positive and significant influence on Original Local Government Revenue in East Java Province. With an increase in people's income, the ability to pay regional taxes indirectly increases, which will contribute to an increase in the receipt of Original Local Government Revenue.

4. The total population does not have a positive and significant influence on Original Local Government Revenue in East Java Province. Even though the population has increased, it has not increased Original Local Government Revenue because most of the users of facilities such as hotels and restaurants are foreign tourists who are not residents of the area. The number of local people who use these services is only a small number.

Based on the aforementioned conclusions, several recommendations can be presented for the stakeholders involved in this research and for future studies. These recommendations include:

1. The East Java Provincial Government should maximize the utilization of Original Local Government Revenue to enhance regional autonomy capabilities. This would facilitate the funding of local requirements and subsequently enhance the well-being of the population.

2. The East Java Provincial Government should focus on enhancing the capacity of regional autonomy to cater to local needs and thereby indirectly enhance the welfare of the populace.

3. It is advisable for managers of restaurants and hotels within East Java Province to heighten their awareness regarding fulfilling tax obligations. Additionally, they should contribute to regional development by boosting local consumption, particularly within the immediate locality. This measure would lead to an increase in tax revenue through business income and contribute to the augmentation of local revenue.

FURTHER STUDY
In this study, there are variables that can be dissected in more detail. Subsequent research is expected to utilize different variables or even more variables, so as to depict the causal factors influencing the increase of Regional Original Income more concretely and comprehensively in East Java Province.

REFERENCES


