Measuring Local Revenue from The Tourism Sector in Bali Province

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Abstract—This study aims to analyze the-effect-of-the-number-of-tourist-visits, length of stay of tourists and room occupancy rates on-local-revenue-from-the-tourism-sector-in-Bali Province. The-research method used is descriptive quantitative. The-data-used-in-this study-secondary-data-from-the-Bali Province Tourism Office. The technique used-is-multiple-linear regression. With-the-number-of-samples used, namely 30 months, from October 2019 to March 2022. The results showed that partially the-number-of tourist visits had a-positive-and significant-effect-on local revenue from-the-tourism-sector-in-Bali Province, the-length-of-stay of tourists and the room occupancy rate had a negative and insignificant effect-on-local revenue from-the-tourism-sector-in-Bali Province. Simultaneously the number of tourist visits, length of stay of tourists and room occupancy rates have a significant influence-on-local revenue from the tourism sector in Bali Province.

Keyword: Length-of-Stay-of Tourist; Number-Of-Tourist-Visits; Regional Native Income; Room Occupancy Rate

I. INTRODUCTION

Tourism is a leading potential of the region that has all the attractions of natural scenery, oceans, mountains, traditions, arts and culture that can attract both domestic and foreign tourists to visit and have a positive impact on regional development. One of the areas that have been world famous for the beauty of tourism is Bali, Bali Province often referred to as The Island of Paradise is an area that stores a variety of beauty and superior tourism potential ranging from beauty and landscapes (sea, mountains, and lakes). Bali tourism development must be maximized in order to realize sustainable tourism. Sustainable tourism is a development process in the field of tourism by prioritizing development principles that include nature and environmental sustainability (ecological sustainability), preserving local culture and wisdom of the local area (social and cultural sustainability) (Bali Tourism Office, 2020).

In increasing income, community income and the government, tourism is one of the industrial sectors that is able to bring economic changes and improve living standards and other productivity sectors (Aditya and Bendesa, 2021). The increasing number of tourist visits accompanied by the length of stay certainly has a good impact on the occupancy rate of rooms, for tourists who want to stay overnight there are inns, inns and hotels to stay (Suartana et al., 2018). According to Wijaya (2011) in Suastika & Yasa (2017), the length of stay of tourists is the number of nights or days spent by foreign tourists outside their country of residence. In theory, the longer a tourist stays at a destination, the more money is spent in the area. At least for consumption purposes such as food and beverages for tourists and hotel accommodations during tourism activities. According to Khaer and Utomo (2012), Room occupancy is the number of rooms divided by available rooms multiplied by 100 percent. The higher the initial income of the region, the more independent the area is in terms of development decisions and policies. Regional
Original Revenue, is sourced from regional areas that are included in regional financing sources (Amerta & Budhiasa, 2014). The consequences of implementing the regional autonomy system encourage each regional government to be able to improve the economy with the aim of reducing dependence on the central government, creating independence, including increasing regional main revenue generation, which can later be a source ranging from financing to regional economic management (Taras & Artini, 2017). Moreover, in a study conducted by Yamin et al. (2020), it showed that the number of tourist visits and hotel stays had a significant influence on tourism sector revenue and economic growth. Lusiana et al. (2021) also revealed that 1) the number of domestic visitors has a positive and significant effect on OLGR 2) The number of foreign visitors has a positive and significant effect on OLGR 3) The number of tourist destinations has a positive and significant effect on OLGR 4) Restaurant tax has a positive and significant effect on OLGR 5) Hotel room tax has a positive and significant effect on OLGR 6) Number of accommodations show evidence as a moderating variable for relationship hotel room tax and OLGR.

Based on the background and the previous studies above, this study aims to analyze the effect of the number of tourist visits, length of stay of tourists and room occupancy rates on local revenue from the tourism sector in Bali Province.

II. CONCEPT AND HYPOTHESIS

Regional Original Revenue (PAD)

Regional Original Revenue is revenue that exists in a certain area and is then received from regional sources which is then collected based on regional regulations or applicable legislation. The regional revenue sector plays an important role, because it shows that a region is able to finance state activities and the development of certain regions (Siregar, 2017:23).

Tourism Sector

According to Suwena & Widyatmaja (2017:28), tourism is a complex activity that can be considered as a large system with various components such as economic, ecological, political, social, and cultural. Tourism has benefits that can be seen in various aspects of life, both economic, socio-cultural and environmental.

Number of Tourist Visits

According to the Tourism Law of the Republic of Indonesia Year 2009, tourists are people who travel. Number of visits Tourists are people or tourists who visit tourism destinations to enjoy natural or cultural beauty or for other purposes. Tourist visits to tourism destinations will affect regional income derived from tourism expenditures, especially for accommodation, food and drink, and recreation needs (Sari & Dewi, 2021).

Hypothesis 1: The number of tourist visits affects the regional original revenue.

Length of Stay of Tourists

Length of Stay A traveller is the number of nights or days spent outside the country of residence of a foreign tourist. The greater the number of visits and the length of stay of tourists, it has the contribution to the original regional income of an area according to the research Wahyudi et al. (2022) results of research on the length of stay of tourists has a positive and significant effect on Regional Original Income.

Hypothesis 2: The length of stay of tourists affects the regional original revenue.

Room Occupancy Rate

According to Wijaya & Yuliarmi (2019), room occupancy rate is a condition in which the number of rooms sold, when compared to the total number of rooms that can be sold. The more hotel rooms are sold, the hotel occupancy rate will increase and generate higher hotel revenue (Mutlag, 2013). The tourism sector has the potential to grow as a country's main source of income (PAD). This is in accordance with the results of research by Suartana et al. (2018) stated that the occupancy rate of rooms in Bali Province has a positive and significant effect on Regional Original Income.

Hypothesis 3: Room occupancy rates affect the regional original revenue.

III. METHOD

This study is located in Bali Province where this study was conducted to examine the effect of the Number of Visits (X₁), Length of Stay of Tourists (X₂), and Room Occupancy Rate (X₃) on Local Original Income in the Tourism Sector (Y) in October 2019-March 2022. This study took data on foreign tourists. In addition, data is collected by documenting the necessary information, ie. record collection, according to a study conducted by the Bali Provincial Tourism Office. The data analysis methods used are descriptive analysis.
and multiple linear regression analysis. Before analyzing the data obtained, a classical assumption test will be carried out to the statistical analysis test stage to determine the feasibility of the research sample.

IV. RESULT AND DISCUSSION
Before proceeding to the analysis stage, the results of the research need to test classical assumptions. Testing classical assumptions or evaluation of the proposed model must be carried out so that the research model truly describes causal phenomena and correlations between the variables studied. Multiple linear regression models will be more appropriate to use and produce more accurate calculations if the following assumptions can be met. The classical assumption tests used are normality tests, heteroscedasticity tests, and multicollinearity tests.

Table 1. Kolmogorov Method Normality Test - Smirnov Test

<table>
<thead>
<tr>
<th>One-Sample Kolmogorov-Smirnov Test</th>
<th>Unstandardized Residual</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>30</td>
</tr>
<tr>
<td>Normal Parameter Z</td>
<td>Mean = 0.000000</td>
</tr>
<tr>
<td>Std Deviation</td>
<td>0.3797774</td>
</tr>
<tr>
<td>Most Extreme Differences</td>
<td>Absolute = 0.103</td>
</tr>
<tr>
<td>Positive</td>
<td>0.097</td>
</tr>
<tr>
<td>Negative</td>
<td>-0.103</td>
</tr>
<tr>
<td>Test Statistic</td>
<td>Asymp. Sig. (2-tailed)</td>
</tr>
<tr>
<td></td>
<td>0.2006</td>
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</tbody>
</table>

Source: SPSS Version 26 Output, 2022

Based on Table 1, shows the Kolmogorov-Smirnov Z Test value is not significant at the level of 0.05 because of the asympt value. Sig (2-tailed) shows a number of 200<sup>6</sup> > of 0.05 or insignificant, so the model shows a normal distribution.

Then in Figure 1, shows that the entire distribution of residual standardized regression data is within the normal distribution curve. With then the analysis can proceed to the next stage. Based on Figure 2, showing the estimation model shows that it does not show a clear or regular pattern of relationship between relationship regression studentized deleted residual and regression studentized deleted predicted value. The results concluded that the model contains no symptoms of heteroscedasticity.

Source: SPSS Output Version 26, 2022

Based on Table 2 shows the estimation model: LnY1 = Ln bo + b1 Ln X1 + b2 Ln X2 + b3 Ln X3 The value of Collinearity Statistics VIF from the variable Number of Tourist Visits is 2.191 < 10, this means that there is no multicollinearity. For the Variable Length of Stay of Travelers Collinearity Statistics VIF value of 1.387 < 10, this means that there is no multicollinearity. For the Room Occupancy Rate Variable the Collinearity Statistics VIF value of 2.011 ≤ 10, which means multicollinearity does not happen.

Source: SPSS Output Version 26, 2022
Table 3. Autocorrelation Test

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R</th>
<th>Adjusted</th>
<th>R</th>
<th>Error of</th>
<th>Change Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Square</td>
<td></td>
<td>Square</td>
<td>F Change df</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Estimate</td>
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<td>Estimate</td>
<td>Change df</td>
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<td>Estimate</td>
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<td>Estimate</td>
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<td>Estimate</td>
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<td>Change df</td>
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<td>Estimate</td>
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<td>Estimate</td>
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<td>Estimate</td>
<td>Change df</td>
</tr>
</tbody>
</table>

Source: SPSS Output Version 26, 2022

Based on Table 3 shows that in the model the estimated value of dL table (at n = 30 and independent variable k = 3) is 1.216 and Du table is 1.650 while the DW value of the calculated result is 1.083. So that it lies in criterion 2, namely Dl < Dw < dU, which is in the gray area, meaning that it cannot draw conclusions on the relationship of all estimated variables. After the entire series of classical assumption tests are carried out and have been fulfilled, then the analysis can proceed to the next stage.

Table 4. Multiple Linear Regression Test (R)

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
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</thead>
<tbody>
<tr>
<td></td>
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<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
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<td>Lower Bound</td>
<td>Upper Bound</td>
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Source: Output SPSS Versi 26, 2022

Table 4 shows each value of the coefficient in the regression equation which can be interpreted as follows:

\[
\alpha = 25.326 \\
b_1 = 0.131 \\
b_2 = -0.547 \\
b_3 = -0.135
\]

Then the regression model equation can be generated, namely:

\[
Y = 25.326 + 0.131 (X_1 - 0.547 X_2 - 0.135 X_3)
\]

The above equation can be interpreted as follows:

The value \( \alpha = 25.326 \) means when the variable Amount Visit Traveller \((X_1)\), Old Stay Traveller \((X_2)\), Level Room Occupancy \((X_3)\) is 0 or unchanged hence the amount of Income Original The area of the Tourism Sector \((Y)\) amounted to 25,326,000,000.

The value of \( b_1 = 0.131 \), means that the number has a positive effect of 0.131 on the Regional Original Income of the tourist Tourism Sector and the relationship at the level of 0.05, means that an increase in the number of tourists of 100,000 people will increase the regional income of Bali Province by Rp. 131,000,000, and vice versa if the number of tourists decreases by 100,000 people it will reduce the Regional Original Income by Rp. 131,000,000.

Value \( b_2 = -0.547 \), meaning that the length of stay of tourists has a negative effect of -0.547 and is significant on Regional Original Income at the level of 0.10. This means that the length of stay of tourists is a positive no effect on the increase in Bali’s Original Regional Income Province.

The value of \( b_3 = -0.135 \), means that the Room Occupancy Rate has a negative effect of -0.135 on Local Original Income and the relationship is significant. This means that the Room Occupancy Rate has a negative effect of -0.135 on the Original Income at level 0.10 Bali Province.

Table 5. Simultaneous Significance Test Results (T-Test)

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
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<tr>
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<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
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Source: SPSS Output Version 26, 2022

Hypothesis test (significance test t) has the aim of determining most of the influence of one independent variable individually to explain the dependent variable (Ghozali, 2013:59). Based on Tabel 5 above, it can be seen that the influence of the independent variable on the dependent variable is as follows:

Based on the Simultaneous Significance Test (Test T), a calculated t value of 7.128 > 2.05553 and a signification value of (0.000 < 0.05, then Ho is accepted and Ha is rejected which means that partially the variable Number of Tourist Visits has a positive and significant effect on the variable of Local Original Income from the Tourism Sector of Bali Province.
variable of Tourist Stay has a negative effect and not the variable of Local Original Income significant to from the Tourism Sector of Bali Province.

Based on the Simultaneous Signification Test (Test T) obtained a calculated t value of -1.769 < 2.05553 and a signification value of 0.0084 < 0.05, then Ho is rejected and Ha is accepted can mean partially the variable Room Occupancy Rate has a negative and insignificant effect on the variable Local Original Income from the Tourism Sector of Bali Province.

Table 6. Results of the Individual Parameter Significance Test (Test F)

| Model Summarya | R | R Square | Adjusted R Square | Std. Error of the Estimate | Significance of F | Change | Change df | Sig. F | Change
<table>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.760</td>
<td>0.581</td>
<td>0.580</td>
<td>0.00000</td>
<td>0.000</td>
<td>22.272</td>
<td>3</td>
<td>25</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Source: SPSS Output Version 26, 2022

Table 6 indicates that the F value is 22.272 and the F value of the table is 2.98. A significance value of F of 0.000 is less than a significance value of 0.05 (0.000 < 0.05) then Ho is rejected and Ha is accepted, so the value of F is calculated 22.272 > F Table 2.98 (22.272 > 2.98) then Ho is rejected and Ha is accepted. So it can be concluded that independent variables (Number of Tourist Visits, Length of Stay of Tourists, and Room Occupancy Rate) simultaneously have a significant influence on Local Original Income from the Tourism Sector in Bali Province. Based on the test results, the data in this study deserves to proceed to the analysis stage.

The Effect of the Number of Tourist Visits on Local Original Income from the Tourism Sector

Based on the results of the analysis, it can be seen that there is a significant influence between the variables of the Number of Tourist Visits on Local Original Income from the Tourism Sector of Bali. The significance value produced after the analysis shows a number smaller than the predetermined significance value, so it can be concluded that Ho is rejected and Ha is accepted. It can be interpreted that during the research period that occurred from October 2019 - to March 2022 (30 months) the number of tourist visits fluctuated every month, The increasing number of visits will have an influence on increasing Regional Original Income when tourists visit Bali tourists also visit tourist destinations and do consumption shopping or souvenirs for families, it can be seen that tourists who visit not only enjoy natural tourism but also do shopping tours from the results of Craft local residents. With the enjoyment of nature tourism and shopping tourism, it increases Regional Original Income from the Tourism Sector, this is in line with previous with research that actions that Putra et al. (2021) shows the number of tourist visits has a positive and significant influence on Regional Original Income.

The Effect of Tourists’ Length of Stay on Local Original Income from the Tourism Sector

The results of the analysis show that the length of stay of tourists has a negative and insignificant effect on the Local Original Income of the Bali Tourism Sector. Value The resulting significance after the analysis shows a number whose significance value is smaller than has been set, so it can be concluded that Ho is rejected and Ha is accepted. It can be interpreted that during the research period occurring in October 2019 – March 2022 (30 months) the length of stay of tourists will affect the increase in that Regional Original Income in this research period when tourists stay.

Not in a long period of time because the number of tourists visiting Bali is very low, especially because of the COVID-19 outbreak, so there are almost no tourists visiting Bali. Tourists have only started coming to Bali starting in March 2022 after a relaxation program for tourist visits due to the continuous decline in the COVID-19 outbreak. It can be seen that although there are tourists visiting Bali but not for a long time, this is what tourists cannot stay for a long time. In line with research by Suastika & Yasa (2017) which shows the length of stay of tourists has a negative and insignificant influence on Regional Original Income.

The Effect of Room Occupancy Rate on Local Original Income from the Tourism Sector

The results of the analysis show that the Room Occupancy Rate has a negative and insignificant effect on the Local Original Income from the Tourism Sector of Bali Province. The value of significance produced after the number that is the value of
Influence on Regional Original Income. The analysis shows smaller than predefined can be concluded that Ho is rejected and Ha is accepted. It can be interpreted that during the research period occurred from October 2019 – March 2022 (30 months) the length of stay of tourists fluctuated every month, and the decreasing occupancy rate of rooms had an influence on increasing local original income from the Tourism Sector, in this research period when tourists stayed in rooms provided by the provider, then Room occupancy rate becomes a measure in calculating hotel revenue. So during the study period, the number of tourist visits that experienced a significant decrease directly affected the Occupancy Level which was not all filled according to the number of rooms available. In line with research Sari & Yuliarmi (2018) that shows room occupancy rates do not have a positive and significant effect on Regional Original Income.

V. CONCLUSION

In the results of the discussion that has been carried out, it can be concluded that the Number of Tourist Visits has a positive and significant influence on the variable of Regional Original Income from the Tourism Sector, which means that the increasing number of tourist visits will increase Regional Original Income. The length of Stay of Tourists has a negative and insignificant influence on the variable of Regional Original Income from the Tourism Sector means that if tourists stay for a long period of time, it will increase the amount of Local Original Income in an area they visit. In the case of this study, the length of stay of tourists is affected by the Covid-19 pandemic so tourists cannot stay overnight or travel to Bali, due to restrictions on tourist movement carried out by the local government through airport closures and other entry accesses. Room Occupancy Rate has a negative and insignificant influence on the variable Local Original Income from the Tourism Sector, meaning that if the room occupancy rate is fully occupied, it will increase the amount of Regional Original Income in an area visited. In the case of this study, the room occupancy rate was affected by the Covid-19 pandemic so tourists could not stay overnight or travel to Bali, due to restrictions on tourist movement carried out by the local government through airport closures and other tourist accesses. Based on the Individual Parameter Significance Test (Test F), it can be concluded that these three variables have a simultaneous and significant influence on Regional Original Income.

REFERENCE


Pengaruh Jumlah Kunjungan Wisatawan, Lama Tinggal Wisatawan dan Tingkat Hunian Hotel Terhadap Pendapatan Asli Daerah dan Kesejahteraan Masyarakat Pada Kabupaten/Kota di Provinsi Bali. 


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