

Review Article

# Influence of the Number of Tourism Visits, and Hotel Occupancy on Tourism Sector Revenue and Economic Growth in Indonesia

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Received Date: 17 July 2020

Revised Date: 31 August 2020

Accepted Date: 03 September 2020

**Abstract** - The purpose of this study is to test and analyze the influence of tourist visits and hotel occupancy rates on tourism sector revenue and economic growth in Indonesia. This type of data uses secondary data sourced from the Central Bureau of Statistics and the Ministry of Finance of the Republic of Indonesia. The period is from 1999 to 2019. Data analysis uses path analysis with the help of the AMOS 23.0 program.

The results found that the number of tourist visits and hotel stays had a significant influence on tourism sector revenue and economic growth. Meanwhile, the earnings of the tourism sector are influential positive but not significant. To increase economic growth in Indonesia, it is recommended to increase the number of tourists and hotel occupancy rates because both variables have the highest influence over the influence of tourism sector revenue on economic growth. Partially, it was found that there was no role in the mediation of tourism sector revenue in the influence of tourist visits and hotel occupancy rates on economic growth, but there was simultaneously a role of mediation of tourism sector revenue.

**Keywords** - Economic Growth, Tourism Sector of Revenue, The Number of Tourists and Hotel Occupancy Rates.

## I. INTRODUCTION

The tourism sector is a potential sector developed as a source of regional income. To increase the indigenous revenue of the region, the development and utilization of resources and tourism potentials become very important. It is widely regarded as a multidimensional activity of a series of development processes. Development is a series of ongoing efforts covering the entire lives of peoples and nations to carry out the task of realizing the national objectives[1].

The tourism sector comes from various activities, including accommodation, restaurants, and tourist attractions. Based on the residential level data of rooms in Indonesia (TPK), it is noted that the hotel room occupancy rate is 2019 Lower when compared with the year 2018, i.e.,

from 57,13 percent to 53,80 percent. The number of tourist visits at the end of the year 2019, 16.1 million people, rose 1.88% compared with the year 2018. Meanwhile, the number of tourists visiting Indonesia in 2018 by 15.8 million people, while in the previous year 2017, as many as 14.04 million people. The cause of declining hotel occupancy is caused by because the number of illegal accommodation facilities, such as unlicensed villas, affects the occupancy of the hotel. In the restaurant sector, a decline is caused due to a decline in the hotel sector, considering that both sectors have a fairly close relation and correlation, or in other words, affect each other. From the data obtained in Indonesia occupancy rate of the highest room occurred in the province of North Sulawesi for 64,77%, and the lowest occurred in the province of Bangka Belitung, only 37,39%. From the fact that the tourism sector in Bangka Belitung province is still very low views from Province other provinces.

Facts show the development of tourism revenue tendency increases. For the last two years of the year, the 2018-2019 tourism sector revenue tends to increase by an average increase of 0,79%. The increase in tourism sector revenue is due to an increasing number of tourists and increased hotel occupancy rates increasing. On the number of tourists, visitors can be informed that in 2018 – 2019 the last number of tourists experienced an increase of 17,6%. Occupancy Rate (TPK) Hotel star Classification in Indonesia in December 2019 reaches an average of 59.39 percent or down 0.36 points compared to the December 2018 TPK of 59.75 percent.

Theoretically, this problem corresponds to the opinion [2] that says the low number of tourists visiting will affect the high low-income tourism sector. The more tourists visit, the tourism sector's revenue will increase, and conversely if the visitor visits are declining, the tourism sector revenue will be decreased. Theoretically, this problem is also following the opinion of [3], who said that the longer the tourists stay in a tourist destination, then the more money is spent in the tourist destination area. With the consumptive activities of both foreign and domestic



tourists, it will enlarge the revenue of the tourism sector of the area.

The increase in hotel occupancy in 2018-2019 is due to the relatively increasing number of visits increasing. [2] said that when the occupancy rate increases, it will be followed by the increasing amount of revenue of the tourism sector; otherwise, when the occupancy rate decreases, it will be followed by declining the amount of revenue of the tourism sector. Meanwhile, according to [4] said that the tourism industry, especially activities related to lodging is the hotel, will earn more revenues when the tourists are getting longer stays and vice versa.

This research is a development of research [1] dan [5] that analyzes the influence of hotel occupancy and the number of tourist visits on tourism sector revenues. To prove his hypothesis, [1] used track analysis by using the research subject of one of the districts (Buleleng) in the province of Bali. Using the same analysis tool, the model of this research is the development of the research model [1], namely: adding a dependent variable of economic growth. Other differences are: In this study carried out the influence of the income mediation of tourism sector in the interest of the number of visits and hotel occupancy rate of economic growth using a wider research subject, namely the country (Indonesia). [6]: International Tourism using the gross domestic product (GDP) indicator, foreign tourists visit, number of foreign tourists arrivals, and exchange rates can maintain the sustainability of the tourism sector to be stronger and have a global market orientation. [7]: There is a positive influence on the number of tourists and hotel occupancy on hotel tax revenues, while the number of hotels has no positive effect on receiving hotel tax in Yogyakarta city. [1]: Finding that (1) there is an influence from the number of tourists, the hotel occupancy rate of tourism sector revenue with a donation of 88.3%, (2) there is a positive influence of the number of tourists to the tourism sector's revenue with a donation of 63.5%, (3) there is a positive influence from the hotel occupancy rate of tourism sector with a donation of 17.3%, and, (4) there is a positive influence of the number of tourists to the level of hotel occupancy in Buleleng Regency with a donation of 05.1% Next [8]: proving the number of tourists visiting Surabaya and occupancy level of hotel rooms significant influence on the realization of the tax receipt hotel.

Based on the results of the empirical study that has been submitted, the research will again test the influence of the number of tourists and the hotel's residential level on the economic growth mediated by tourism sector revenue in Indonesia.

## II. LITERATURE REVIEW

### A. *The relationship of tourism visits and the Hotel's residential level towards tourism and economic growth sector*

Foreign tourists are any visitors who visit a country outside their residence, driven by one or several purposes without intending to earn the income in the place visited,

and the duration of the visit is not more than one year (12 months). The more number of tourists and the longer they stay will increase their demand for products and services in tourism activities so that it will increase the output value generated by the economic sectors, especially the tourism sector. An increase in the number of tourists should be balanced by the number of facilities and infrastructure, and one of them is the availability of adequate lodging rooms, both star hotel rooms, and non-star hotel rooms. Tourists can use the facilities to make tourists feel at home and stay longer to travel, so that will affect the expenditure of tourists that ultimately increase the income of tourism sectors.

The hotel's residential room (TPK) rate is a comparison between the number of nights rooms used with the number of nights available room (in percent) [5]. The higher the occupancy rate of the rooms in both the star and non-star hotels owned by a group of hotels/accommodations in an area, showing the more productive the hospitality business.

The results of the study [5]: Variable number of tourists, non-star hotel rooms, and the occupancy rate of non-star rooms are positive and significant to the PDRB tourism sector, while the residential level of star hotel rooms has no significant effect on the PDRB tourism sector in the ten provinces of Indonesia's priority destinations.

### B. *Tourism sector revenue related to economic growth*

The development of tourism in a country will encourage and accelerate economic growth. This is because tourism activities will create a demand both in terms of consumption and investment, which in turn raises the production activities of goods and services. During the tour, tourists will do shopping So which directly raises demand (Final tourism Demand) for market goods and services. Furthermore, the final demand of tourists indirectly raises the demand for goods and raw materials (Investment Devired Demand) to produce to fulfill the demand of tourists for such goods and services. To fulfill the demand of such tourists, investments are required in transportation and communication, hospitality and other accommodation, handicraft industry and consumer products industry, service industry, restaurants/restaurant, and others. (Spillane in [5])

The revenue of the tourism sector is the income gained by the area through tourism activities in the collection through taxes and retribution. Such as the retribution of recreational and sporting objects, hotel and restaurant tax, entertainment tax, and other units of Rupiah[9]

### C. *The role of tourism sector revenue in the influence of tourism visits and Hotel occupancy of economic growth*

The tourism sector is a potential sector to be developed as one of the regional sources of income. In

order to increase the local native income, the government needs to develop and facilitate tourism places so that the tourism sector can contribute to economic development. The development of tourism has an impact on the socio-economic condition of the community, one of which is the impact of tourism on the government[10].

The results [10] welfare of the people in the district/city in Bali Province. The area's original income as a variable mediation relationship of the number of tourist visits, the length of stay of tourists, and the occupancy rate of the hotel affect the welfare of the community.

### III. METHOD

#### A. Data

This research uses secondary data with the subject of research from the country of Indonesia and the observation period 2000-2018. Data source from the Indonesian statistical Center (BPS). The data used is data on the number of tourist visits, hotel occupancy rate, revenue sector tourism, and economic growth.

#### B. Data Analysis

Based on the hypothetical formula that has been submitted, the full path model is described as follows:

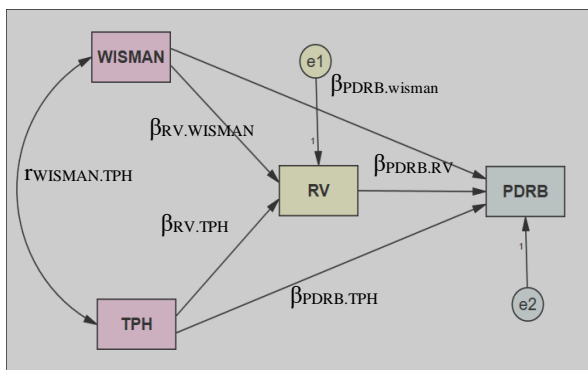


Fig. 1 Complete Path Model

Based on figure 1, the structural equation is written as follows:

$$PDRB = \beta_1 WISMAN + \beta_2 TPH + \beta_3 RV + e_2$$

$$RV = \beta_{31} WISMAN + \beta_{32} TPH + e_1$$

To prove the hypothesis that has been proposed previously, the data analysis technique used is the analysis of the pathway using the help of the AMOS program version 23.0.

The analysis steps are divided into three stages, namely: first: perform a complete path model analysis. Second: test the direct impact of variable tourist visits, hotel occupancy rates, and tourism sector revenue on economic growth. Third: test the influence of tourism visits on economic growth through hotel occupancy rates and tourism sector revenue.

Direct influence test is conducted using t-test, i.e., by comparing significant value probability t-statistical (critical ratio) with an alpha value of 5%. The test criterion is that if the probability t-statistical probability value is smaller than the alpha value, then there is a significant influence of variable tourist visits, hotel occupancy rates, and tourism revenue on economic growth.

Indirect influence tests are performed using Sobel tests by first engineering the complete path model. The test way is to compare the probability value of z-statistic and the alpha value of 5%. The test criterion is that if the probability z-statistical value is smaller than the alpha value, then there is an indirect influence. Because there is a multi-indirect influence, indirect influence testing is carried out partially.

### IV. RESULT AND DISCUSSION

To prove the hypothesis that has been submitted, descriptive statistical analysis and path analysis are used and explained as follows:

#### a) Descriptive Statistics

The results of the descriptive statistics analysis variable number of tourist visits, hotel occupancy rate, tourism sector revenue, and economic growth are seen in the table below.

|          | WISMAN       | RV        | PDRB        | TPH    |
|----------|--------------|-----------|-------------|--------|
| Minimum  | 4467021.000  | 4037.020  | 3851851.791 | 43.23  |
| Maximum  | 15810305.000 | 17600.000 | 10949243.70 | 58.75  |
| Mean     | 8021365.100  | 8467.144  | 6924874.526 | 49.53  |
| Skewness | 1.087        | 0.897     | 0.293       | 0.397  |
| Kurtosis | 0.054        | -0.038    | -1.166      | -0.924 |

Source: Central Bureau of Statistics processed authors (2020)

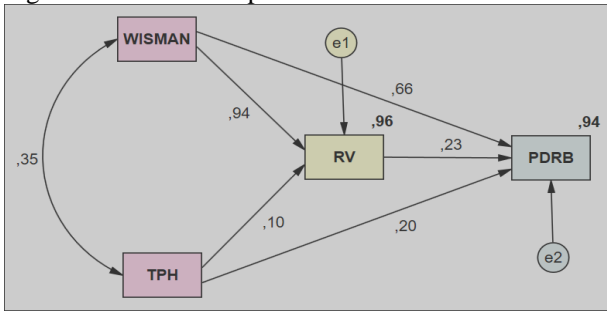
Statistics show that the variable value of tourist visits (WISMAN), tourism sector revenue (RV), economic growth (PDRB) and hotel occupancy rate (TPH) with an average value of 8,021,365 people, \$8,467,144, Rp 6,924,874,526, and 49,534%.

The average traveler rating of 8,021,365 means that in 2000-2019 in Indonesia, 8,021,365 people were visited by tourists. Furthermore, the hotel occupancy rate of 49.534% means that of the number of visits of such tourists, about 49,534 percent stay in hotels. The average value of tourism sector income of \$8,467 144 means that the Indonesian government generates tourism sector revenue of \$8,467 144 per year, and economic growth of Rp 6,924,874,526 means that revenue growth from the tourism sector reaches Rp 6,924,874,526.

From the data, all the variables analyzed showed that the spread was in a range with skewnes values between 0.293-1087 and kurtosis between -1,166 to 0.054. this means that the data spread of all variables follows the normal distribution pattern since the skewness and kurtosis values are in intervals between -1.5 to 1.5 (with alpha 5%).

**b) Full Path Model**

The results of the path analysis with the AMOS 23.0 program are seen in the picture below.



**Fig. 2 Full Path Model Results**

The results of the analysis in Figure 1 obtained a coefficient of the variable influence of tourist visits, hotel occupancy, and tourism sector revenues on economic growth and the influence of tourism sector revenues on economic growth as well as the influence of tourist visits and hotel occupancy rates on tourism sector revenues seen in Table 2.

**Table 2. Full Path Model Test Results**

|      |      |        | C.R.        | P     |
|------|------|--------|-------------|-------|
| RV   | <--- | WISMAN | 1913715.000 | ***   |
| RV   | <--- | TPH    | 203243.000  | 0.042 |
| PDRB | <--- | WISMAN | 250889.000  | 0.012 |
| PDRB | <--- | TPH    | 306292.000  | 0.002 |
| PDRB | <--- | RV     | 0.834       | 0.404 |

Source: Central Bureau of Statistics processed authors (2020)

With standardized regression, weight is seen in Table 3.

**Table 3. Influence of Between Variables**

|      |      |        | Estimate |
|------|------|--------|----------|
| RV   | <--- | WISMAN | 0.94     |
| RV   | <--- | TPH2   | 0.10     |
| PDRB | <--- | WISMAN | 0.66     |
| PDRB | <--- | TPH2   | 0.20     |
| PDRB | <--- | RV     | 0.23     |

Source: Central Bureau of Statistics processed authors (2020)

Based on Tables 2 and 3, the hypothesis test will be conducted as follows:

**c) Direct Influence of Tourist Visits, Hotel Occupancy Rate and Tourism Sector Revenue on Economic Growth**

Based on the analysis of data in Tables 2 and 3, it is known that the probability value of the influence of tourist visits on economic growth is 0.012, and the regression coefficient is 0.66. means that the hypothesis is that tourist visits have a significant effect on economic growth. With an influence contribution of  $(0.66)^2 = 44.3\%$ . The results of this study are in line with the [11]: The findings of our study suggest that a 1% increase in tourism significantly enhances gross domestic product (GPD) by 0.051%.

Furthermore, the probability of the effect of the number of tourists on tourism sector revenue s \*\*\* (smaller than alpha 1%) and proven hypotheses. The regression coefficient was 0.94, with an influential contribution to tourism sector revenues of 88.4%. This

means that the higher the number of tourist visits in Indonesia, the greater the chance of the tourist spending his money so that this has an impact on the increasing revenue of hotels and other service providers, which will further increase the revenue of the tourism sector. The results of this study are in [12] and [13]: the number of tourist visits has a positive and significant effect directly on the original income of Gianyar Regency, but not in line with research [14]: hotel occupancy rates and the number of tourist attractions significantly affect tourism sector revenue in Kebumen Regency. However, the results of this study are not in line with the results of the [15]: the number of tourism objects have no effect on retribution area, the number of tourist impact negatively to retribution area.

Hypothetical testing: the effect of hotel occupancy rates on tourism sector revenue and economic growth is also proven, as evidenced by a probability value smaller than the alpha value of 5%. The effect of the contribution of hotel occupancy on tourism sector revenue was 1.0% and to the economic growth of 3.9%. This means that rising hotel occupancy rates directly affect hotel revenues which can ultimately increase the income of the tourism sector in a country. The results of this study are in line with the research [16] and [13]: Hotel Occupancy Rate has a positive and significant impact on tourism sector acceptance.

There is one hypothesis that is rejected, namely the influence of tourism sector revenue on economic growth, where the effect is not significant. The insignificant impact [15] of tourism (receipts) growth increase will accelerate the economic growth with a time lag of 5 – 6 quarters.

The results of this study are in line with the research but not in line with the [17]: tourism sector revenues affect the financial performance of the region.

**d) The Effect of Tourism Visits on Economic Growth Through Hotel Occupancy Rates and Tourism Sector Revenue**

The results of the test of the role of tourism sector revenue mediation in the influence of tourist visits on economic growth showed that the total direct influence was 0.66 and the total indirect influence was  $[2(0.35 \times 0.94 \times 0.23)] = 0.15$ . Furthermore, the test results of the role of tourism sector revenue mediation in the influence of hotel occupancy rates on economic growth showed that the total direct influence was 0.20 and the total indirect influence of  $[2(0.35 \times 0.10 \times 0.20)] = 0.014$ . Because the total direct influence is greater than the indirect influence, it can be concluded that there is no partial mediation role in the influence of tourist visits and hotel occupancy rates on economic growth in Indonesia in 2000-2019.

The results of the test of the role of tourism sector revenue mediation in the influence of tourist visits and hotel occupancy rates on economic growth are known that the direct influence total is  $(0.66 \times 0.2) = 0.132$  and the total indirect influence of  $[0.2] 2(0.35 \times 0.94 \times 0.23) +$

$2(0.23 \times 0.1 \times 0.2) = 0.165$ . because the total direct influence of tourist visits and hotel occupancy rates on economic growth is smaller than the total indirect influence through tourism sector revenue, it can be concluded that there is a role of tourism sector revenue mediation in the influence of tourist visits and hotel occupancy rates on economic growth in Indonesia in 2000-2019.

## V. CONCLUSION DAN RECOMMENDATION

Based on the results and discussions related to the influence of tourist visits and hotel occupancy rates on tourism sector revenue and economic growth, it can be drawn conclusions:

- a. The number of tourist visits, hotel occupancy rate and tourism sector revenue had a significant and positive effect on economic growth in Indonesia.
- b. The number of tourist visits, hotel occupancy rates and the significant and positive impact on tourism sector revenue in Indonesia.
- c. In part, the role of tourism sector revenue mediation in the influence of tourist visits and hotel occupancy rates on economic growth proved to play no role, but simultaneously found the role of tourism sector revenue mediation in Indonesia.

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The recommendations for further researchers, it should further explore the role of tourism sector revenue mediation in the influence of tourist visits and hotel occupancy rates on economic growth using structural equation modelling (SEM) analysis tools.

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