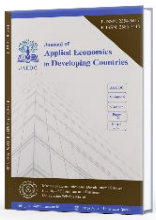

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ANALYSIS OF THE TOURISM SECTOR CONTRIBUTION TO THE IMPROVEMENT ECONOMIC GROWTH IN CENTRAL JAVA

Hillary Netty Habsari*[1)], Dame Esther Mastina Hutabarat[2)]
[1)]Faculty of Economics and Business, Universitas Sebelas Maret, Indonesia
[2)]Faculty of Economics and Management, Universiti Kebangsaan Malaysia, Malaysia

Corresponding author: hillarynh1998@gmail.com

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ABSTRACT

This research aims to determine the effect of the degree of number of tourists, the number of tourist attractions, hotel occupancy rates, and the average length of stay of tourists on economic growth using the parameters of the Gross Regional Domestic Product. This research was conducted on all regencies or cities in Central Java Province with a total of 35 regencies or in the period 2009-2018. The data source used in this study is secondary data taken from the Central Statistics Agency page and the Youth, Sports, and Tourism Office which are then further processed. The data analysis method used is multiple linear regression test using panel data. The results of the study showed that the number of tourists, the number of tourist attractions, and the average length of stay of each tourist had a positive and significant impact on Gross Regional Domestic Product, while hotel room occupancy rates did not have any effect on Gross Regional Domestic Product. In addition to the number of tourists, the number of tourist attractions, hotel room occupancy rates, and the average length of stay of tourists simultaneously or together have a significant effect on Gross Regional Domestic Product. From this research it can be concluded that the tourism sector is able to make a major contribution to economic growth.

1. INTRODUCTION

Development is a continuous and sustainable process in all aspects with the ultimate aim of improving the welfare of society. Economic development in a country can be influenced by the level of economic growth in each region in which it is divided. Each region has different levels of economic growth (Pragustian, 2018). The difference in the level of economic growth is due to the enactment of Law No. 32 of 2004 concerning Financial Balance between the Central Government and Regional Governments, which has consequences for the implementation of regional autonomy in each region by granting authority and freedom so that they can determine their own direction of economic development in their region (Arianti, 2014).

Each region is expected to be able to determine the basic and superior sectors it has so that the region can become a prime mover in regional growth, this is due to the assumption that a change in the basic sector will have a multiplier effect on regional economic sector (Adisasmita, 2005). Stated that development and economic growth are two things that are closely related and cannot be separated (Irawan & Suparmoko, 1997). In the 1998 Outlines of State Policy, one of the development trilogy that must be fulfilled as a basis for development is high economic growth. Apart from the economic sector, there are also other fields that support the development trilogy, including: politics, social and culture. As an important aspect of development, the economy receives a lot of support from several sectors, one of the most influential is the tourism sector (Baiquni & Susilawardani, 2002). The existence of tourist attractions has a positive impact on the surrounding community, including: benefits in terms of material, cultural insight, as well as development of facilities and infrastructure in the surrounding area. The development of the tourism industry covers many broad aspects, both social and economic, in people's lives (Akan et al., 2012). Development in the tourism industry provides opportunities for other sectors to develop, one of which is the service sector which is also affected by the existence of the tourism sector. Travel service bureaus, marketing agencies and other supporting service models can synergize with each other in developing the tourism climate (Adinugroho, 2017).

Table 1. Number of Tourists in Central Java Province 2009-2018

Year	Other Country	Indonesia	Total
2009	303.519	21.515.598	21.819.117
2010	317.805	22.275.146	22.592.951
2011	392.895	21.838.351	22.231.246
2012	372.463	25.240.021	25.612.484
2013	388.143	29.430.609	29.818.752
2014	419.584	29.852.095	30.271.679
2015	375.166	31.432.080	31.807.246
2016	578.924	36.899.776	37.478.700
2017	781.107	40.118.470	40.899.577
2018	677.168	48.943.607	49.620.775

Source: DISPORAPAR Central Java Province, 2018

Based on the data in the table above, it can be seen that the number of tourist visits in all tourist destinations in Central Java Province shows a consistent increase even though in certain years there is a slight decrease. In 2009 to 2010, the number of tourists increased from 21,819,117 people to 22,592,951 people, however in 2011 the number of visits decreased to 22,231,246 people. The number of return visits increased until 2013 with total visits of 29,818,752 tourists. In 2014, there was a decrease in the number of foreign tourist visits from 419,584 to 375,166, but this shortfall was covered by an increase in domestic tourist visits from 29,430,609 people to 29,852,095 people. The number of visits continued to increase until 2018 with total visits of 49,620,775 people, divided into 48,943,607 domestic tourists and 677,168 foreign tourists. In 2018 tourism income contributed Rp. 301,622,707,421.00 to the GRDP of Central Java Province (Dinas Kepemudaan, Olahraga, 2018).

Originating from this phenomenon, Central Java succeeded in receiving an award at the Indonesia Attractiveness Award 2019 GOLD in the Tourism sector for the Large Province category organized by Frontier Group and Tempo Media Group. The largest contributor to the number of tourists came from the tourist attraction of Borobudur Temple which is located in Magelang Regency, Central Java Province, which amounted to 3,896,642 tourists. The good growth and development of the tourism sector in Central Java Province has had a strong impact on Central Java's GRDP with an increase every year.

The abundant natural resources and cultural diversity found in Central Java Province make this area have many potential points that can be processed and developed as a tourism sector. The processing and development of potential that has been and is currently being carried out has had a good impact as indicated by an increase in the number of tourist visits, both domestic and foreign. With an area covering 32,801 km2, Central Java Province has 692 Tourist Attractions (DTW) which are classified into 5 types of DTW, namely 240 natural DTW, 132 cultural DTW, 199 artificial DTW, 43 special interest DTW, and 78 other DTW. The good growth and development of the tourism sector in Central Java Province has had a big impact on Central Java's GRDP with an increase every year (Dinas Kepemudaan, Olahraga, 2018).

Changes in the socio-economic structure of a country have been followed by changes in the pattern of tourism activities in that country. Tourism activities have changed their status from a person's tertiary needs to a primary need, becoming one of everyone's rights that must be protected and respected. All parties have an obligation to ensure that tourism activities must be upheld so that they can help achieve the targets of increasing human dignity, equal distribution of prosperity, and cooperation between nations to achieve world peace (Ross, 1998). Research in the Jordan region found that the tourism sector was able to have a positive and significant influence on economic growth. The tourism sector even immediately contributes to increasing employment opportunities and export value (Fuad, 2014).

Provides support for the research carried out by Kreishan by saying that in research carried out in 5 ASEAN countries (Indonesia, Malaysia, the Philippines, Singapore and Thailand) over a period from 1995 to 2012, the results found that there were Tourism activities have been proven to be able to provide a positive and significant effect on increasing growth in the economic sector (Abdul, 2016).

A study conducted in Sabang City found that the tourism sector was able to make a major contribution to economic growth. This is seen from the variables used, namely the number of foreign tourist visits, the number of domestic tourists, the number of tourist locations, the number of hotel rooms have a positive and significant influence on regional economic growth in Sabang City (Amnar et al., 2017). This tourism phenomenon has encouraged researchers to carry out research on how much influence the number of tourists, number of tourist attractions, hotel room occupancy rates, and average length of stay have on economic growth as seen using GRDP parameters by selecting research locations in Central Java Province over a period of time. from 2009-2018 (Kazmina et al., 2019).

2. RESEARCH METHODS

The scope of this research is all districts and cities located in Central Java Province with a total of 35 districts/cities using a 10 year time period, namely from 2009 to 2018. The observation time required is 4 months starting from December 2019 to March 2020 and data is processed using eviews 9. The model used in this study is as follows (Pragustian, 2018; Gujarati, 2013; Purhantara, 2010):

$$GRDP_{it} = a + \beta_1 JW_{it} + \beta_2 JD_{it} + \beta_3 TH_{it} + \beta_4 RL_{it} + e_{it}$$

Where as:

GRDP = Gross Regional Domestic Product in IDR
i = Regency / City in Central Java Province t = time β1-b3 = coefficient
JW = number of tourists
JD = number of tourist attractions
TH = hotel room occupancy rate
RL = average length of stay
a = constant
e = Error term

The hypothesis in this research is as follows:

H1 = It is suspected that the number of tourists has a positive influence on GRDP in Central Java Province for the 2009-2018 period.

H2 = It is suspected that the number of tourist attractions has a positive influence on GRDP in Central Java Province for the 2009-2018 period.

H3 = It is suspected that hotel room occupancy rates have a positive influence on GRDP in Central Java Province for the 2009-2018 period.

H4 = It is suspected that the average length of stay has a positive influence on GRDP in Central Java Province for the 2009-2018 period.

3. RESULTS AND DISCUSSION

3.1. RESULTS

Descriptive Analysis

Spatial analysis of the distribution of critical land in North Kalimantan Province was carri The province whose capital is the city of Semarang has an astronomical location with its coordinates on the equator, namely 5^°40' to 8^°30' along South Latitude and 108^°30' to 111^°30' along along East Longitude (with Karimunjawa Island included). The area of Central Java Province is 3.25 million hectares or 32,800.69 square km, accounting for 25.04 percent of the entire area of Java Island or 1.70 percent of the total area in Indonesia (Badan Pusat Statistik Provinsi Jawa Tengah, 2018).

Table 2. Descriptive Analysis

No	Year	ADHK GDP (in thousands)	JW (in thousands)	JD	TH	RL
1	2009	21,804	21,804	257	29.99	1.24
2	2010	148,818	22,576	266	32.06	1.23
3	2011	151,167	22,202	284	31.76	1.30
4	2012	164,282	25,585	385	32.92	1.30
5	2013	423,811	29,276	417	33.85	1.29
6	2014	182,990	30,252	467	34.08	1.34
7	2015	762,849	35,203	477	33.25	1.40
8	2016	805,090	37,465	551	35.09	1.39
9	2017	849,060	40,384	615	34.52	1.49
10	2018	893,415	49,600	692	35.16	1.36

Source: Central Java Province BPS Publication Data, 2018

As a result of the secondary data recap carried out by researchers in the table above, it can be observed that the development of ADHK GRDP in Central Java Province in 2009 - 2018 shows that ADHK GRDP tends to increase during this 10 year period. The decline only occurred in 2014 from 423,811 to 182,990, then increased again until 2018. The lowest ADHK GRDP gain was in 2009 with a total of 21,804, while the highest gain was in 2018 with a value of 893,415.

Based on the table above, it shows that the accumulative figures throughout Central Java, the combined number of domestic and foreign tourists who make tourist visits to one or several places in the districts or cities in Central Java tend to lead to a continuous and stable increase, the decline only occurred in 2011 namely from 22,576 to 22,202. The highest number of visits was in 2018 with a total of 49,600 tourists. 2018 saw the largest increase in visits compared to other years, namely 9,216 tourists. 2009 was the year with the fewest number of tourists, namely 21,804.

In table 2 above, the DTW numbers are shown by the fact that there is no accumulative decrease in Central Java during the period 2009 to 2018. The increase in the number of DTW continues to occur steadily throughout the year from 2009 to 2018. The highest increase occurred in 2012 amounting to 101 units from 284 in 2011 to 385 in 2012. The highest number of DTW was obtained in 2018 with 692, while the lowest number was in 2009.

Based on table 2 above, it can be seen that the accumulative hotel room occupancy rate in Central Java experienced fluctuating developments from 2009 to 2018. There were two declines in hotel room occupancy rates, namely in 2015 and 2017. In 2015, the The hotel room occupancy rate from 34.05 fell to 33.25 and in 2017 the decline occurred by 0.57 points from 35.09 to 34.52. 2018 was the highest year where the hotel room occupancy rate reached 35.16 percent. The lowest hotel room occupancy rate occurred in 2009, when it only achieved 29.99 percent.

Best Model Selection

Chow Test is a test to compare between common effect models as H0 and fixed effect models as Ha. The result is show that the Fcount > Ftable, namely 5.13 > 1.46743658, then the conclusion obtained is that Ha is accepted, fixed effect is a more suitable model to be used in this study. The F-statistic is 155.792670 and the probability level is 0.0000 < 0.05. Based on this, it can be determined that the test results using this test state that the fixed effect model is the most appropriate for this research (Suastika & Yasa, 2017).

Hausman Test is a test to compare between random effect models as H0 and fixed effect models as Ha. The result is show that the probability value of the chi-square in the Hausman test has a value of 0.0136, from this it can be concluded that fixed effect proven to be more efficient for researchers to use in estimating panel data parameters because the chi-square value < α, namely 0.0136 < 0.05. So from this conclusion it can be said that H0 is rejected and Ha is accepted.

Regression Analysis

Table 3. Regression Analysis

Variable	Coefficient	Significance Level
JW	3.481310	0.0006
JD	9.304310	0.0000
TH	-0.523026	0.6013
RL	4.559049	0.0000

Source: Processed data, 2018

Based on the t-statistical test results table or partial test above, it is known that the variable JW (Number of Tourists) has a coefficient value of 3.481310 with a probability value of 0.0006, this proves that the ratio of the coefficient values is smaller than the significance level used which is 5% (0.0006 < 0.05), so it can be said that the variable number of tourists has a significant and positive influence on economic growth (GRDP). The variable JD (Number of Tourist Attractions) has a coefficient value of 9.304310 with a probability value of 0.0000, this results in the statement that the number of tourist attractions has a positive and significant influence on economic growth (GRDP) because the probability value is less than 5% (0.0000 < 0.05). The coefficient value of the variable TH (Hotel Room Occupancy Rate) is -0.523026 followed by a probability value of 0.6013, where this value is greater when compared to the significance level (0.6013 > 0.05), so it can be said that the hotel room occupancy rate variable has no influence on economic growth (GRDP). In the results shown by the variable RL (Average Length of Stay) the coefficient value obtained is 4.559049 with a probability value of 0.0000, where this value is smaller than the 5% significance level (0.0000 < 0.05),

so it can be stated that this variable has positive and significant influence on economic growth (GRDP). Based on the description of each variable above, the results of the t-statistical test in this study concluded that H1, H2, and H4 were accepted, while H3 was rejected.

The results of processing the f-statistical test or simultaneous test in this research produce output that the independent variables used in this research, namely Number of Tourists (JW), Number of Tourist Attractions (JD), Hotel Room Occupancy Rate (TH), Average Length of Stay (RL) have a significant influence simultaneously (together) on the dependent variable, namely GRDP. This statement is indicated by the fulfillment of the condition Fcount > Ftable using a significance level of 5% or 0.05, namely 13.03295 > 2.631. If we look at the comparison of the probability value with the significance level used, it also shows that (P Value) < 0.05 or 0.000000 < 0.05, so that H0 is rejected and Ha can be accepted.

Another result obtained is the coefficient of determination value of 0.614265, from this large number it is clear that the independent variables are number of tourists, number of tourist attractions, hotel room occupancy rate, and average length of stay have an interpretation level of 61.42% of the dependent variable, namely GRDP. Meanwhile, the remainder, namely 100%-61.42% = 38.58%, is the level of interpretation described by other variables outside this research or it can be said that the error rate in this research is 38.58%.

3.1. DISCUSSION

The results shown in this research show that the probability value of the JW variable is 0.0006, while the significance level used is 5% or 0.05. Based on this, it can be interpreted that for every 1 unit increase in the number of tourists, economic growth will increase if the independent variable remains constant. If we observe the value of t calculated by JW compared to the t table then it is 3.481310 > 1.967 or tcount > ttable, so that the variable X1 is partially has a significant and positive influence on the dependent variable or it can be seen that H1 in the number of tourists variable can be accepted, while H0 is rejected. This is in line with the results of research carried out, where the number of tourists has a significant and positive influence on economic growth. This is in contrast to the results of research carried out by Handono in 2018, where the number of tourists had no influence on economic growth (Sukirno & Sadono, 2006).

The results shown in this research show that the probability value of the JD variable is 0.0000, while the significance level used is 5% or 0.05. Based on this, it can be interpreted that for every 1 unit increase in the number of tourist attractions, economic growth will increase if the independent variable remains constant. If you look at the value of t calculated partially has a significant and positive influence on the dependent variable or it can be stated that H2 in the variable number of tourist attractions can be accepted, while H0 is rejected. This is in line with research carried out by Amnar et al. (2017). The results showed that the variable number of tourist attractions or tourist locations had a significant and positive influence on economic growth. This is also in line with research carried out by Windriyaningrum (2013), where the variable number of tourist attractions had a significant influence on economic growth (Tabash, 2017).

The results shown in this research show that the probability value produced by the TH variable is 0.6013, while the significance level used is 5% or 0.05. Based on this, it can be interpreted that for every 1 unit increase in the hotel room occupancy rate, economic growth will decrease if the independent variable remains constant. If we look at the value of t calculated X3 compared to the t table then -1.967 < -0.523026 < 1.967 or -ttable < tcount < ttable, so that the TH variable has no influence on the dependent variable partially or H0 in the hotel room occupancy rate variable can be accepted, while H3 is rejected. This is not in line with the results of research from Subardini in 2017, where the variable hotel room occupancy rate was proven to have a positive and significant influence on economic growth in a region. Research that supports these results is research conducted by Sugiharto Endar (1997) where the hotel room occupancy rate variable partially had no influence on economic growth.

The results shown in this research show that the probability value of the RL variable is 0.0000, while the significance level chosen is 5% or 0.05. Based on this, it can be interpreted that for every 1 unit increase in the average length of stay of tourists, economic growth will increase if the independent variable remains constant. If we look at the value of t calculated X4 compared to the t table, it is 4.559049 > 1.967 or t calculated > t table, so that variable X4 partially has a significant and positive influence on the dependent variable or it can be stated that H4 in the variable average length of stay of tourists can be accepted, while H0 is rejected. This is not in line with the results of research carried out by Rediteani & Setiawina (2018), where it was said that the variable average length of stay of tourists had no influence in increasing economic growth. The suitability of the research results is found in research conducted by Subardini (2017), where the variable length of stay of tourists has a significant and positive influence on economic growth.

4. CONCLUSION

The number of tourists partially has a significant and positive influence on economic growth as seen by GRDP parameters in Central Java Province. The number of tourist attractions partially has a significant and positive influence on economic growth as seen by GRDP parameters in Central Java Province. The partial occupancy rate of hotel rooms has no influence on economic growth as seen from the GRDP parameters in Central Java Province. The average length of stay of tourists partially has a significant and positive influence on economic growth as seen by GRDP parameters in Central Java Province. From this research it can be concluded that tourism activities have changed their status from a person's tertiary need to a primary need. All parties have an obligation to ensure that tourism activities must be upheld so that they can help achieve the targets of equal distribution of prosperity.

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