The Influence of the Tourism Sector and GRDP on Poverty

Hana Yunita Anggraini[1]✉, Amin Pujiati[2]

Development Economic Study Program, Economics Faculty, Universitas Negeri Semarang

Abstract

The purpose of this study was to analyze the influence of the tourism sector and GRDP on poverty in Central Java. This type of research is quantitative research, the data used in this study is secondary data obtained by the method of collecting library data from relevant agencies such as the Central Java Provincial Statistics Agency and the Youth, Sports, and Tourism Office of Central Java Province. The analytical tool used is panel data regression which combines time-series data (2015-2019) and cross-section (35 districts/cities in Central Java) with the best method, namely the Fixed Effect Model (FEM). The results of the analysis show that the variable number of tourists has a probability of 0.4497, the variable number of hotels has a probability of 0.0000 and the GRDP variable has a probability of 0.0000 against the percentage of the number of poor people. Based on the results of the study, it was concluded that the variable number of tourists had no effect on the variable percentage of the poor population and the variable number of hotels and GRDP had a negative effect on the percentage of the number of poor people.

Keywords: *Number of Tourist, Number of Hotels, GRDP, Fixed Effect Model*

Abstrak

Tujuan dari penelitian ini adalah untuk menganalisis pengaruh sektor pariwisata dan PDRB terhadap kemiskinan di Jawa Tengah. Jenis penelitian ini adalah penelitian kuantitatif, data yang digunakan dalam penelitian ini adalah data sekunder yang diperoleh dengan metode pengumpulan data kepustakaan dari instansi terkait seperti Badan Pusat Statistik Provinsi Jawa Tengah dan Dinas Pemuda, Olahraga, dan Pariwisata Provinsi Jawa Tengah. Alat analisis yang digunakan adalah regresi data panel yang menggabungkan data time-series (2015-2019) dan cross section (35 kabupaten/kota di Jawa Tengah) dengan metode terbaik yaitu Fixed Effect Model (FEM). Hasil analisis menunjukkan bahwa variabel jumlah wisatawan memiliki probabilitas 0,4497, variabel jumlah hotel memiliki probabilitas 0,0000 dan variabel PDRB memiliki probabilitas 0,0000 terhadap persentase jumlah penduduk miskin. Berdasarkan hasil penelitian disimpulkan bahwa variabel jumlah wisatawan tidak berpengaruh terhadap variabel persentase penduduk miskin dan variabel jumlah hotel dan PDRB berpengaruh negatif terhadap persentase jumlah penduduk miskin.

Kata Kunci: Jumlah Wisatawan, Jumlah Hotel, PDRB, Fixed Effect Model

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✉ Correspondence Address:
  Address: Gedung L2 Lantai 2 FE Unnes
  Kampus Sekaran, Gunungpati, Semarang, 50229
  E-mail: hanayunita64@gmail.com

INTRODUCTION

Every country wants people to have a prosperous life, including Indonesia as stated in the 1945 Constitution to promote the general welfare. Various efforts are made to achieve this development goal, one of which is by improving the existing sectors and evaluating the programs that have been carried out, by increasing the development of the sectors owned is very much needed. The problem that is generally in the spotlight is the problem of poverty, this problem is also felt by various countries from developed countries to developing countries and this poverty is a problem that is difficult to overcome.

Poverty occurs when a person or group of people cannot meet their primary needs or economic needs within the minimum expenditure limit according to BPS. Since the administration of the 6th president, various plans to reduce poverty have always been a development priority (Manning & Miranti, 2015). Tourism is one of the economic sectors used by many countries to increase state income, tourism is a promising sector. The tourism industry is now seen as a profitable sector for Indonesia because Indonesia has tourism potential that can be further developed optimally (Cholik 2017).

Tourism is a sector that can influence other sectors or provide a multiplayer effect. Tourism can make a substantial contribution to the economy such as providing jobs, increasing income, and being a driver of economic growth that can increase the economic sector so that it can synergize with the tourism industry (Kreishan, 2014). Tourism has components that are also included in GRDP and have an impact on reducing poverty. In tourism, there are the number of tourists, the number of hotels, the number of restaurants and user fees that affect the income of the tourism sector.

The number of tourists, the number of restaurants, the retribution of a tourist place increases every year, this also affects tourism income which also increases, with the increasing number of tourists also affecting the GDP. The tourism sector can provide opportunities with the entry of investment that is used to trigger economic growth, by opening employment opportunities, and increasing the government's foreign exchange earnings (World Bank, 2013).

Central Java is one of the provinces in Indonesia, which can reduce the highest poverty rate. According to data from the Central Statistics Agency (BPS), the poor in Central Java in September 2019 reached 3.68 million people, when compared to March 2019 it reached 3.74 million people, the number of poor people in Central Java in September decreased by 63,830 people.

In percentage terms, the number of poor people in Central Java in September 2019 decreased by 0.22 percent to 10.58 percent. This figure makes Central Java the province with the highest decline in the number of poor people among other provinces in Indonesia, but in previous years the percentage of poor people in Central Java was the highest among West Java and East Java.

Table 1. Poverty Percentage of Java Island in 2015-2019

Province	Years				
	2015	2016	2017	2018	2019
West Java	9.53	8.95	8.71	7.45	6.91
Central Java	13.58	13.27	13.01	11.32	10.80
East Java	12.34	12.05	11.77	10.98	10.37

Source: BPS Indonesia, 2020

Table 1 the percentage of the urban poor and the highest poverty in the table for the last 5

years from 2015-2019 in the province of Central Java. The table tends to decrease but Central Java remains the province with the highest percentage of poverty between West Java and East Java, this does not work with the number of tourists entering Central Java.

The amount of tourist spending can have a direct impact on the trade, hotel, and restaurant sectors, Archer 2000 in research (Darmawan 2016). With the number of tourists who enter the area then the economy runs in that area. Tourism is like an economic driver, if the tourism sector is growing, it will have an impact on increasing regional income.
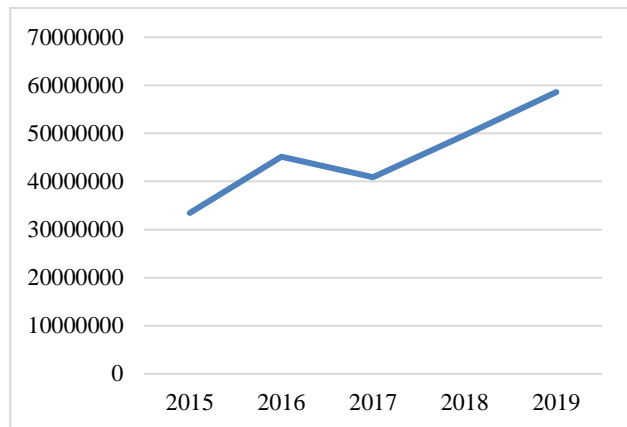

Figure 1. Number of Tourist from 2015-2019 in Central Java
Source: Central Java BPS, 2020

Central Java has an increasing number of tourists every year, the increase in the number of tourists is dominated by foreign tourists from Malaysia and locals. The increase in the number of visits is nothing but tourism potential. Many regency/city tourism potentials have not been developed, so the government can develop the tourism sector by adjusting the type of tourism that is superior or potential so that it can be developed (Mustofa, 2018).

Central Java has various types of tourism that are quite complete, ranging from educational tours to religious tourism. The tourism potential is good and there are still some tourist attractions that can still be developed, this is an opportunity to make tourism a major contribution to GRDP.
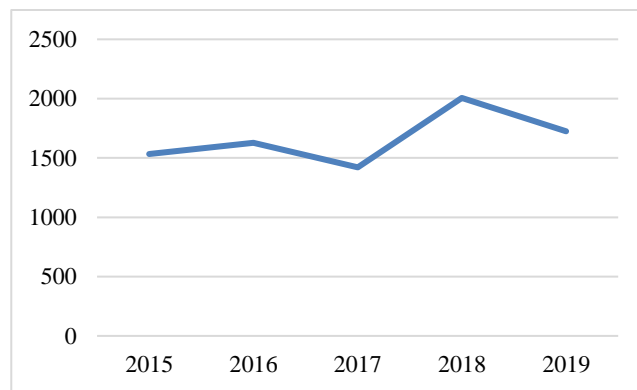

Figure 2. Number of Hotels from 2015-2019
Source: Central Java BPS, 2020

The number of hotels in Central Java in 2016 increased along with the number of tourists who also increased, in 2017 the number of hotels decreased, due to the decline in the number of tourists in 2017. In 2018 again experienced a fairly high increase, as shown in the tourist table as well experienced a fairly high increase in 2018. The number of tourists and the number of hotels affect the income of the tourism sector and also affect the income of the surrounding community and people who work in the hotel sector, ticket sales, parking, and around MSMEs.

In Figure 3, the price of GRDP is constant, increasing every year. This is because the Central Java industry has increased, and the economic structure of Central Java in terms of production is dominated by the manufacturing industry. This causes economic growth to also grow. Although the poverty rate in Central Java continues to

decline but is still quite high when compared to West Java and East Java, an increase in the tourism sector will lead to an increase in GRDP per Capita and this can help reduce the number of poor people.

The direct influence between economic and non-economic benefits for the poor with the application of PPT, in the application of pro-poor tourism development (PPT) in the tourism sector, will provide benefits to the poor, both economic and non-economic, for example social, environmental and cultural Spenceley and Seif 2003, quoted (Darmawan, 2016). With the increasing contribution of the tourism sector, it will have an impact on increasing GDP.
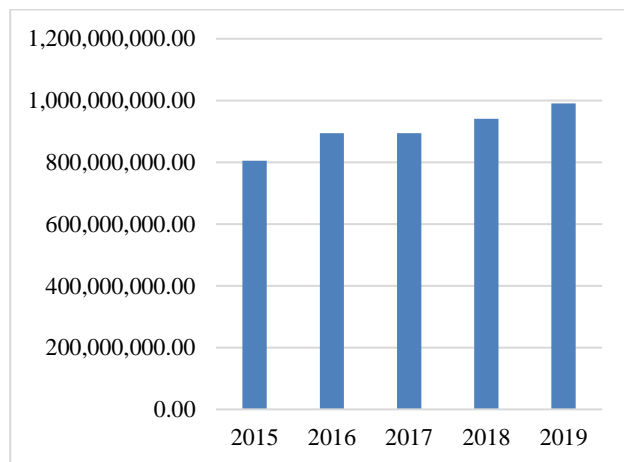

Figure 3. GRDP at Constant Prices in 2015-2019
Source: Central Java BPS, 2020

Based on the background described above, it is necessary to study the influence of the tourism sector and GRDP on poverty, because the tourism sector in Central Java has excellent potential so that it can be used as an opportunity to reduce poverty by developing the potential of the tourism sector and GRDP. The purpose of this study is to identify the influence of the tourism sector and GRDP on poverty in Central Java in 2015-2019.

RESEARCH METHODS

The type of research used in this research is quantitative research, quantitative research is data that contains numbers. The type of data in this study is secondary data for 2015-2019, secondary data is data obtained from other parties, not collected by the researchers themselves, the source of data is obtained from the Central Java Provincial Statistics Agency and the Youth, Sports and Tourism Office (DISPORAPAR).

The method of collecting this research is to use the literature study method. A literature study is a method of collecting data with notes, literature, documentation, and others. The analytical method used is a panel data regression analysis model, the data used is a combination of cross-sectional and time series data. In the panel data regression analysis model, there are 3 methods used, namely (Gujarati, 1995): Pooled Least Square (PLS) or Common Method, Fixed Effect (FEM), and Random Effect (REM).

The classical assumption test that is carried out is, multicollinearity detection multicollinearity problems can occur if the independent variables show a correlation between independent variables, the nature of multicollinearity is to reduce the ability to explain and predict, and heteroscedasticity detection aims to test whether the disturbance terms have the same variance or not in the model. regression equation.

How to detect whether the variable is influenced by heteroscedasticity with the Glejser test. There are 3 statistical tests, namely the Coefficient of Determination (R^2) test, which is a coefficient that measures how much influence the dependent variable has on the independent variable, Simultaneous Regression Coefficient (F test) testing is carried out to test jointly or all

independent variables on the dependent variable, and testing Parameter Significance Individually (t-test) was conducted to see whether the regression coefficient was significant or not if individually. If the regression coefficient is not significant then the variable is said to be insignificant.

RESULTS AND DISCUSSION

This study uses a panel data regression model, so we need the best method to consider panel data regression. To get the best model, the Chow test and Hausman test were carried out with the results of the determination of the regression estimation model as follows:

Chow test Chi-Square cross-section probability is 0.0000 less than (α) 0.05 (0.0000 <0.05) which means Ho is rejected, and the model chosen is a fixed effect. Hausman test random cross-section probability of 0.0000 is smaller than (α) 0.05 (0.0000 <0.05) which eans Ho is rejected so that the selected model is a fixed effect.

Table 2. Fixed Effect Model Estimation Results

Variable	Coefficient	Std. Error	t-Stat	Prob
C	209.0741	11.57024	18.07*	0.000
Log (Tourist)	-0.0958*	0.126375	-0.8*	0.45*
Log (Hotels)	-0.889*	0.201098	-4.43*	0.000
Log (GRDP)	-11.469*	0.740869	-15.5*	0.000
R-squared	0.980148	F-statistic		182.9*
Adjusted R-squared	0.974787	Prob(F-statistic)		0.000

Source: E-Views output results

Based on the results of the Chow test and Hausman test, the appropriate model used in this study is the Fixed-Effect Model which is shown in table 2. Based on the results of panel data regression with the best-fixed effect model shown in table 2, the panel data regression equation

model of the influence of the tourism sector on poverty in Central Java is as follows:

$$Y = 209.741 - 0.0958 - 0.889 - 11.469$$

Regression analysis of panel data with the Fixed Effect Model obtained differences in constants and intercepts for each Regency/City in Central Java Province which shows a difference in the percentage value of poverty between districts/cities if the value of the independent variable is equal to 0. In Central Java, the highest is Cilacap Regency with a value of 0. intercept 228.2125 percent if all variables are 0. The district/city with the lowest intercept value of 190.9074 is Magelang City if all variables are 0.

Statistical testing was carried out to see how much influence between the variables used in this study, in statistical testing 3 tests were carried out, namely: the determinant coefficient (R^2), and the Adjusted R-squared value of 0.980148. This value indicates that the independent variable can affect the dependent variable by 0,981882 or 98 percent, while the remaining 2 percent is explained by other variables outside the model.

Simultaneous test (F test), the prob value (F-statistics) of 0.000000 is smaller than (α) of 5 percent or 0.05, so it can be concluded that the independent variables (number of tourists, number of hotels, GRDP) can have a significant effect to the dependent variable (percentage). number of poor people) together.

Partial Test (t-test) the probability of the number of tourists being 0.4497 means the probability is greater than the significance level (α) 0.05 (0.4497 > 0.05) thus Ho is accepted and Ha is rejected, so it can be concluded that at the 5 percent significance level, the number of tourists has no effect significant to the percentage

of the number of poor people in Central Java in 2015-2019. With a coefficient value of the number of tourists of -0.095803 it means that if there is an increase in the number of tourists by 1 million people, it will not affect the percentage of the number of poor people by 0.095803 percent assuming cateris paribus.

This result is in line with the results of previous researchers, that tourist visits do not have a significant effect on poverty reduction. This is because poverty in rural India is more acute than in urban areas and tourism growth usually occurs in urban areas. Thus, tourism benefits accrue to people living in urban areas and not to poorer rural households (Roy, 2010).

The number of tourists who enter a tourist destination should have an indirect effect on the percentage of the number of poor people, but in this study, the number of tourists does not affect the variable percentage of the number of poor people, this happens when tourist visitors are reluctant to spend money when going to tourist destinations such as bringing food, and drinks only, do not spend the night or stay in other areas so that money that should be circulating in tourist areas circulates in other areas so that the number of tourists cannot reduce the percentage of the number of poor people in Central Java. Tourism spending does not have a significant effect on poverty reduction in all developing countries (Kim et al, 2016).

The probability of the number of hotels variable is 0.0000 which means the probability is smaller than the significance level (α) 0.05 (0.0000 < 0.05) thus Ho is rejected and Ha is accepted, so it can be concluded that the significance level is 5 percent. The number of hotels has a significant effect on the percentage of the number of poor people in Central Java in

2015-2019 with a coefficient value of -0.889361 which means that if there is an increase in the number of hotels by 1 unit, it will reduce the percentage of the number of poor people by 0.889361 percent assuming cateris paribus.

The findings in this study are the same as those that have been studied. The results of this study are in line with research (Gunandi, 2019) that the accommodation variable has a significant negative effect on the number of poor people because of the role of visiting tourists. Accommodation can be a temporary place for tourists to stay, the longer the tourists stay, the more the velocity of money in the sector will increase, one of which is consumption. The development of tourism has a negative but significant impact on poverty, meaning that the better the development of the tourism sector will have an impact on reducing poverty (Patera 2016).

The low productivity causes low income received by the community, the higher the productivity, the higher the income received by the community. Production carried out in the tourism sector is by providing services, one of which is a hotel, by improving hotel services, many customers feel comfortable with the quality of service so that many tourists will use the hotel, and there will be many hotels made to compete for customers and increasingly many existing hotels will be able to absorb labor around tourist areas with a large number of workers absorbed, the income of the community will increase so that the number of hotels is able to reduce the percentage of the number of poor people in Central Java.

The probability of the GRDP variable is 0.0000 which means the probability is smaller than the significance level (α) 0.05 (0.0000 < 0.05) thus Ho is rejected and Ha is accepted, so it can

be concluded that at the 5 percent significance level, GRDP has a significant effect on the percentage of the number of poor people in Java. In the middle of 2015-2019 with a GRDP coefficient value of -11,46859 means that if there is an increase in GRDP of 1 million IDR, it will reduce the percentage of the number of poor people by 11,46859 percent assuming cateris paribus.

The findings in this study are the same as those previously investigated by the results in this study in line with research (Giovanni, 2018) GRDP has a negative but significant effect on poverty in the provinces of West Java, Central Java, East Java, and DIY. The GRDP variable has a significant negative effect on poverty in Central Java Province during the period 2008 to 2013 (Wibisono & Arianti, 2015).

GRDP is found in the economic sector in an area, in GRDP there is a tourism sector in it such as accommodation, eating and drinking, and taxes, with the higher GRDP that is obtained, the more sectors grow so that economic growth increases and poverty decreases. In theory, circle if productivity is low it will have an impact on low income too, if this happens then savings and investment will also decrease in human investment or capital.

Decreased GRDP income will have an impact on household consumption, if household income decreases, they will replace their basic needs with cheaper goods or reduce the number of goods purchased (primary needs). With the increase in productivity in the economic sector, income will also increase so that savings and investment owned will also increase.

CONCLUSION

Based on the results of research that has been carried out there are several conclusions, namely: The variable number of tourists has no effect on the variable percentage of the number of poor people. The variable number of hotels influences the percentage variable of the number of poor people, and the variable of gross regional domestic product has an effect on the variable percentage of the number of poor people.

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