



Analyzing the impact of tourism on Gross Regional Domestic Product (GRDP) in Central Java Province

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Abstract

Indonesia is rich in natural resources, culture, and diversity in its social activities. This makes tourism a sector with potential as an economic booster. Central Java Province, in particular, is one of the provinces with a diverse and numerous array of tourist destinations. This diversity attracts both local and international tourists. Therefore, this research was conducted to determine the extent of the impact of the tourism sector on the Gross Regional Domestic Product (GRDP). The analysis method used is multiple linear regression with a 25-year time series data covering the number of tourist attractions, number of tourists, number of hotel accommodations, number of restaurants and eateries, and tourism sector investments as independent variables, and GRDP as the dependent variable. The results show that the number of tourist attractions and tourists has a positive and significant impact, while the number of hotel accommodations, restaurants, and eateries has a positive but not significant impact. Additionally, investment in the tourism sector has a negative and significant impact.

Keywords: GDRP, Tourism, Hotel, Restaurant, Investment

Introduction

Indonesia is a paradise on earth, a metaphor illustrating that Indonesia is a country rich in natural resources and diverse cultures. This makes the tourism sector a promising and attractive industry for tourists. The abundant potential of tourism can be leveraged to transform Indonesia into a prosperous nation by using tourism as an economic accelerator to boost foreign exchange earnings and local revenue. The wealth of natural resources can foster a thriving and competitive tourism sector. Tourism has already become a significant source of foreign exchange, making it a vital sector in Indonesia's economy. International tourist arrivals have contributed significantly to tourism revenue and its share in the Gross Domestic Product (GDP). The tourism sector has played a substantial role in the national economy and is increasingly regarded as a priority sector due to its considerable economic impact

Central Java Province also boasts a diverse range of ethnicities and cultures, offering not only natural tourism attractions but also cultural experiences, such as traditional dance performances, traditional clothing, ceremonies, and more. The diversity of culinary offerings and agricultural products also adds to the cultural richness. These tourism experiences are showcased annually through various events highlighting the unique characteristics of each region. The province's diverse geographical features and cultural heritage support the government's efforts to actively promote cultural festivals. Central Java is also home to renowned destinations such as Borobudur Temple, the Old Town of Semarang, Dieng Plateau, Baturaden, Karimun Jawa, and many others.

The provision of accommodations, including hotels, restaurants, and eateries, is a response to the growing number of both domestic and international tourists and their needs for lodging and food. Adequate facilities also play a key role in the development of the tourism sector. By ensuring good access and sufficient infrastructure, the appeal of Central Java as a tourism destination will increase. The economic balance of local communities will be maintained with the influx of tourists who utilize these available accommodations, potentially boosting the economy around key tourist attractions.

Investment in the tourism sector is another effort undertaken by the government, private sector, and the community to enhance the potential and attractiveness of Central Java's tourism. Investment in tourism offers numerous benefits, such as increasing output and income, expanding job opportunities, and strengthening regional self-sufficiency. Additionally, investment drives the development of essential infrastructure, transportation, communication, sanitation, and other public facilities. Properly allocated investment in tourism can yield substantial returns and attract more tourists to Central Java.

According to data from the Central Java Statistics Agency, the number of domestic and international tourists visiting Central Java showed a positive trend, consistently rising from 2011 to 2019. The peak occurred in 2019, with a total of 58,592,562 visitors. However, the COVID-19 pandemic in 2020 led to a significant decline in tourist numbers, dropping to 22,707,375. In 2021, the number of tourists decreased again to 21,334,202. Nevertheless, the negative trend reversed in 2022 as Indonesia began to recover from the pandemic, with Central Java recording 46,610,128 visitors, a remarkable 291% increase nationwide.

The Central Java Statistics Agency also reported a positive trend in Central Java's Gross Regional Domestic Product (GRDP) from 2010 to 2019, peaking at 991.516.543,31 million rupiah in 2019. However, the GRDP declined to 965.227.269,21 million rupiah in 2020 due to the pandemic. The GRDP rebounded in 2021, reaching 997.345.051,89 million rupiah, and continued to grow in 2022, recording 1.050.322.126,93 million rupiah.

Despite the growth in tourist numbers, the contribution of the tourism sector to Central Java's GRDP has declined over the past five years. In 2018, tourism contributed 14.8%, but by 2022, this had decreased to 13.6%. This inverse relationship suggests that, while the number of tourists has generally increased, the tourism sector's contribution to GRDP has not kept pace, indicating the presence of other factors influencing the sector's impact on Central Java's economy.

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Based on these challenges, the variables examined in this study will include the number of tourist attractions, the number of tourists, the number of hotel accommodations, the number of restaurants and eateries, and the level of investment in the tourism sector. These variables represent the tourism sector and will be used to analyze its influence on the Gross Regional Domestic Product in Central Java.

Literature Review

Gross Regional Domestic Product (GRDP)

Gross Regional Domestic Product (GRDP) is one of the key indicators used to assess the economic condition of a region or province over a specific period. A region's ability to manage and utilize its resources can be reflected through its GRDP value. Additionally, the size of regional government spending can also provide insights into the overall economic condition of the area. Government spending or regional expenditure is a form of response by the government to the region's economic situation. The well-being of the population can improve as regional spending on development increases, which in turn stimulates regional economic growth (Mankiw, 2014).

According to Sukirno (2000:14), economic growth is an increase in per capita output over the long term, emphasizing three key aspects: process, per capita output, and the long term. Economic growth is not merely a snapshot of the economy, but rather a continuous process. Regional development and sectoral development must be aligned so that sectoral development in various regions can be implemented according to the potential and priorities of each region.

Gross Regional Domestic Product (GRDP) is the total added value generated by all business and service activities within a region, calculated by summing up the value of final goods and services produced by all economic units. GRDP can also be defined as the total added value generated by all business units or the total value of goods and services produced by all economic units in a given area (BPS, 2019).

GRDP at constant prices is used to measure economic growth year by year and is often referred to as annual economic growth. GRDP at constant prices is the total value of production, expenditure, and income calculated using fixed prices, adjusted by the consumer price index. Meanwhile, GRDP at current prices is the total gross added value from all economic sectors in a region, where the added value refers to the value added to goods and services used as inputs in the production process. This added value represents the return for the participation of production factors in the production process.

Tourism

According to Law No. 10 of 2009, tourism encompasses all tourism activities supported by various facilities and services provided by the community, entrepreneurs, and the government. Tourism is one of the industrial sectors that affects environmental, social, and economic development. It is a new model of industry that contributes to rapid economic growth, marked by increased employment opportunities, income, living standards, and the stimulation

of other productive sectors in tourist destinations (Srisusilawati et al., 2022).

Tourism involves the activities of the government, business actors, and society in organizing, managing, and catering to the needs of tourists.

Tourist Attraction

According to Law No. 10 of 2009 on Tourism, Article 1, paragraph 5, a tourist attraction is a place used or aimed at tourism that offers beauty, uniqueness, and diversity in nature, culture, and human creations. The term "tourist attraction" replaces the former term "tourist object" after the enactment of the Government Regulation (PP) in 2009. A tourist attraction is anything of value that draws interest for visits and sightseeing (Pendit in Syarifuddin, 2021). The development of a tourist attraction requires a well-planned and thoughtful process, ensuring that it aligns with the characteristics of the tourism area. A well-managed tourist attraction can draw more visitors, and its development can serve as a driver of sustainable economic growth, benefiting both tourists and the local community (Ministry of Tourism and Creative Economy, 2022).

Tourist

According to Law No. 10 of 2009, Article 1, a tourist is defined as a person who engages in tourism activities. A tourist is someone who travels from their place of origin to a desired destination for a temporary period, staying for a short time before returning to their place of origin. A person is considered a tourist when traveling for leisure, health reasons, or other purposes. Generally, a tourist is someone who visits and temporarily stays at the destination they are exploring. The number of tourists refers to the total count of both domestic and international tourists visiting a particular place or region. Developing tourism by focusing on enhancing the role of tourism in economic activities is essential for increasing the number of visitors. This approach can create job opportunities and business prospects, aiming to boost community income and local revenue (Wihoho, 2006).

Hotel

According to the Minister of Tourism, Post, and Telecommunications Decree No. KM/37/304/MPPT-86, a hotel is a type of accommodation in the form of a building that provides various services such as lodging, food, and beverages, along with other commercially managed services. According to the Tourism Department, a hotel is a business that utilizes a building or part of it, specifically designated to provide services to guests, including lodging, meals, and other services and facilities in exchange for payment. A hotel is essentially a business that offers a building for rent to guests who wish to stay and enjoy the facilities and services provided (Damayanti et al., 2021).

Restaurants and Eateries

The catering industry is a sector that operates in the field of food and beverage service, catering to both the general public and institutions with specific orders for various needs. Some types of businesses included in this industry are bars, restaurants, coffee shops, cafeterias, eateries, and other similar establishments. This industry is also known as the "Foods-away-from-home industry" because it provides food and beverages to individuals away from

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their usual residence, such as during travel or as typically offered in hotels and restaurants (Yoeti, 1996). An eatery is an industry involved in the management and serving of ready-to-eat food, commonly referred to as the catering industry. An eatery is a venue dedicated to providing food and beverages for consumption. This includes various types of establishments such as bars, tent cafes, cafeterias, small local eateries, catering services, and others.

Tourism Sector Investment

Investment refers to expenditures made by the production sector (private sector) for acquiring goods and services to either replenish stock or expand factories. In economic theory, investment involves spending on capital goods and production equipment intended to replace or add to the existing capital in the economy, which will be used in future production of goods and services (Boediono, 1992). Investment is a commitment of funds or other resources made currently with the aim of gaining benefits in the future (Eduardus Tandelilin, 2010). Tourism sector investment refers to expenditures made by the government, private sector, or individuals to build, develop, and maintain tourism infrastructure such as attractions, hotels, restaurants, transportation, and more. The goal of tourism sector investment is to enhance the appeal, quality, and quantity of tourism in a region or country. Such investment aims to provide economic, social, cultural, and environmental benefits in a sustainable manner.

Research Method

This study employs a quantitative research approach. Quantitative research is designed to analyze populations and samples using research tools to combine and process data to produce results that can be analyzed. Data analysis in this approach is statistical, aimed at illustrating and testing hypotheses formulated (Sugiyono, 2018). The quantitative approach emphasizes the use of numerical data to study variables and the application of statistical procedures for data analysis.

The research is conducted in the Central Java Province, covering the period from 1999 to 2023. The study uses secondary data, which is sourced from secondary parties and is intended for direct use and publication. Secondary data is available from the official websites of the Central Java Statistics Agency (BPS), the Central Java Youth, Sports, and Tourism Office (DISPORAPAR), and the Central Java Investment and One-Stop Integrated Services Office.

Dependent Variable (Y)

According to Sugiyono (2018:54), the dependent variable or bound variable is the one that is influenced by the independent variables. In Indonesian, the dependent variable is known as the "terikat" variable. In this study, the dependent variable is Gross Regional Domestic Product (PDRB). This research uses data on the Gross Regional Domestic Product at Constant 2010 Prices for Central Java Province, measured in million rupiahs. The Gross Regional Domestic Product at Constant Prices represents the total value of production, expenditure, and income calculated based on fixed prices using base-level prices and consumer price indices.

Independent Variables (X)

According to Sugiyono (2018:54), an independent variable is one that defines or influences the dependent variable. In Indonesian, the independent variable is known as the "bebas" variable. The independent variables used in this study are as follows:

1. Number of Tourist Attractions (X1)

This variable represents the number of tourist attractions that attract visitors, including natural attractions, cultural sites, man-made attractions, special interest tourism, and other tourist destinations in Central Java Province, measured in units.

2. Number of Tourists (X2)

This variable combines the number of international and domestic tourists visiting Central Java Province for tourism activities, measured in individuals.

3. Number of Hotel Accommodations (X3)

This variable indicates the number of lodging facilities available for rent to meet tourists' needs, including both star-rated and non-star-rated hotels in Central Java Province, measured in units.

4. Number of Restaurants and Eating Places (X4)

This variable denotes the number of businesses providing food and beverages that can be enjoyed on-site in Central Java Province, measured in units.

5. Tourism Sector Investment (X5)

This variable refers to investments or capital expenditures aimed at developing the tourism sector, such as in infrastructure, transportation, public facilities, and more, in Central Java Province, measured in billion rupiahs.

Population

The population refers to all the objects studied or observed that share common characteristics. It is commonly understood as representing the totality of what is being studied. In quantitative research, the population represents a generalization that consists of objects or subjects with specific characteristics and attributes defined for the study to analyze and draw conclusions from the final results. In this research, the population consists of time series data from the years 1999 to 2023 in Central Java Province.

Sample

According to Sugiyono (2018:55), a sample is a part of the population with specific attributes, and the sample used must be representative. The sampling technique used in this research is purposive sampling. Purposive sampling is a method of selecting data sources based on specific criteria or considerations. Using this technique, data on the tourism sector in Central Java Province for the years 1999-2023 is obtained, including the number of tourist attractions, the number of tourists, the number of hotel accommodations, the number of restaurants and eating places, and tourism sector investment. Therefore, the total sample consists of 25 years of data.

Data Analysis Methods

This study uses data processing tools with the SPSS (Statistical Package for the Social Sciences) version 27 software. The method used is multiple linear regression analysis. Data testing will be performed automatically, and the results will be interpreted. The details of the tests to be conducted using the method include classical assumption tests, which consist of tests for multicollinearity, normality, heteroscedasticity, and autocorrelation, as well as F-test and t-test.

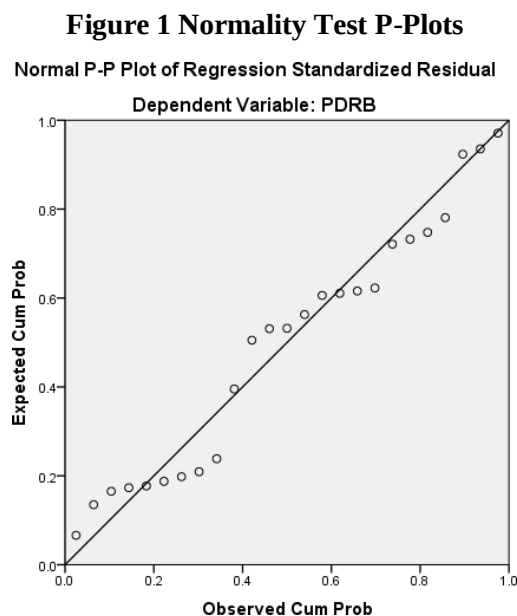
Results and Discussion

Classical Assumption Tests

In multiple linear regression analysis, classical assumption tests are performed to ensure that the estimation of parameters and regression coefficients is unbiased. These tests include several evaluations such as normality test, multicollinearity test, autocorrelation test, and heteroscedasticity test. The results of the classical assumption tests in this study are as follows:

Normality Test

In this study, the normality test is conducted using P-Plot. The measurement rule involves examining the distribution of data (points) on the diagonal axis in the graph. Additionally, the test is performed using the One Sample Kolmogorov-Smirnov Test with the decision rule that if the significance value > 0.05 , then the regression model has normally distributed residuals, and vice versa. The results of the normality test can be seen in the figure below.



Source: Researcher, 2024 (data processed)

Based on Figure 1, the results of the normality test using the P-Plot indicate that the data points are scattered around the diagonal axis and follow the direction of the diagonal axis. This suggests that the regression model meets the assumption of normality testing.

Table 1 Normality Test (One Sample Kolmogorov-Smirnov)
One-Sample Kolmogorov-Smirnov Test
 Unstandardized Residual

N		25
Normal Parameters ^{a,b}	Mean	.0000001
	Std. Deviation	133884217.50000000
Most Extreme Differences	Absolute	.148
	Positive	.148
	Negative	-.106
Test Statistic		.148
Asymp. Sig. (2-tailed)		.164 ^c

- a. Test distribution is Normal.
 b. Calculated from data.
 c. Lilliefors Significance Correction.

Source: Researcher, 2024 (data processed)

Based on Table 1, the results of the normality test using the Kolmogorov-Smirnov Test method in SPSS show an Asymp. Sig. (2-tailed) value of 0.164, which is greater than 0.05. Therefore, it can be concluded that the data are normally distributed.

Multicollinearity Test

This test aims to determine whether there is a correlation among the independent variables in the model. To evaluate the presence of high correlations among independent variables, one can examine the values of Tolerance and Variance Inflation Factor (VIF). The results of the multicollinearity test in this study can be seen in Table 2 below.

Table 2 multicollinearity test

Variable	Tolerance	Rules	VIF	Rules	Information
Number of Tourist Attractions	0,169	$\geq 0,10$	5,903	≤ 10	free from multicollinearity
Number of Tourists	0,366	$\geq 0,10$	2,734	≤ 10	free from multicollinearity
Number of Hotel Accommodations	0,379	$\geq 0,10$	2,640	≤ 10	free from multicollinearity
Number of Restaurants and Eateries	0,463	$\geq 0,10$	2,161	≤ 10	free from multicollinearity
Investment in the Tourism Sector	0,227	$\geq 0,10$	4,407	≤ 10	free from multicollinearity

Source: Researcher, 2024 (data processed)

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Based on the results of the tests conducted using SPSS and displayed in Table 2 above, it is found that all variables in this study have Tolerance values >0.1 and VIF values <10 . Therefore, it can be concluded that there is no multicollinearity in this regression model.

Heteroscedasticity Test

In linear regression, it must be ensured that there is no correlation between the residual values and the independent variables. To check this, a Park test can be conducted to measure the relationship between the residual values and all independent variables.

Table 3 Heteroscedasticity Test

Variable	Sig. Value	Rules	Information
Number of Tourist Attractions	0,869	$\geq 0,05$	Free From Heteroscedasticity
Number of Tourists	0,537	$\geq 0,05$	Free From Heteroscedasticity
Number of Hotel Accommodations	0,348	$\geq 0,05$	Free From Heteroscedasticity
Number of Restaurants and Eateries	0,422	$\geq 0,05$	Free From Heteroscedasticity
Investment in the Tourism Sector	0,078	$\geq 0,05$	Free From Heteroscedasticity

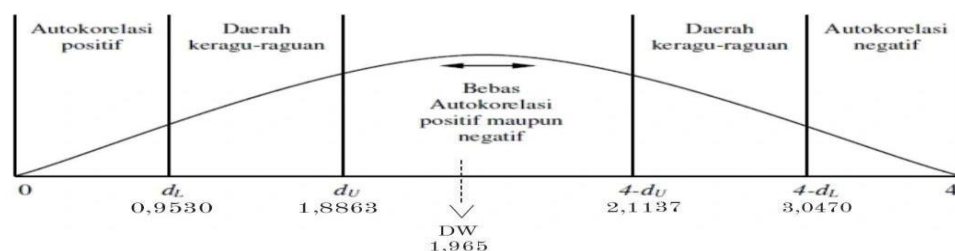
Source: Researcher, 2024 (data processed)

Based on Table 4.7 above, the significance (sig.) values for the PDRB variable in Central Java are all greater than 0.05. With these test results, it can be concluded that this regression equation is free from heteroscedasticity issues.

Autocorrelation Test

Based on the previous classical assumption tests, it can be concluded that this research model does not violate classical assumptions. The autocorrelation test in this study uses the Durbin-Watson (DW) test method. The analysis results show a DW test value of 1.965. With 5 independent variables (k) and 25 data points (n), the DW table values are $d_L = 0.9530$ and $d_U = 1.8863$. To determine whether there is autocorrelation in the research model, the DW curve can be seen in Figure 2 below.

Figure 2 DW Curve



Source: Researcher, 2024 (data processed)

Based on Figure 2, it can be observed that the DW test value falls between DU and 4-DU, i.e., $DU < DW < 4-DU$. Therefore, it can be explained that the model does not exhibit autocorrelation.

Hypothesis Testing

In this study, hypothesis testing is conducted through multiple linear regression to determine the effect of independent variables on the dependent variable. This analysis is performed using SPSS version 27.

Coefficient of Determination (R^2)

The Coefficient of Determination (R^2) is used to measure the extent to which the model explains the dependent variable. The value of the coefficient of determination ranges from zero to one.

Table 4 Coefficient of Determination

R	R Square	Adjusted R Square
0,930	0,864	0,829

Source: Researcher, 2024 (data processed)

Based on Table 4, the R^2 value is 0.930, which indicates that the variables of the number of tourist attractions, number of tourists, number of hotel accommodations, number of restaurants and eateries, and investment in the tourism sector explain 93% of the variation in the GDP variable. The remaining 7% is influenced by factors outside the model or by other confounding variables.

F Test

The F test is used to determine whether there is a simultaneous effect of the independent variables on the dependent variable. From the results of the data analysis using the SPSS program, the following results were obtained:

Table 5 F Test

F	Sig.
24,236	.000 ^b

Source: Researcher, 2024 (data processed)

In the ANOVA table, the calculated F value is 24.236 with a significance level of 0.000. Since this significance level is less than the 5% significance level ($\alpha = 0.05$), it can be concluded that the result is significant. The F table value with degrees of freedom (df1) of 5 (number of independent variables) and df2 (n-k-1) of 19 results in an F table value of 2.60. Because the calculated F value (24.236) is greater than or equal to the F table value (2.60), H_0 is rejected. Therefore, it can be concluded that variables X1, X2, X3, X4, and X5 have a simultaneous effect on variable Y.

T-Test

This test is conducted to determine the effect of each independent variable on the

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dependent variable. The results of the t-test in this study are explained in the table below:

Table 6 t Test

Variable	t value	t table	Sig.
Number of Tourist Attractions	3,526	2,086	0,002
Number of Tourists	2,332	2,086	0,031
Number of Hotel Accommodations	1,907	2,086	0,072
Number of Restaurants and Eateries	0,621	2,086	0,542
Investment in the Tourism Sector	-2,313	2,086	0,032

Source: Researcher, 2024 (data processed)

Number of Tourist Attractions on GRDP

Based on the results of the regression test conducted in this study, the t-value is 3.526, which is greater than the t-table value of 2.086, placing it in the rejection region for H₀. The significance value is 0.002, which is less than 0.05. This indicates that, partially, the number of tourist attractions has a positive and significant effect on GRDP in Central Java Province. It can be explained that as the number of tourist attractions increases, so does the GRDP in Central Java Province. The increase in the number of tourist attractions contributes to GRDP growth through revenues collected from taxes and fees. Therefore, it can be concluded that the development of tourist attractions will impact the increase in GRDP through taxes and fees. Moreover, the greater the number of tourist attractions, the more job opportunities are created, both in the formal and informal sectors. This will ultimately lead to an increase in per capita income for the employed workforce. Thus, an increase in the number of tourist attractions will enhance the potential sources of GRDP (Anjasmara & Setiawina, 2019).

Number of Tourists on GRDP

Based on the results of the regression test conducted in this study, the t-value is 2.332, which is greater than the t-table value of 2.086, placing it in the rejection region for H₀. The significance value is 0.031, which is less than 0.05. This indicates that, partially, the number of tourists has a positive and significant effect on GRDP in Central Java Province. This means that as the number of tourists increases, its impact on the rise in GRDP in districts/cities of Central Java Province becomes greater. The increase in the number of tourists contributes to GRDP growth because tourists spend money in various sectors related to tourism, such as transportation costs, accommodation, and fees. Thus, revenue from sectors affected by tourism will also rise. If the number of international and domestic tourists increases, the regional economy will also develop due to the income from tourists' consumption expenditures. As the number of tourists grows, it will be accompanied by an increase in GRDP (Emilda, 2023).

Number of Hotel Accommodations on GRDP

Based on the results of the regression test conducted in this study, the t-value is 1.907, which is smaller than the t-table value of 2.086, placing it in the acceptance region for H0.

The significance value is 0.072, which is greater than 0.05. This means that, partially, the number of hotel accommodations has a positive but not significant effect on GRDP in Central Java Province. The number of hotel accommodations may have a positive impact on GDP because hotels are one of the sectors supporting tourism and the regional economy. However, its impact might not be significant as the presence of hotels alone is not sufficient to significantly increase GRDP without the support of other tourism sectors, such as tourist attractions, transportation, or supporting services.

Number of Restaurants and Eateries on GRDP

Based on the results of the regression test conducted in this study, the t-value is 0.621, which is smaller than the t-table value of 2.086, placing it in the acceptance region for H0.

The significance value is 0.542, which is greater than 0.05. This indicates that, partially, the number of restaurants and eateries has a positive but not significant effect on GRDP in Central Java Province. The number of restaurants and eateries may have a positive impact, but it is not significant because, although they contribute to the economy through consumer spending and job creation, their contribution may be limited. The food and beverage sector typically represents only a small portion of the overall economic activity in a region, so its impact on GRDP is not as substantial as that of other more dominant sectors such as industry, trade, or tourism as a whole.

Investment in the Tourism Sector on GRDP

Based on the results of the regression test conducted in this study, the t-value is - 2.313, which is smaller than the t-table value of -2.086, placing it in the rejection region for H0. The significance value is 0.032, which is smaller than 0.05. This indicates that, partially, investment in the tourism sector has a negative and significant effect on GRDP in Central Java Province. The negative and significant impact of tourism sector investment on GRDP may be due to several factors. One possibility is that tourism investment, especially in the early stages, often takes time to have a positive impact on the regional economy. In the initial phase of development, significant investments are needed for infrastructure, facility construction, and marketing, which can lead to a flow of funds out of the region. This can reduce short-term gains and put pressure on the regional budget.

Conclusion

Based on the research findings that have been explained, the following conclusions can be drawn:

1. The number of tourist attractions has a positive and significant impact on the Gross Regional Domestic Product (GRDP) in Central Java Province.

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2. The number of tourists has a positive and significant impact on the Gross Regional Domestic Product (GRDP) in Central Java Province.
3. The number of hotel accommodations has a positive but not significant impact on the Gross Regional Domestic Product (GRDP) in Central Java Province.
4. The number of restaurants and eateries has a positive but not significant impact on the Gross Regional Domestic Product (GRDP) in Central Java Province.
5. Investment in the tourism sector has a negative and significant impact on the Gross Regional Domestic Product (GRDP) in Central Java Province.

Based on the research results and conclusions described, the following recommendations are provided regarding the tourism sector and GRDP:

1. Given that the number of tourist attractions has a positive and significant impact on GRDP, the government and tourism industry stakeholders should continue to develop and promote new tourist destinations and improve the quality of facilities at existing destinations. Additionally, more strategic promotion and marketing programs can help attract more domestic and international tourists.
2. Since the number of tourists has a significant positive impact on GRDP, it is recommended to develop broader and more innovative promotional strategies to attract more tourists. Moreover, tourism-supporting infrastructure, such as transportation and accessibility, should be improved to ensure continuous increases in tourist visits.
3. Although the number of hotels has a positive impact, it is not significant for GRDP. Therefore, it is advised to increase hotel utilization, for example, by enhancing occupancy rates through appealing travel packages, partnerships with online booking platforms, or hosting large-scale events that can attract more guests. Improving hotel service quality can also encourage tourists to stay longer.
4. The number of restaurants and eateries also has a positive but not significant impact. It is recommended to enhance the role of the culinary sector as an important part of the tourism experience. Promoting local cuisine and developing culinary tourism destinations can help increase tourist spending in restaurants, thereby having a more significant impact on GRDP.
5. Since investment in the tourism sector shows a significant negative impact on GRDP, a thorough evaluation of how this investment is allocated is necessary. The government and stakeholders should ensure that investments are directed toward targeted and sustainable projects, focusing on infrastructure that supports tourism growth and involving local communities to ensure broad economic benefits.

Declaration of conflicting interest

This research is conducted purely by the researcher as a form of implementing the knowledge acquired and as a contribution to the advancement of the field of science. Additionally, this research is conducted with no other purpose than to serve as a source of reading and knowledge.

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