Analysis of the Influence of the Tourism Sector on Central Lombok Regional Original Income (PAD) in 2014-2023

Tumi Stiawati¹, Abdul Manan², Endang Astuti³

1,2,3 University of Mataram

Article Info

Article history:

Received Februari, 2025 Revised March, 2025 Accepted March, 2025

Keywords:

Tourism,
Regional Original Income,
Tourists,
Tourist Attractions,
Restaurants,
Hotels,
Central Lombok.

ABSTRACT

This study aims to analyze the Influence of the Tourism Sector on Central Lombok's Regional Original Revenue (PAD) in 2014-2023. The tourism sector has an important role in increasing regional revenue through hotel, restaurant, and tourist attraction levies. The independent variables in this study include the number of tourists, the number of tourist attractions, the number of restaurants and restaurants, and the number of hotels, while the dependent variable is Regional Original Revenue (PAD). The research method used is multiple linear regression analysis with secondary data obtained from the Central Statistics Agency (BPS), BAPPEDA, and the Central Lombok Regency Tourism Office. The results of the study show that the number of tourists, the number of tourist attractions, the number of hotels partially and simultaneously have a positive and significant effect on Regional Original Revenue (PAD), while the number of restaurants and eateries partially and simultaneously have a negative and significant effect on Regional Original Revenue (PAD). This research gives implications that local governments need to continue to develop the tourism sector by increasing the number of tourist attractions, the number of restaurants and restaurants, and the number of hotels. Improving tourism infrastructure, as well as optimizing regional taxes and levies to increase Regional Original Revenue (PAD), in addition to this, sustainable tourism management is also needed to maintain tourist attraction and encourage regional economic growth.

This is an open access article under the CC BY-SA license.



Corresponding Author:

Name: Tumi Stiawati

Institution Address: University of Mataram, Jl. Majapahit No. 62, West Nusa Tenggara, Indonesia

Email: tumisetiawati03@gmail.com

1. INTRODUCTION

Indonesia as a unitary country adheres to the principle of decentralization in its government structure. Development in Indonesia is not only the responsibility of the central government but also the responsibility of local governments. Therefore, to optimize and even out development in Indonesia, regional development with the

implementation of broad, real and responsible regional autonomy.

According to Law No. 33 of 2004 on the financial balance of the central and regional governments, regions have many opportunities to manage their natural resources in the most effective way. Local governments are trying to improve their

regional economy, including increasing the acquisition of local original income (PAD) [1].

One of the sources of Regional Original Revenue (PAD) that has great potential and contribution in increasing regional original income is the tourism sector [2]. It is hoped that the development and utilization program of regional tourism resources and potentials will help regional economic development. Tourism is generally considered an activity that has many aspects of various phases of development.

According to [3], the number of tourists is one of the factors that affect the region's original income (PAD). Tourists who come to an area will make many transactions, such as buying souvenirs, food and drinks, lodging tickets such as hotels, renting private vehicles during vacations, visiting entertainment, and tourist attractions, which can ultimately increase local income. Tourists show a desire to visit tourist attractions in Central Lombok regency.

According to [4] All visitors to tourist attractions have different characteristics and

patterns of visitation, as well as their needs and reasons for visiting. Tourism providers must consider this so that their products can be tailored to the interests and needs of visitors. To become a Tourist Destination Area.

According to [5] The number of restaurants and restaurants also plays an important role in encouraging culinary tourists in an area, according to the Regional Tax and Regional Levy Law, article 1 paragraph 23, a restaurant is the provision or seller of food and beverages with payment, such as: restaurants, cafes, canteens, stalls, and including catering services. Restaurant tax is a service provided by a restaurant, including food sales services.

Meanwhile, according to [6] Hotels are one of the accommodations from the tourism sector that can increase local income. A hotel is a place where people can stay, eat, and avail of other services and facilities by paying. Hotel development is growing rapidly, this includes building new hotels or adding rooms to existing hotels.

Table 1. Regional Original Income, Number of Tourists, Number of Tourist Attractions, Number of Restaurants and Restaurants, and Number of Hotels in Central Lombok Regency in 2014-2023.

Year	District Original Revenue (PAD)	Number of Tourists	Number of Tourist Attractions	Number of Restaurants and Restaurants	Number of Hotels
2014	131,173,268,457.44	104,720	58	94	75
2015	154,364,397,643.86	115,426	75	121	86
2016	137,674,068,163.83	107,964	60	98	90
2017	70,614,539,071.00	57,428	39	45	45
2018	69,206,871,385.41	56,468	38	41	48
2019	204,512,599,142.00	130,869	92	146	105
2020	203,926,708,188.00	128,076	91	143	97
2021	154,088,985,754.00	98,645	76	125	115
2022	236,232,647,378.00	186,432	105	215	127
2023	238,979,176,626.00	188,043	107	223	139

Source: BAPPEDA, Central Statistics Agency, and Central Lombok Tourism Office

From table 1 above, it can be seen that the Regional Original Revenue (PAD) of Central Lombok district from 2014 to 2023 fluctuated greatly, in 2014, the PAD amounted to Rp131,173,268,457.44 billion. The highest PAD figure was recorded in 2023,

reaching IDR 238,979,176,626.00 billion. And there was a significant decrease from 2017 to 2018, with PAD of IDR 70,614,539,071.00 billion and IDR 69,206,871,385.41 billion, respectively. The number of tourists can be seen from the table above that the increase

occurred in 2023 as many as 188,043 tourists, but the lowest number of tourists in 2018 was 56,468 as a result of natural disasters, namely earthquakes.

In 2022 and 2023, visits began to recover, with figures reaching 186,432 and 188,043. In 2014, there were 58 tourist attractions, and this number continues to increase every year. In 2023, the number of tourist attractions will increase to 107 tourist attractions. Growth of Restaurants and Restaurants In 2014, there were 94 restaurants and eateries, and this number rose to 223 in 2023. In 2014 there were 75 hotels, and this number has increased rapidly to 139 hotels in Overall, the number of tourist attractions, hotels, as well as restaurants and eateries showed a significant upward trend from 2014 to 2023, reflecting the development of the tourism sector in Central Lombok. The of natural disasters, earthquakes that resulted in a drastic decrease in the number of tourists in 2017 and 2018, affected PAD as a whole. However, the sector began to recover in 2022 and 2023. Positive Revenue: Although PAD briefly declined in 2017–2018, better tourism management was seen in 2022-2023 with an increase in PAD and visitors.

2. METHODS

This study uses a quantitative explanatory approach to investigate the influence or casual relationship between two or more variables.

The location of the research was conducted in Central Lombok Regency, the type of data used in this study is quantitative data because quantitative data are numbers, facts, and phenomena in this data cannot be explained in natural language. The analysis tool used in this study is Chestnut Linear Regression. The common models of Multiple Linear regression are as follows:

$$Y = α + β1X1 + β2X2 + β3X3 + β4X4 + e.....$$
(1)

Information:

Y: District Original Revenue (PAD)

X1: Number of Travelers

X2: Number of Attractions

X3: Number of Restaurants and Restaurants

X4: Number of Hotels

 α : Constant (increasing or decreasing value)

 β : coefficient (if the value x is 0, then Y will be α or constant)

e: Error or residual.

3. RESULTS AND DISCUSSION

Classical Assumption Test

The statistical requirement for multiple linear regression analysis based on ordinary leas square (OLS) is the classical assumption test. This is done to ensure that the resulting regression model is the best in terms of estimation certainty, unbiased, and consistent.

1. Test Normality

The normality test is carried out to test whether the values of the residuals that have been standardized in the distributed regression model are normal or not.

Table 2. Results of the Normality Test

Jarque-Bera	Probability	Conclusion		
0.878831	0.644413	Normally distributed		
		data		

Source: eviews 12 (processed data)

Based on table 2 above, it shows that the results of the normality test using the *Jarque-Bera* method produce *a probability value* of 0.6444413, where this number is more than the significance level (alpha 5% = 0.05) which means that the H0 hypothesis is accepted which means that the data used in this study is normally distributed.

2. Multicollinearity Test

The multicollinearity test is to see whether or not there is a high relationship between high variables between independent variables.

Table 3. Multicollinearity Test Results

	2
Variable	Centered VIF
X1	13.87281
X2	20.02826
Х3	31.52196
X4	10.48757

Source: eviews 12 (processed data)

Based on table 3 above, it shows that the results of the multicollinearity test using the *Variance Inflation Factor* (VIF) method produced VIF values of X1, X2, and X3 of 13.87281; and 20.02826; 31.52196; and 10.48757, respectively, where the number is more than 10 which means that the H0 hypothesis is accepted which means that the data X1, X2, and X3 used in this study do not have multicollinearity.

3. Heteroscedasticity Test

In this study, heteroscedasticity will be tested by the Glejser method. This is done by regressing the variable lindependent of its

residual absolute value. The heteroscedasticity problem occurs in such a model if the independent variable affects the absolute value of its residual significantly. The symptoms of heteroscedasticity are shown by the regression coefficient of each independent variable to its absolute residual value. If the probability value is greater than the alpha value (Sig. > alpha), then the model does not support the heteroscedasticity symptom. On the other hand, if the t count is smaller than the table, then t heteroscedasticity does not exist.

Table 4. Heteroscedasticity Test Results

F-statistic	3.152490	Prob. F (4,5)	0.1199
Obs*R-squared	7.160698	Chi-Square (4)	0.1276
Scaled explained SS	1.602205	Prob. Chi-Square (4)	0.8084

Source: eviews 12 (processed data)

Based on table 4 above, it shows that the results of the heteroscedasticity test using the Glejser method produce Prob values. The Chi-Square (4) of Obs*R-squared is 0.1276, where the number is more than the significance level (alpha 5% = 0.05) which means that it accepts the H0 hypothesis which means that the data used in this study does not contain symptoms of heteroscedasticity.

4. Autokorelasi Test

When the residual value in one period affects the residual ili in the previous period, it can interfere with the assumption of residual independence in this regression model, which is called an autocorrelation test which is used to determine whether there is a correlation between the residual (*error*) of one regression model and another.

Table 5. Results of the autocorrelation test of

R-squared	0.679412	Mean dependent var	1.80E-15
Adjusted R-squared	0.038236	S.D. dependent var	0.018575
S.E. of regression	0.018216	Akaike info criterion	-4.976983
Sum squared resid	0.000995	Schwarz criterion	-4.765173
Log likelihood	31.88491	Hannan-Quinn criter.	-5.209337
F-statistic	1.059633	Durbin-Watson stat	2.137770
Prob(F-statistic)	0.523612		

source eviews 12 (processed data)

Based on table 5 above, it shows that the results of the heteroscedasticity test using the *Lagrange Multiplier* (LM) method produced a Durbi-Watson value of 2.137770, where this number is more than the dU value (4-2.4137 = 1.75) seen from the Durbin-Watson table which means that the data used in this study does not have an autocorrelation.

5. Statistical t-Test (Partial Test)

The partial test or t-test is a test of the partial regression coefficient, to find out

whether it is partially significant or each variable is independent of the bound variable.

6. Statistical F Test (Simultaneous Test)

This F experiment is used as a material to recognize the possibility of influencing independent variables together (simultaneously) on bound variables.

Table 6. Simultaneous Test Results

F-statistic	724.8543
Prob(F-statistic)	0.00000

Source: Eviews 12 (Processed Data)

Based on table 6 above, it is known that the probability value of the F-statistic is 0.0000, where the number is less than the significance level (alpha 5% = 0.05) which means that the variables of the number of tourists, the number of tourist attractions, the number of restaurants and restaurants, and the number of hotels together have a significant effect on the Original Regional Revenue of Central Lombok district in 2014-2023.

7. Determination Coefficient Test (R2)

Table 7. Results of the Determination

Coefficient Test

R-squared	0.998278
Adjusted R-squared	0.996901

Source: Eviews 12 (Data processed)

Based on table 7 above, it is known that the R-squared value is 0.998278 which means that the magnitude of the ability of the independent variable explains the diversity of the bound variable. This shows that the number of tourists, the number of tourist attractions, the number of restaurants and restaurants, and the number of hotels are able to affect the Regional Original Revenue by 99.82%, the remaining 0.18% is influenced by other variables that are not used in this study.

The role of regional original revenue (PAD) must inevitably be increased through planning to achieve regional financial capability and independence and strengthen the revenue structure. This is because regional original income is one of the benchmarks of ability and reflects regional independence. Local governments must immediately evaluate the inadequate state of local governments to obtain Regional Original Revenue (PAD) if they want to improve services and facilities to the community.

Table 8. Regional Original Revenue (PAD) of Central Lombok Regency in 2014-2023

Year	Regional Original Revenue (PAD) (Rp)	
2014	131.173.268.457,44	
2015	154.364.397.643,86	
2016	137.674.068.163,83	

2017	70.614.539.071,00
2018	69.206.871.385,41
2019	204.512.599.142,00
2020	203.926.708.188,00
2021	154.088.985.754,00
2022	236.232.647.378,00
2023	238.979.176.626,00

Source: Central Lombok Bappeda

Based on table 8, it can be seen highest Regional that the Original Revenue (PAD) in 2023 238,979,176,626.00 billion, due to the increase in local government original revenue sources that have increased efficiency in the collection of regional taxes, regional levies, and other legitimate sources of income, the growth of the tourism and investment sectors where Central Lombok, especially Mandalika area, has experienced rapid growth in the tourism sector with the existence of International such as MotoGP and World Superbike (WSBK). This contributes to an increase in hotel, restaurant taxes, and tourism levies. The existence of support from the central government at the location of transfer funds or fiscal policies from the central that government support strengthening of regional Original Revenue (PAD) can also affect the increase in revenue.

2) The number of tourists is the total number of individuals who travel to an area, whether it is for recreational, business, or other purposes. This data is usually collected by the government, tourism organizations, or related institutions for the planning and development of the tourism sector, which can be seen in the following table.

Table 9. Number of Tourists in Central Lombok Regency Year 2014-2023

Year Number of Tourists (People)	
2014	104.720
2015	115,426

2016	107,964
2017	57,428
2018	56,468
2019	130,869
2020	128,076
2021	98,645
2022	186,432
2023	188,043

Source: Tourism Office, Central Lombok Central Statistics Agency

Based on table 9 above, it can be seen that in 2023 Central Lombok Regency has experienced a significant increase in the number of tourist visits, because with the existence of Central Lombok international events hosting various events such as MotoGP and World Superbike (WSBK) Mandalika circuit, these events have succeeded in attracting thousands of visitors from within and outside the country, significantly increasing profile of regional tourism, development of the Mandalika Special Economic Zone (SEZ) as an effort to increase investment and tourism in Central Lombok, the development of infrastructure and facilities in this region makes it a more attractive destination for tourists. The improvement of road the infrastructure, development airports, and other transportation facilities makes it easier for tourists to visit Central Lombok, which results in more tourists visiting Central Lombok.

3) The number of tourist attractions is used as an indicator in the development of tourism in an area, showing how many choices of destinations can attract tourists the data can be seen in the table below.

Table 10. Number of Central Lombok Tourist Attractions in 2014-2024

Year	Number of Tourist
rear	Attractions
2014	50
2015	75
2016	60
2017	39
2018	38

2019	92
2020	91
2021	76
2022	105
2023	107

Source: Tourism Office, Central Lombok Central Statistics Agency

Based on table 10 above data, the number of tourist attractions in 2023 has increased by 107 tourist attractions, there has been a significant increase in the number of tourist attractions in Central Lombok Regency. This is mainly due to the efforts of the local government in improving services and convenience in the tourism industry, as well as the opening of new tourist attractions.

4) The number of restaurants and restaurants is the total number of business units that provide food and beverage services in a region, the data on the number of restaurants and restaurants can be seen in the following table.

Table 11. Number of restaurants and restaurants in Central Lombok Regency in 2014-2023

	2011 2020
Year	Number of restaurants and
	eateries
2014	94
2015	121
2016	98
2017	45
2018	41
2019	146
2020	143
2021	125
2022	215
2023	223

Source: Tourism Office, Central Lombok Central Statistics Agency

In table 11 above, the highest number of restaurants and eateries in 2023 is 223 growth in the tourism sector, where an increase in the number of tourists, both domestic and foreign, encourages demand for more diverse and quality culinary facilities, the development of Special Economic Zones (SEZs) as leading tourist destinations, which attracts investment in the hospitality and culinary sectors, This development creates opportunities for the opening of new restaurant and restaurant businesses around the Area.

5) Hotel is a type of accommodation business that provides lodging services for guests or tourists data on the number of hotels in Central Lombok.

Table 12. Number of Hotels in Central Lombok Regency in 2014-2023

Tahun	Jumlah Hotel
Tarrarr	Julillari Hotel
2014	75
2015	86
2016	90
2017	45
2018	48
2019	105
2020	97
2021	115
2022	127
2023	139

Source: Tourism Office, Central Statistics Agency

In table 12 above, it can be seen that the number of hotels in 2023 is 139 units, this increase is due to the fact that tourist visits, both domestic and foreign, can increase demand for accommodation facilities. The development of the Mandalika Special Economic Zone (SEZ) has attracted massive investment in the tourism sector, including the construction of new hotels to support the needs of tourist accommodation, but in 2017 and 2818 the number of hotels was 45 and 48 units due to the occurrence of natural disasters in that year, namely earthquakes that slid down the island of Lombok resulting in many buildings collapsing and suffering severe damage, This is one of the occurrences of a decrease in the number of tourist attractions in 2017 and 2018.

The Effect of the Number of Tourists on the Regional Original Income (PAD) of Central Lombok Regency in 2014-2023

Based on the results of data analysis using multiple linear regression, a coefficient

result of 0.880545 with a probability of 0.0001 (less than alpha 0.05) was obtained which showed that the number of tourists had a positive and statistically significant effect, where this result accepted the hypothesis made in this study showing that the increase in the number of tourists will also increase the Original Income of the Central Lombok Region due to The number of tourist visits can affect the magnitude of the region's original income, and the increase in the number of shows that Indonesia's tourism promotion has succeeded in attracting domestic and foreign tourists to Central Lombok Regency, which has a positive impact on the rate of regional original income. In short, improving the quality of the tourism sector will automatically increase local revenue in Central Lombok Regency.

The Effect of the Number of Tourist Attractions on the Regional Original Revenue (PAD) of Central Lombok Regency in 2014-2023

Based on the results of data analysis using multiple linear regression, a coefficient result of 0.015821 with a probability of 0.0001 (less than alpha 0.05) was obtained, which shows that the number of tourist attractions has a positive and statistically significant effect, where this result accepts the hypothesis made in this study. These results show that the increase in the number of tourist attractions will also increase the Original Income of the Central Lombok Region where the attraction in the area is tourist attractions.

The Effect of the Number of Restaurants and Restaurants on the Regional Income (PAD) of Central Lombok Regency in 2014-2023

Based on the results of data analysis using multiple linear regression, a coefficient result of -0.007018 with a probability of 0.0003 (less than alpha 0.05) was obtained which showed that the number of restaurants and restaurants had a negative and statistically significant effect, where this result rejected the hypothesis made in this study. This result shows that the increase in the number of restaurants and eateries will also reduce the Original Income of the Central Lombok Region because restaurants and eateries in

Central Lombok are not enough for tourists, due to the limited number of restaurants and eateries provided in Central Lombok, it can be seen at MotoGP events that most tourists choose restaurants and eateries in urban centers such as Mataram and nearby places from their hotels, because Central Lombok gives too high prices or the food tastes of tourists are very different which results in tourists preferring to eat in urban centers with more choices of restaurants and restaurants as well, while in Central Lombok restaurants and restaurants are still lacking so that it has a negative effect, because in Central Lombok there is very little availability in restaurants and restaurants.

The Effect of the Number of Hotels on Regional Original Revenue (PAD) of Central Lombok Regency in 2014-2023

Based on the results of data analysis using multiple linear regression, a coefficient result of 0.003957 with a probability of 0.0061 (less than alpha 0.05) was obtained which shows that the number of hotels has a positive and statistically significant effect, where this result accepts the hypothesis made in this study. These results show that the increase in the number of hotels will also increase the Original Revenue of the Central Lombok Region. The hospitality industry is an important part of the tourism industry chain, and it consists of many companies such as travel agencies, restaurants, transportation, and so on. The hospitality business helps tourists get temporary lodging with food, beverages and leisure.

4. CONCLUSION

From the results of the data analysis and discussion that has been described in the previous chapter, the following conclusions can be drawn.

1) The results of the t-test on the number of tourists (X1), the number of tourist attractions (X2), and the number of hotels (X4) show that the number of tourists partially has a positive and significant effect on the Regional Original Revenue (PAD) of Central Lombok in 2014-20023. However, the

- results of the t-test (partial test) on X3 show that partially the number of restaurants and eateries has a negative and significant effect on the Regional Original Revenue (PAD) of Central Lombok in 2014-20023
- The results of the f test (simultaneous test) show that the number of tourists, the number of tourist attractions, and the number of hotels together have a positive and significant effect on the Regional Original Revenue (PAD) of Lombok in 2014-2023. Central Meanwhile, simultaneously number of restaurants and eateries has a negative and significant effect Central Lombok's Regional Original Revenue (PAD) in 2014-2023.
- 3) It can be seen that the R-squared value is 0.998278 which means that the magnitude of the ability of the independent variable explains the diversity of the bound variable. This shows that the number of tourists, the number of tourist attractions, the number of restaurants and restaurants, and the number of hotels are able to affect the Regional Original Revenue by 99.82%, remaining 0.18% is influenced by other variables that are not used in this study

ADVICE

Based on the conclusion above, the following suggestions can be given:

1) In order to increase restaurants and restaurants in Central Lombok, we can focus on increasing the number of restaurants and restaurants controlling food and beverage prices so that they remain reasonable and stable, especially at major events such as MotorGp and World super bike (WSBK) in Mandalika. Local governments are advised to maximum prices for food and beverages that are often consumed by tourists and local communities to prevent unreasonable price spikes.

The government also needs to conduct a market survey to determine fair prices based on the type of restaurant, ranging from food stalls, mid-range restaurants, to premium restaurants or star-rated hotels. By implementing this strategy, restaurants and eateries can offer more standard prices to attract more customers, as well as increase their contribution to the tourism sector and Central Lombok's Regional Original Revenue (PAD).

2) To further increase the number of tourists, the number of tourist attractions, and the number of hotels positively and significantly to the Regional Original Revenue (PAD) of Central Lombok, tourism promotion can be increased through digital media and international events so that the number of tourists continues to increase every year, develop tour

packages that are attractive domestic and foreign tourists, but in the number of tourist attractions can and invest in tourist innovate attractions (cultural tourism, ecotourism, artificial tourism), strengthen the maintenance cleanliness of destinations to remain attractive and safe, and on number of hotels encourage investment in the hospitality sector with tax incentives and ease of business licenses, develop concept of environmentally friendly local culture-based hotels, and improve hotel service standards and facilities to increase competitiveness with other destinations. So with this strategy, the Central Lombok tourism sector can develop more optimally contribute significantly Regional Original Revenue (PAD).

REFERENCES

- [1] L. I. M. A', Faisal Abdullah a, and H. K. B, "Jurnal Ilmu Ekonomi (JIE)," vol. 6, no. 3, pp. 370–383, 2022.
- [2] A. H. Ahmad, "Pengaruh Jumlah Kunjungan Wisatawan, Objek Wisata, Dan Retribusi Pariwisata Terhadap Pendapatan Asli Daerah Annur Hanafi Ahmad," pp. 50–61, doi: 10.55587/jseb.v2i1.34.
- [3] I. Wardia, B. Ismiwati, and B. S. Wijimulawiani, "ANALISIS PENGARUH SEKTOR PARIWISATA TERHADAP PENDAPATAN ASLI DAERAH (PAD) PROVINSI NUSA TENGGARA BARAT," vol. 3, no. 1, pp. 74–81, 2024.
- [4] R. Azizah *et al.*, "PENGARUH KUNJUNGAN WISATAWAN TERHADAP PENDAPATAN ASLI DAERAH (PAD) KABUPATEN," pp. 197–205, 2022.
- [5] S. Sanjaya, R. A. Wijaya, P. Studi, A. Fakultas, U. Putra, and I. Yptk, "Pengaruh Jumlah Hotel dan Restoran terhadap Penerimaan Pajaknya serta Dampaknya pada Pendapatan Asli Daerah di Sumatra Barat," vol. 8, no. 3, pp. 559–568, 2020.
- [6] M. K. Rozikin, "PENGARUH JUMLAH KUNJUNGAN WISATAWAN DAN JUMLAH HOTEL TERHADAP PENDAPATAN ASLI DAERAH DI PULAU LOMBOK".