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Author : Adefrid Juan Putra Tarigan and Syech Suhaimi  
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# The Influence of The Tourism Economic Sector in Increasing Original Income of The Karo District

Adefrid Juan Putra Tarigan, Syech Suhaimi

*Universitas Sumatera Utara, Medan, Indonesia*

Adefridtarigan123@gmail.com, syechsuhaimi62@gmail.com

## Abstract

This research aims to analyze the influence of the tourism economic sector on increasing Regional Original Income (PAD) in Karo Regency. Tourism has become an important sector in regional economic growth and Karo Regency as a potential tourist destination is attracting attention in efforts to optimize tourism's contribution to PAD. The analytical method used by the author in this thesis is quantitative descriptive analysis. The research results show that the variable number of tourist attractions has an insignificant positive effect on Regional Original Income. The variable number of domestic tourists has a positive and insignificant effect on Regional Original Income. The variable number of foreign tourists has a significant positive effect on Regional Original Income. The variable number of restaurants has a significant positive effect on Regional Original Income.

**Keywords:** Tourist Object; Domestic Tourists; Foreign Tourists; Hotel Occupancy Rate; Number of Restaurants; Increase in Local Revenue

## 1. Introduction

Regional Original Revenue is revenue obtained by the region from its own regional sources which are levied based on local regulations in accordance with applicable laws. Local Government Law Number 23 of 2014 gives authority to the regions to manage their own households in accordance with the transfer of authority from the central government to local governments [1]. Especially the tourism sector is very large potential that can be explored and developed, considering that all regions in Indonesia have their own tourism potential. And in this study the area in question is Karo Regency.

The economy of Karo Regency in 2021 reached IDR 21,824.14 billion and at constant 2010 prices reached IDR 14,582.33.70 billion. With the two highest sectors, namely information and communication growth of 6.75% and wholesale and retail trade of 4.18%. The development of tourism is more visible, such as opening up jobs in the culinary field, souvenirs, tour guides, and others that can increase the income of the local community.

Table 1 Number of Tourist Visits in Karo Regency

Year	Domestic	International
2014	324.670	1.951
2015	370.412	752
2016	435.587	437
2017	552.430	5.887
2018	524.238	6.014
2019	721.460	6.066
2020	227.812	-
2021	354.369	5.200
2022	500.656	5.510

Based on the table above, it can be seen that the number of domestic and foreign tourist visits has fluctuated. The most declining tourist visits can be seen in 2020 amounting to 227,812 due to the impact of COVID - 19 which greatly impacted the tourism sector and in 2021 it rose again by 354,369 then in 2022 by 500,656. tourist objects are back in operation in Karo regency and crowded with visitor.

## 2. Literature Review

### 2.1. Local Original Revenue

Local Original Revenue is a source of local government financing generated through several sources such as taxes, levy proceeds, regionally owned companies, and others.

### 2.2. Tourism

Tourism is defined as the activity of travel and stay of a person outside his place of residence and environment for no more than one consecutive year for travel, business, or other purposes with no work in the place visited.

### 2.3. Local Revenue

PAD is a source of local government financing that comes from several sources of revenue consisting of local tax proceeds, local retribution proceeds, local-owned company proceeds, and other legal revenues.

### 2.4. National Income Theory

National income is the total amount of wages or salaries, rent, interest, and profit, received by the owners of the factors of production in return for their services or contributions in the production process in one year and is a measuring tool to determine the level of a country's economy.

## 3. Research Method

This research is quantitative descriptive type. Where this research is based on the philosophy of positivism, used to research on certain populations or samples, data collection using research instruments, data analysis is quantitative / statistical with the aim of testing predetermined hypotheses. This research data comes from the Tourism Office and BPS Karo Regency. Data collection in this study uses secondary data in the form of Times Series obtained from the Tourism Office and related websites.

There are several approaches used to find research results, including the Fixed Effect Model, Random Effects Model, Chow Test, and Hausman Test. The hypothesis tests used are the F-test, T-test, and Coefficient of Determination Test ( $R^2$ ).

## 4. Results and Discussion

This study aims to determine the effect of the Tourism Economy Sector in increasing Regional Original Revenue of Karo Regency. There are three techniques in estimating the Common Effect Model, Fixed Effect Model, Random Effect Model.

Table 2 Common Effect Model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	33.14934	4.070442	8.143915	0.0000
JOW	0.153764	0.015959	9.634829	0.0000
JWDN	1.482583	0.311993	4.751979	0.0000
JWM	2.745816	0.434740	6.315854	0.0000
JR	0.037523	0.004355	8.615732	0.0000
THH	4.252127	0.136854	31.07059	0.0000
R-squared	0.799367	Mean Dependent Var.		69.34823

Source : Research Results

It can be seen that the R - Squared value is 0.799367.

From the table 3, it can be seen that the R-squared value is 0.997207.

Table 3 Fixed Effect Model

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Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-37.89695	24.94603	-1.519157	0.1310
JOW	0.007063	0.004175	1.691863	0.0930
JWDN	5.648801	3.698014	1.527523	0.1290
JWM	7.096492	0.431032	16.46396	0.0000
JR	0.199025	0.017428	11.4195	0.0000
THH	0.018647	0.003597	5.184564	0.0000
R-squared	0.997207	Mean Dependent Var.		69.34823

Source: Research Results

Table 4 Random Effect Model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	6.112068	6.287122	0.972157	0.3324
JOW	0.010318	0.004109	2.511006	0.0130
JWDN	1.562791	0.558469	2.798351	0.0057
JWM	6.643789	0.236809	28.05551	0.0000
JR	0.199025	0.017428	11.41954	0.0000
THH	0.018647	0.003597	5.184564	0.0000
Cross-section Random			1.996005	0.9810
Idiosyncratic Random			0.277763	0.0190
R-squared	0.90488	Mean Dependent Var.		4.307482

Source: Research Results

From the regression results in Table 4, all independent variable probabilities are positive and significant to the dependent variable, while the R-squared value is 0.90488. Next is to choose which is the best model in this study. the hypothesis is as follows:

H<sub>0</sub> : Common Effect Model more feasible

H<sub>a</sub> : Fixed Effect Model more feasible

Table 5 Chow Test

Effects Test	Statistic	d.f	Prob.
Cross-section F	283.293840	(34.136)	0.0000
Cross-section Chi-Square	747.986954	1	0.0000

Source : Research Results

Table 6 Hausman Test

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f	Prob.
Cross-section Chi-Square	43.996039	5	0.0000

Source: Research Result

Based on the Table 4 and Table 5, it is known that the p-value is 0.0000, so that  $0.0000 < 0.05$ , H<sub>0</sub> is rejected and the most appropriate method is the Fixed Effect Model. Then the researchers conducted statistical tests with the Coefficient of Determination (R<sup>2</sup>) Test, F-statistic Test, and T-statistic Test.

Table 6 Coefficient of Determination ( $R^2$ )

R-squared	0,997
Adjusted R-squared	0,996

Source: Research Results

Table 7 F-Statistic

F-squared	143.8846
Prob (F-statistic)	0.000000

Table 8. Coefficient of Determination( $R^2$ )

Variable	Coefficient	Std.Error	t-Statistic	Prob.
C	-37.89695	24.94603	-1.519157	0.1310
JOW	0.007063	0.004175	1.691863	0.0930
JWDN	5.648801	3.698014	1.527523	0.1290
JWM	7.096492	0.431032	16.46396	0.0000
JR	0.569231	0.193713	2.938521	0.0068
THH	3.218271	0.247293	13.01399	0.0000

Source: Research Results

The information that can be obtained is as follows:

1. The results of the first hypothesis test show a p-value of  $0.0930 > 0.05$ , then  $H_0$  is accepted, meaning that the number of tourist attractions has a positive and insignificant effect on PAD.
2. The second hypothesis test results show a p-value of  $0.1290 > 0.05$ , then  $H_0$  is accepted, meaning that the number of tourists has a positive and insignificant effect on PAD.
3. The results of the third hypothesis test show a p-value of  $0.0000 < 0.05$ , so  $H_0$  is rejected, meaning that the number of foreign tourists has a positive and significant effect on PAD.
4. The results of the fourth hypothesis test show a p-value of  $0.0068 < 0.05$ , so  $H_0$  is rejected, meaning that the number of restaurants has a positive and significant effect on PAD.
5. The results of the fifth hypothesis test show a p-value of  $0.0000 < 0.05$ , so  $H_0$  is rejected, meaning that the number of hotel occupancy rates has a positive and significant effect on PAD.

## 5. Conclusion

Based on the research results that have been attached above, the following conclusions can be drawn:

1. The number of tourist attractions has a positive and insignificant effect on Regional Original Revenue.
2. The number of domestic tourists has a positive and insignificant effect on Regional Original Revenue.
3. The number of foreign tourists has a significant positive effect on Regional Original Income.
4. The number of restaurants has a significant positive effect on local revenue.
5. Hotel occupancy rate has a significant positive effect on local revenue.

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