

# The Revenue Determinant of Tourism Sector Before and During the Covid-19 Pandemic

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**Abstract:** This study aims to determine the effect of the number of tourists, tourist attractions, tax growth, and object retribution growth tourism on tourism sector revenue in Gowa Regency before and during the Covid-19 pandemic in 2017-2020. This study uses secondary data. Secondary data in this study were obtained from several sources including the Regional Revenue Agency and the Gowa Regency Tourism & Culture Office. The analytical method used consists of a normality test, multicollinearity test, and heteroscedasticity test. This study shows that before the Covid-19 pandemic the variables number of tourists, number of attractions, and tourism business tax had a significant effect on tourism sector revenue in Gowa Regency and during the Covid-19 pandemic the variables number of tourism objects and business tax growth had a significant and positive effect in the same direction as sector revenue tourism in Gowa Regency.

**Keywords:** Number of Tourists, Tourist Attraction, Tax Growth, Levy Growth, Tourism, Covid-19 Pandemic.

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## 1. Introduction

The tourism sector is one of the sectors in the economy that has an important and quite large contribution to the community's economic activities and government revenues, especially local governments. It has been 18 months since the Covid-19 pandemic entered Indonesia and has had a significant

impact on the economic sector, including the tourism sector. The impact of the Covid-19 pandemic has caused the tourism sector to experience a decline, such as the accommodation provision sub-sector being closed, malls, restaurants, and destinations were also closed, affecting the number of tourist visits and hotel room occupancy rates. Based on the ministry of tourism (2018) the number of tourist visits to Indonesia is increasing from year to year, namely growing by around 13.2 percent in 2008 and increasing by around 1.4 percent in 2009. In 2015 the number of tourist visits increased by 7.2 percent, growing above the average number of other countries which is only 4.4 percent. In 2017 foreign tourist visits to Indonesia grew to 14.3 million visits where this success is the dedication, commitment, strategy, and theory of developing the tourism sector that has been carried out.

Nature Tourism in Gowa Regency is one of the objects related to recreation and tourism that utilizes the potential of natural resources and their ecosystems, both in their original (natural) forms and in combination with man-made ones. As a result, recreational areas in the open are still natural and can provide comfort so that more and more people or tourists visit them. Tourism revenue in Gowa Regency is affected by the number of tourists, the number of tourism objects, and tourism business taxes and tourism object fees. Under the current pandemic conditions, tourism receipts have decreased due to a decrease in the number of tourists, so it directly affects the income of Gowa Regency. Until the first quarter and second quarter of 2020, there was a decrease in the number of tourists in the first quarter of tourists by 14,007 people while in the second quarter it was 1,073 people, or a decrease of 1,205.40%. In addition, the government has also made several efforts to build and maintain the existence of the tourism sector.

Research on the determinants of tourism sector revenue in Gowa Regency before and during the 2017-2020 Covid-19 pandemic will provide an overview of the number of tourists, the number of tourist objects, growth in tourism business taxes, and growth in tourist object fees in Gowa district on tourism sector revenue. aims to determine the effect of the number of tourists, tourist attractions, tax growth, and growth in tourist object fees on tourism sector

revenue in Gowa Regency before and during the Covid-19 pandemic in 2017-2020.

Tourism business revenue is part of local revenue derived from tourism activities, such as recreation and sports fees, hotel and restaurant taxes, entertainment taxes, and others in rupiah units per year (Yoeti, 1996)<sup>1</sup>.

Ferry Plearngra, (2012)<sup>2</sup>. Analysis of the Influence of the Number of Tourist Attractions, the Number of Tourists, and Per Capita Income on Retribution Revenues for Tourism Objects in the Regency/ City of Central Java. The research methodology used the 2006-2010 Time Series data with cross-sections of 35 districts/cities in Central Java. The results of the three variables analysed, namely the number of tourism objects, the number of tourists, and income per capita are all significant. The results of the regression output conclude that the three independent variables, including the number of tourism objects, the number of tourists, and per capita income, jointly affect the income received from tourism object levies.

Lia Ardriani, (2013)<sup>3</sup>. The Influence of Hotel Occupancy Rate, Number of Tourists, and Number of Tourist Attractions on Tourism Sector Income in Kudus Regency in 1982-2011. The research methodology uses descriptive analysis and multiple linear regression analysis using the Ordinary Least Squares (OLS) method. The results of the research on the variables analysed, namely the occupancy rate of hotels, the number of tourists, and the number of tourist objects, are all significant and have a positive effect on the income of the tourism sector in Kudus Regency.

Nasrul Qadarochman, (2010)<sup>4</sup>. Analysis of Regional Acceptance from the Tourism Sector in the City of Semarang and the Factors Affecting It. The research methodology used is the secondary method. Of the four variables analysed, which include regional tourism sector revenue, number of tourist objects, number of tourists, and hotel occupancy rate, all were declared significant. Meanwhile, the per capita income variable has no significant effect.

Dimas Betega, (2010)<sup>5</sup>. Analysis of Factors Influencing Tourism Income in Klaten Regency. The data analysis used is a Linear Double Log regression

analysis with tourism income as the dependent variable and three variables as independent variables, namely the number of tourists, vehicle traffic, and hotel room occupancy rates. From the results of the significance test, it was obtained that the variable number of tourists had a positive effect on tourism income, while the variables of vehicle flow and hotel room occupancy rates had no significant effect on tourism income at the significance level.

Ida Austriana, (2005)<sup>6</sup>. Analysis of Factors Affecting Regional Revenue from the Tourism Sector in Central Java. Used is multiple linear regression with local revenue as the dependent variable and five variables as independent variables, namely the number of tourists, number of star and jasmine hotel rooms, number of means of transportation, income per capita, and number of tourism objects. From the results of the regression and significance test, it can be concluded that the number of tourists, the number of star and jasmine hotel rooms, the number of means of transportation, and the total per capita income at the significance level are at the 5 percent significance level and the number of tourist objects harms district/city revenues in Central Java Province.

The hypothesis for this study is as follows:

1. Suspected that the number of tourists had a positive and significant effect on the acceptance of the tourism sector in Gowa Regency before and during the Covid-19 pandemic.
2. It is suspected that the number of tourist objects had a positive and significant effect on tourism sector revenue in Gowa Regency before and during the Covid-19 pandemic.
3. It is suspected that the Growth of the Tourism Business Tax had a positive and significant effect on tourism sector revenue in Gowa Regency before and during the Covid-19 pandemic.
4. It is suspected that the Growth of Tourism Object Retribution had a positive and significant effect on tourism sector revenue in Gowa Regency before and during the Covid-19 pandemic.

## 2. Method

This research was conducted in Gowa Regency, South Sulawesi Province. The research took place starting in August 2021.

This research uses Secondary Data. Secondary data in this study were obtained from several sources including the Regional Revenue Agency and the Gowa Regency Tourism & Culture Office. This study uses data on the Number of Tourists, Number of Tourist Attractions, Growth of Tourism Business Taxes, and Growth of Tourism Object Retribution in Gowa Regency for the last 4 years starting from 2017 to 2020, while for Tourism Sector Revenue using data within the last 4 years starting in 2017 up to 2020. The collection of data required in this discussion is through two stages of research, namely, Library Studies and Field Research.

The Normality Test aims to test the normality of the distribution of the dependent variable (criterion) and the independent variables. The normality test was carried out to test whether the confounding or residual variables in the regression model have a normal distribution. Test it is done with the Jarque-Bera statistical test using Eviews 12 software. The variable is normally distributed, if the significance level value is  $> 0.05$  it means it passes the normality test, conversely, if the significance level is  $\leq 0.05$  it means it does not meet the normality test.

Multicollinearity is present whether linear relationships between independent variables are in a regression model. Multicollinearity can be detected from the tolerance value and the Variance Inflation Factor (VIF) value. If the tolerance value of the independent variable is  $> 0.10$  and the VIF value is  $< 10$ , then multicollinearity does not occur; conversely, if the tolerance value is  $< 0.10$  and the VIF value is  $> 10$ , the multicollinearity's case is occurred (Imam Ghozali, 2009)<sup>7</sup>. If there is multicollinearity in data analysis, the data does not pass the test.

The hypothesis testing used in this study is simple linear regression. This simple linear regression analysis aims to test the extent to which and how the directions of the independent variables influence the dependent variable. The regression equation model is as follows:

$$\text{LnY} = \alpha + \text{Ln}\beta_1\text{X}_1 + \beta_2\text{X}_2 + \beta_3\text{X}_3 + \beta_4\text{X}_4 + e$$

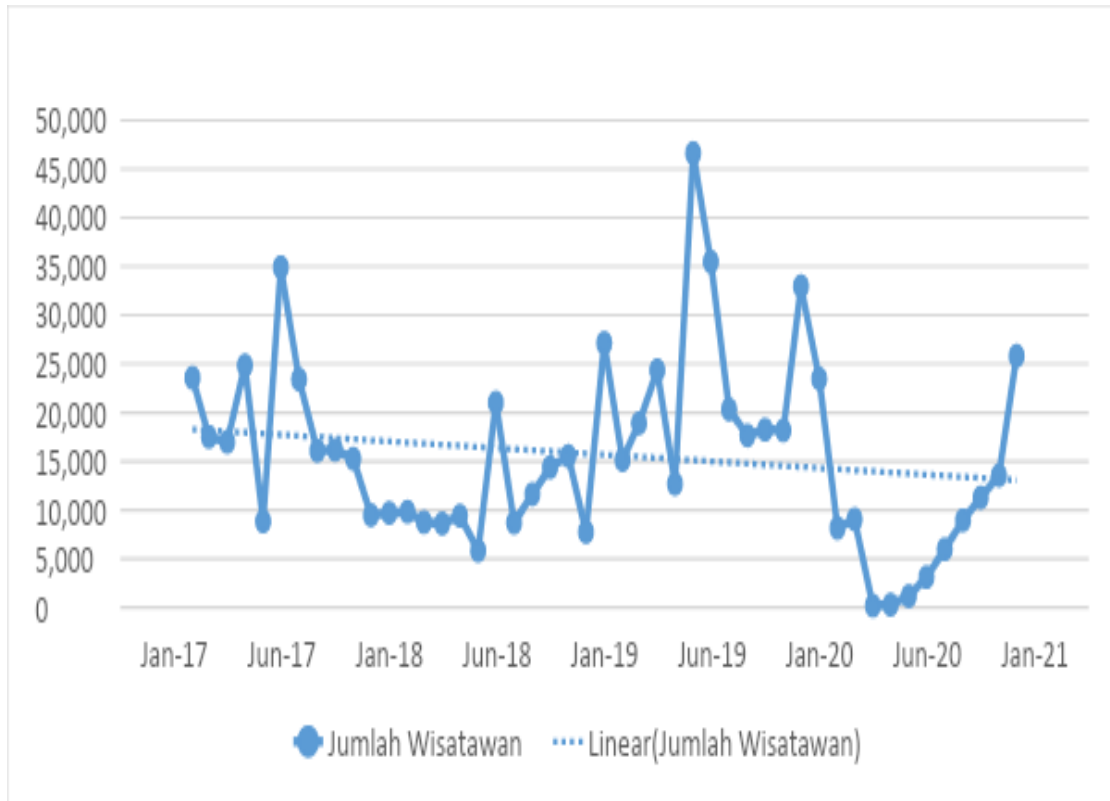
Where variable (y) is tourism sector revenue, variable (X1) is the number of tourists, variable (X2) is the number of tourist objects, variable (X3) is the growth of tourism business taxes and variable (X4) is the growth of tourist attraction fees.

The coefficient of determination  $r^2$  is used to find out what percentage of the Variation of the Dependent Variable (investment decision-making) can be explained by the variation of the independent variables (overconfidence bias and optimism bias). This  $r^2$  value lies between 0 and 1. If the  $r^2$  value is close to 0, it means that there is very little variation in the dependent variable which is explained by the independent variable. If the value of  $r^2$  moves closer to 1, it means that the greater the variation in the dependent variable which can be explained by the independent variable. If it turns out that in the calculation the value of  $r^2$  is equal to 0, this indicates that the dependent variable cannot be explained by the independent variable, with the following formula:

$$r^2 = (r)^2 \times 100\%$$

### **3. Discussion**

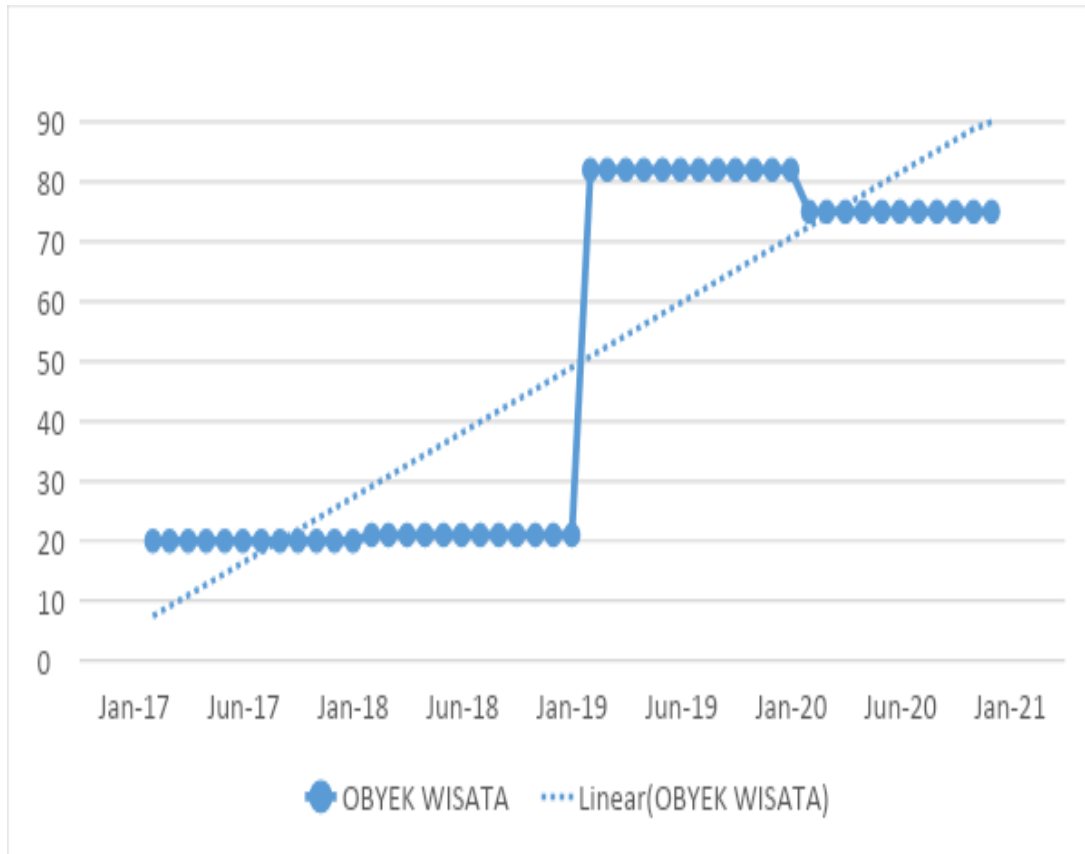
As for the development of the number of tourists in Gowa Regency in the 2017-2020 period, the highest number of tourists was in June 2019, namely 46,488 people. Whereas in 2020 in April and May, the number of tourists decreased drastically with the lowest values of 181 people and 287 people. This can be seen from the Figure 1.



Source: BPS Gowa

**Figure 1. Number of Tourists in Gowa Regency February 2017-December 2020**

It can be seen from Figure 2 that the trend of the number of tourist objects in Gowa Regency is increasing every year in the 2017-2020 period. However, if you look at the increase in the number of tourist objects, it is relatively the same every month in 2017 by 20 units, then it increased in 2018 by 21 units. And in 2019 it increased drastically by 82 units of tourism objects but decreased by 75 units in 2020.

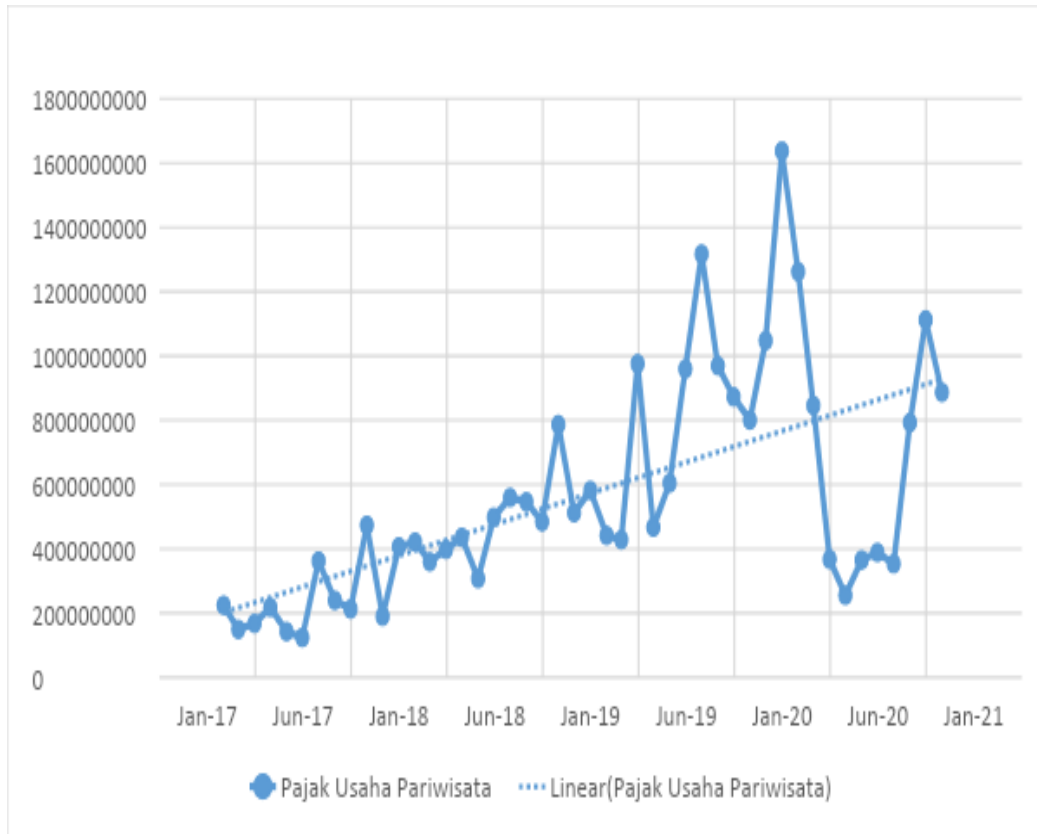


Source: BPS Gowa (2022)

**Figure 2. Number of Tourist Attractions in Gowa Regency February 2017-December 2020**

The tourism business tax in Gowa Regency has an increasing trend from year to year, namely from 2017-2020. It can be seen from the figure below that the lowest tourism business tax is in July 2017, which is IDR 124,213,198. Whereas in 2020 the highest value of the tourism business tax was in January, namely IDR 1,637,218,244. This is shown in the graphic image below, as follows.

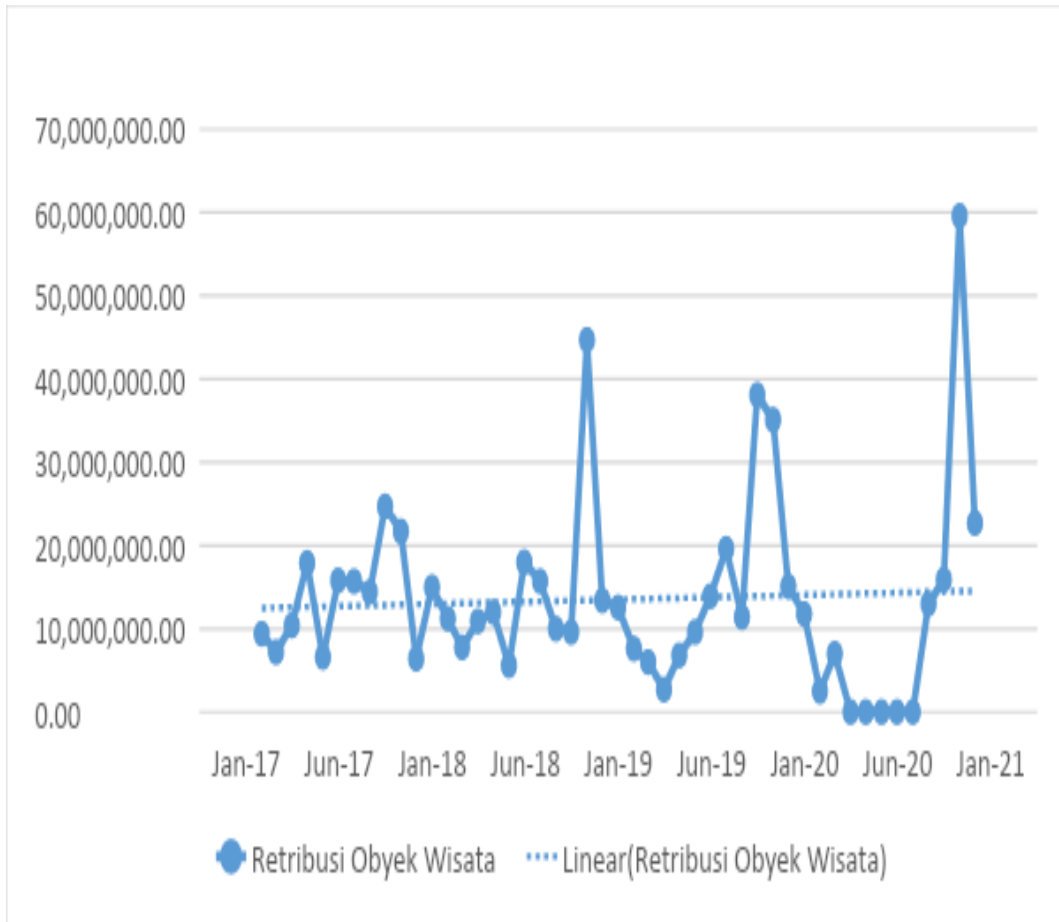




Source; Gowa Regency Tourism and Culture Office

**Figure 3. Tourism Business Tax in Gowa Regency February 2017-December 2020**

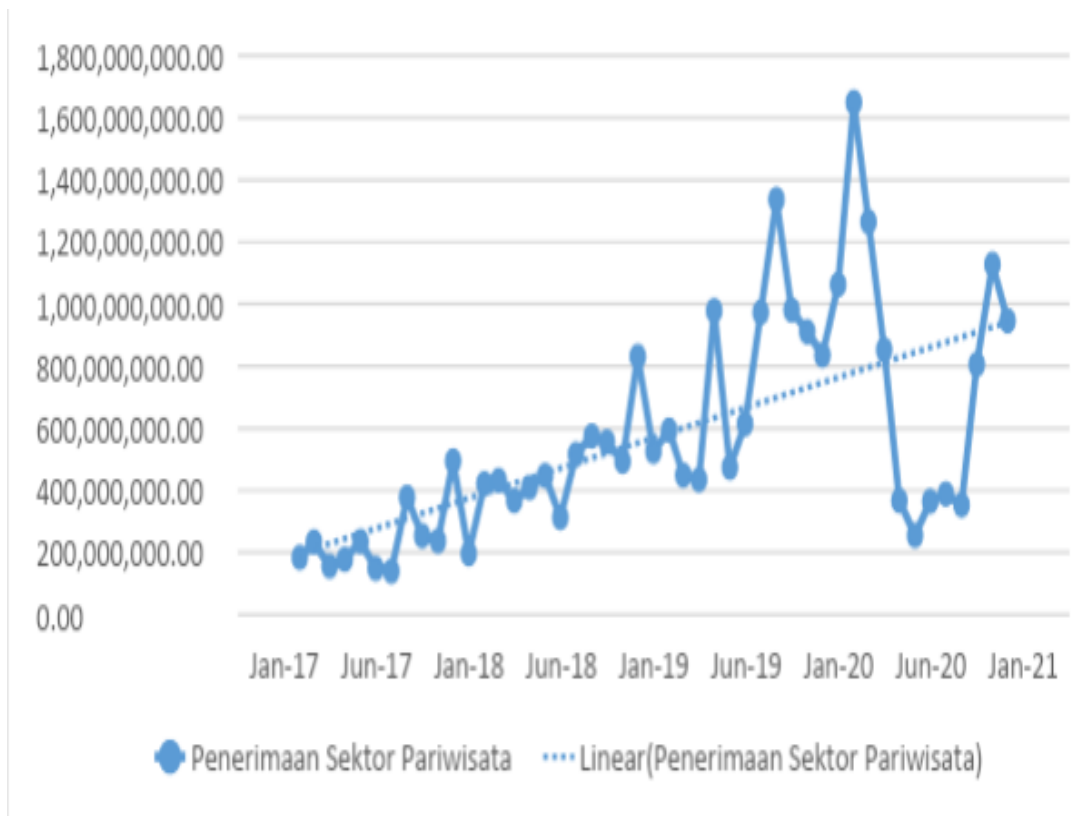
Looking at the development of tourist object fees in Gowa Regency it has decreased very drastically, so it has the lowest value from April to August 2020 which is equal to Rp. 0. However, in October 2020 the value of the levy for tourism objects in Gowa Regency experienced the highest increase, namely Rp. 59,600,000. This is shown in the graphic image below.



Source; Gowa Regency Tourism and Culture Office

**Figure 4. Tourism object fees in Gowa Regency February 2017- December 2020**

The highest development of tourism sector revenue in Gowa Regency was shown in January 2020, namely Rp. 1,648,996,244. However, entering March 2020, the revenue from the tourism sector in Gowa Regency has decreased and shows a very low tourism sector revenue value, namely in May 2020 with a value of Rp. 255,448,502 with a percentage value of -30.49%. This is shown in the graphic image below.



Source: Gowa Regency Tourism and Culture Office

**Figure 5. Tourism Sector Revenue in Gowa Regency February 2017- December 2020**

Estimation results in looking at the effect of the number of tourists, the number of tourist objects, the growth of tourism business taxes, and the growth of tourist object fees on tourism sector revenue in Gowa Regency before this pandemic used multiple regression analysis with OLS (Ordinary Least Square) estimation. Data management in this study uses the Eviews 12 for Windows program.

**Table 1**  
**Effect Estimation Results Before the Covid-19 Pandemic**

The direction of Influence Between Variables	Regression Coefficient	Prob- ability	Descrip- tion	F. Probabil- ity
$\text{LnX}_1 \rightarrow \text{LnY}$	-0.518	0.001	Significant	
$\text{X}_2 \rightarrow \text{LnY}$	0.019	0.000	Significant	
$\text{X}_3 \rightarrow \text{LnY}$	0.005	0.000	Significant	0.000*
$\text{X}_4 \rightarrow \text{LnY}$	0.000	0.286	Not Significant	

\*) Significant at  $\alpha = 5\%$ ,  $R^2 = 66.9\%$

Source: Secondary data after analysis 2021

Based on table 1 above, an F probability value of 0.000 is obtained. This shows that the independent variables are simultaneously able to explain the dependent variable, namely tourism sector revenue in Gowa Regency for the 2017-2020 period.  $R^2$  Gowa Regency tourism sector revenue is 0.669. This means that 66.9 percent of the variation in changes in tourism sector revenue in Gowa Regency can be explained by variations in changes in the number of tourists, the number of tourist objects, the growth of tourism business taxes, and the growth of tourist attraction fees, while the remaining 33.1 percent is influenced by other variables that are not included in this research model.

**Table 2. Effect Estimation Results During the Covid-19 Pandemic**

The direction of Influence Between Variables	Regression Coefficient	Prob- ability	Descrip- tion	F. Probabil- ity
$\text{LnX}_1 \rightarrow \text{LnY}$	-0.063621	0.4755	Not Significant	
$\text{X}_2 \rightarrow \text{LnY}$	0.015700	0.000	Significant	0.00001*
$\text{X}_3 \rightarrow \text{LnY}$	0.003793	0.0086	Significant	
$\text{X}_4 \rightarrow \text{LnY}$	0.000733	0.2755	Not significant	

\*) Significant at  $\alpha = 5\%$ ,  $R^2 = 58.84\%$

Based on table 2 above it is obtained F Probability value of 0.000001. This shows that the independent variables are simultaneously able to explain the dependent variable, namely tourism sector revenue in Gowa Regency for the 2017-2020 period. R2 Gowa Regency tourism sector revenue is 0.588460. This means that 58.8460% of the variation in changes in tourism sector revenue in Gowa Regency can be explained by variations in changes in the number of tourists, growth in tourism business taxes, and growth in tourist object fees, while the remaining 31.9 percent is influenced by other variables not included in the research model.

#### **4. Conclusion**

Carried out, the following conclusions can be obtained: 1) before the Covid-19 pandemic the variables number of tourists, number of tourist objects, and tourism business taxes had a significant effect on tourism sector revenue in Gowa Regency in 2017-2020. 2) before the Covid-19 pandemic the tourism object retribution variable did not have a significant effect on tourism sector

revenue in Gowa Regency in 2017-2020. 3) during the Covid-19 pandemic the variable number of tourist objects and business tax growth had a significant and positive effect in the same direction on tourism sector revenue in Gowa Regency in 2017-2020. 4) During the Covid-19 pandemic, the variable number of tourists and growth in fees did not affect the acceptance of the tourism sector in Gowa Regency in 2017-2020.

From the conclusions above, several suggestions can be put forward as follows:

- 1) Optimizing the management of tourism potential to increase tourism development, the Government or the Gowa Regency Tourism and Culture Office needs to collaborate with related parties including the community around the Tourism Object to jointly push the Gowa Regency tourism development policy. This can be possible if tourism management is carried out by paying close attention to tourist requests, increasing tourism potential, and increasing tourism marketing or tourism promotion through social media.
- 2) the development of the tourism sector can be more targeted; it is hoped that the Regional Government of Gowa Regency will carry out studies that can support steps and policies as well as the preparation of an integrated tourism development program in Gowa Regency.
- 3) For future researchers, it is suggested to replace the variables or add variables other than those used in this model considering that only the variables of the number of tourists, the number of tourist objects, and the tourism business tax are significant in this study which indicates that tourism sector revenue is a complex study and requires multisectoral variables.

## References

- [1] Betega, Dimas. (2010). *Analisis Faktor-Faktor Yang Mempengaruhi Pendapatan Pariwisata Di Kabupaten Klaten Skripsi*. Surakarta: Universitas Sebelas Maret.
- [2] Dian Herdiana. (2020). Rekomendasi Kebijakan Pemulihan Pariwisata Pasca Wabah Corona Virus Disease 2019 (Covid-19) di Kota Bandung. *Jurnal Volume 7 No.1*.
- [3] Fatmadina Alfia Izzata & Shofwan. (2018). *Ananlisis Faktor-Faktor Yang Mempengaruhi Pendapatan Sektor Pariwisata Di Kabupaten Jember*. *Jurnal Ilmiah Ekonomi dan Bisnis, Universitas Brawijaya*.
- [4] Fauziah Afriyani. (2015). *Analisis Faktor-Faktor Yang mempengaruhi Kontribusi Sektor Pariwisata Untuk Mendukung Peningkatan PAD Di Kota Palembang*. *Jurnal, Universitas Indo Global Mandiri Palembang*.
- [5] Hastuti, Rika Tri. (2010). *Analisis Retribusi Sektor Pariwisata Terhadap Pendapatan Asli Daerah Skripsi*. Yogyakarta: Universitas Sanata Dharma.
- [6] Irma Dwina. (2020). *Melemahnya Ekonomi Indonesia Pada Sektor Pariwisata Akibat Dampak Dari Pandemi Covid-19*. *Jurnal Pendidikan IPS*.
- [7] Kadek Dewi Udayanti & Wayan Bagia & Wayan Suwendra. (2015). *Pengaruh Jumlah Wisatawan dan Tingkat Hunian Hotel Terhadap Pendapatan Sektor Pariwisata di Kabupaten Buleleng Periode 2010-2013*. *Jurnal Manajemen Volume 3*.
- [8] Lanny Christi Tangkilisan & Daisy S.M. Engka & KrestD. Tolosang. (2019). *Pengaruh Jumlah Wisatawan Asing dan Domestik Terhadap Pendapatan Asli Daerah Sulawesi Utara Melalui Tingkat Hunian Hotel Sebagai Intervening Variabel*. *Jurnal Berkala Ilmiah Efisiensi Volume 19 No.1*.
- [9] M. Rifki Fadilah. (2020). *Studi Analisis Dampak Covid-19 Ke Sektor Pariwisata Indonesia Serta Respon Kebijakan*. *Policy Assessment, The Indonesian Institue ; Center for Public Policy Research*.

- [10] Mohamad D. Revindo & Syahda Sabrina & Muhammad Sowwam (LPEM FEB UI). (2020). *Dampak Pandemi Covid-19 Terhadap Pariwisata Indonesia: Tantangan, Outlook, dan Respon Kebijakan*. Briefing
- [11] Natalia, N. D., & NUGROHO, S. (2015). *Analisis Penerimaan Retribusi Obyek Wisata Guci Kabupaten Tegal* (Doctoral dissertation, Fakultas Ekonomika dan Bisnis).
- [12] Note, Lembaga Penyelidikan Ekonomi dan Masyarakat, FEB Universitas Indonesia.
- [13] Pleanggra, F., & YUSUF, E. A. (2012). *Analisis Pengaruh Jumlah Obyek Wisata, Jumlah Wisatawan dan Pendapatan Perkapita Terhadap Pendapatan Retribusi Obyek Pariwisata 35 Kabupaten/Kota di Jawa Tengah* (Doctoral dissertation, Fakultas Ekonomika dan Bisnis).
- [14] Saputra, R., & Zulkifli, Z. (2018). *Pengaruh Jumlah Wisatawan, Jumlah Obyek Wisata, Dan Retribusi Obyek Wisata Terhadap Pendapatan Asli Daerah Di Kabupaten Gunung Kidul Tahun 2012-2016* (Doctoral dissertation, STIE Widya Wiwaha).
- [15] Soehardi & Diah Ayu Permatasari & Janfry Sihite. (2020). *Pengaruh Pandemi Covid-19 Terhadap Pendapatan Tempat Wisata dan Kinerja Karyawan Pariwisata di Jakarta*. Jurnal Kajian Ilmiah Edisi Khusus No.1.
- [16] Trisnawati, M., & Sudirman, W. (2015). *Analisis Faktor-Faktor yang Mempengaruhi Kepatuhan Wajib Pajak Membayar Pajak Hotel, Pajak Restoran dan Pajak Hiburan di Kota Denpasar*. E-Jurnal Ekonomi dan Bisnis Universitas Udayana, 4(12), 975-1000.
- [17] Windriyaningrum, Lia Ardiani. (2013). *Pengaruh Tingkat Hunian Hotel, Jumlah Wisatawan, dan Jumlah Obyek Wisata Terhadap Pendapatan Sektor Pariwisata Di Kabupaten Kudus Tahun 1981-2011*, Skripsi. Semarang: Universitas Negeri Semarang.
- [18] Yakup, Anggita Permata. (2019). *Pengaruh Sektor Pariwisata Terhadap Pertumbuhan Ekonomi Di Indonesia* Tesis. Surabaya: Universitas Airlangga.



[19] Yandri Benony Walakula. (2020). *Analisis Eksistensi Pariwisata Indonesia di Tengah Situasi Pandemi Corona Virus Disease (Covid 19)*. Jurnal Ilmu Sosial Keagamaan Volume 1 No.1.