The Relationship between the Implementation of the PSBB Policy and the Number of Tourists in Lumajang Regency during the COVID-19 Pandemic

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A R T I C L E   I N F O

A B S T R A C T

The COVID-19 pandemic has caused several local governments to implement Large-Scale Social Restrictions (PSBB) and Community Activity Restrictions (PPKM) policies to minimize the presence of new clusters of COVID-19 spread. This policy will certainly have implications for limiting community activities, including in the tourism sector. However, there are still not many studies that examine the effect of PSBB on the tourism sector. By using two research methods, namely qualitative (descriptive analysis) and quantitative methods (correlation analysis), this study found two things that can be contributed to research on the tourism sector, especially in Lumajang Regency. First, the results found that the increase in the number of COVID-19 patients was not significantly related to the number of tourists in Lumajang Regency. Second, the results of the study also found that the implementation of the PSBB in the East Java region was significantly associated with a decrease in the number of tourists in Lumajang Regency. From these results, it can be concluded that the development of tourism in Lumajang Regency has a relationship with the implementation of the PSBB policy in the East Java region and not because of the increase in COVID-19 patients in Lumajang Regency itself.

Keywords: Tourism, PSBB, Covid-19, Correlation

INTRODUCTION

The case of COVID-19 in Indonesia was first confirmed in early March 2020. The total number of confirmed cases of COVID-19 in Indonesia is 1,111,671 as of February 3, 2021 (Virus Corona (COVID-19) - Google Berita, 2021; Muttaqien & Sulistyan, 2022). The number of people exposed to Covid continues to increase from the first day and the longer this increase tends to increase and never decrease. The existence of this pandemic not only has an impact on the Indonesian public health sector, but also has an impact on the economic sector, especially tourism.

Tourism is one of the sectors affected by the COVID-19 pandemic. Based on data from BPS, there was a relatively significant decrease in the number of tourists, both for local and foreign tourists. Total foreign tourist arrivals (tourists) to Indonesia decreased by 75% from 2019 to 2020, where the total homestead visits in 2020 decreased to 4.02 million visits. This significant decrease in the number of tourists will certainly affect economic conditions in Indonesia because tourism plays an important role in increasing the country's foreign exchange and growing employment in the areas that are targeted by tourism.
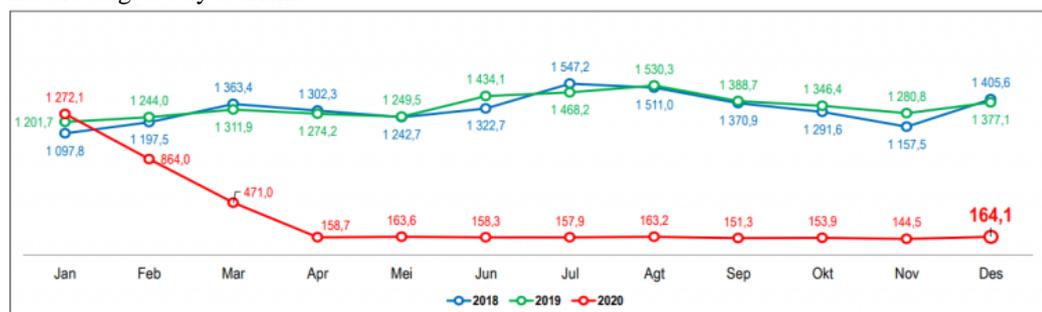

Figure 1. The Development of the Number of Foreign Tourist Visits for the 2018-2020 Period (in thousands)
Source: Environmental Geography Student Association (2021)

To reduce the impact of the COVID-19 pandemic, the government has implemented several policies. Including limiting the number of foreign nationals who will enter Indonesia. This of course causes the tourism industry to indirectly suffer considerable losses due to the closure of access for foreign tourists who will travel to Indonesia. Although on the other hand the policy of closing access from abroad is also implemented to minimize new mutations from the COVID-19 virus.

Not only restrictions on access from abroad, within the country itself the government also implements a policy of limiting activities in the country. The government has implemented the Large-Scale Social Restriction (PSBB) policy since April 2020 to break the chain of the spread of Covid-19 in a number of parts of Indonesia. The implementation of the PSBB stipulates that school, work, and worship activities are carried out at home, while entertainment, tourism and shopping centers are closed and only businesses that provide basic needs may be opened by implementing health protocols. During the PSBB implementation, the operation of transportation modes is limited and residents are prohibited from leaving the PSBB area.

Currently the government no longer uses the term Large-Scale Social Restrictions (PSBB) but replaces it with the Enforcement of Community Activity Restrictions (PPKM). This is because the implementation of PPKM in the field is less firm where community mobility is still high in line with the growing number of Covid-19 cases. PPKM can apply in a number of areas that meet the four criteria set by the government, including the high number of people exposed to COVID.

Figure 2. Number of Indonesian Tourist Trips for the 2019-2020 Period
Source: Publication of Indonesian Tourist Statistics (BPS, 2020)

If we look at the travel data of domestic tourists for the 2019-2020 period in Figure 2, the number of domestic tourists in 2020 experienced a not too large decline. This is different from the high decline in the number of foreign tourists in 2020. Meanwhile, when seen in Figure 3, the number of tourists in Lumajang Regency in 2020 also experienced a relatively high decline. However, this decline only took place in early 2020. In mid-2020, the number of tourists in Lumajang Regency began to show an upward trend.

Lumajang Regency is one of the areas in the southern part of East Java Province. Lumajang Regency consists of 21 sub-districts with regional boundaries, namely the north of Probolinggo Regency, east of Jember Regency, south of the Indonesian Ocean, and west of Malang Regency. As in general, regencies located in the south, Lumajang Regency has considerable potential in the tourism sector. This can be seen from the number of tourists who continue to increase, namely as many as 3258370 tourists in 2017 and up to 3777640 tourists in 2019. However, the COVID-19 pandemic in early 2020 that hit the world including Indonesia affected the potential for economic development of Lumajang Regency.
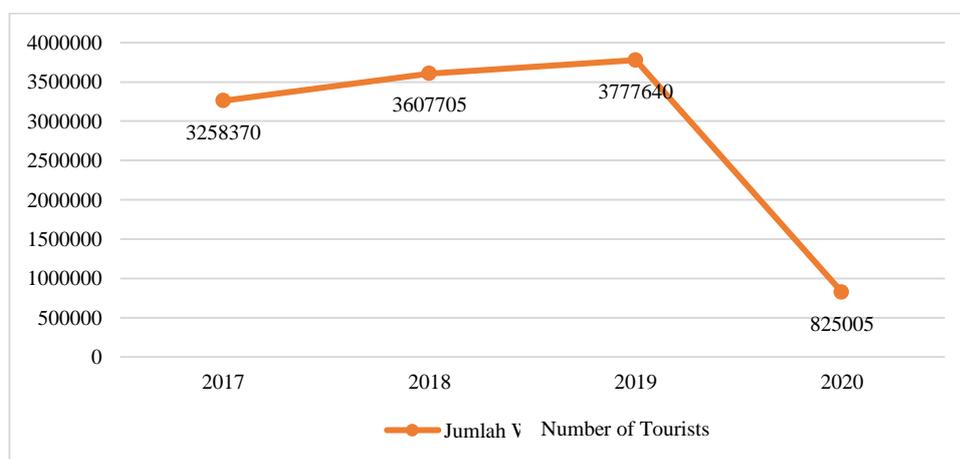

Figure 3. Tourist Visits in Lumajang Regency in 2017-2020
Source: Tourist Visit Data Report (Dinas Pariwisata dan Kebudayaan Kabupaten Lumajang, 2022)

The COVID-19 pandemic not only has an impact on public health, but also affects the economic conditions, education, and social life of the Indonesian people. Based on data from the National Disaster Management Agency, the number of positive patients infected with COVID-19 in Indonesia reached 6,575 people as of April 19, 2020. This pandemic has caused several regional governments to implement Large-Scale Social Restrictions (PSBB) and Enforcement of Community Activity Restrictions (PPKM). Which has implications for limiting community activities, including economic activities, educational activities, and other social activities. The decline in these activities has an impact on the socio-economic conditions of the community, especially in the tourism sector.

From the previous research, the tourism sector has an impact on the economy, the natural environment, local residents and tourists themselves. The development of the tourism sector will be able to trigger national economic growth. Economic growth and tourism have a reciprocal causal relationship (Reciprocal Causal Hypothesis) which means that tourism growth and economic growth provide mutual benefits to one another (Nizar, 2011; Paramita et al., 2021). Rahma and Handayani (2013) used multiple regression analysis and found that there was a positive and significant effect of the number of tourist visits, the number of tourism objects, and per capita income on regional revenues from the tourism sector in Kudus Regency during 1997-2011.

(Suastika & Yasa, 2017) conducted in districts/cities in Bali Province from 2010-2015 using path analysis found two things. First, the number of tourist visits and hotel occupancy rates have a

positive and significant effect on local revenue, while the length of stay of tourists has a negative and insignificant effect. Second, the number of tourist visits, length of stay of tourists and hotel occupancy rates have a positive and significant effect, while local revenue has a negative and significant effect on people's welfare. Meanwhile, Yakup and Harynato (2019) found that tourism has a positive effect on economic growth and vice versa, economic growth has a positive effect on tourism. This study examines the influence of tourism on economic growth in Indonesia. This study uses a simultaneous equation model which is estimated with Two Stage Last Square based on Time Series data during 1975-2017. The results of his research found that tourism sector income does not only come from the money spent, but will also attract foreign capital. From several previous studies, it indirectly has one common thread where the growth of the tourism sector affects the growth of other sectors. However, there are still not many studies that discuss the relationship between the COVID-19 pandemic and the tourism sector. Based on this background, this study aims to analyze (1) the relationship between the COVID-19 pandemic and the number of tourists in Lumajang Regency and (2) the relationship between the PSBB policy on the number of tourists in Lumajang Regency.

METHOD

This research was conducted in Lumajang district, East Java province by taking data on the number of tourists and the number of patients exposed to COVID in Lumajang Regency in the 2017-2020 time period. As for data, the PSBB policy is implemented by entering the code "0" when the PSBB policy is not enforced in East Java and the code "1" if the policy is enforced. The research methods used in this research are qualitative (descriptive) and quantitative (correlation analysis) methods. This study aims to answer two things. First, this study analyzes the relationship between the COVID-19 pandemic and the number of tourists in Lumajang Regency. Second, this study analyzes the relationship between the PSBB Policy on the number of tourists in Lumajang Regency.

The qualitative method was used in this study by describing the movement of data on the number of patients exposed to COVID-19 to the number of tourists in Lumajang Regency. In addition, for the second research question, a qualitative method was used to describe the movement of data between the implementation of the PSBB policy on the number of tourists in Lumajang Regency. The quantitative method is used by using the Pearson product moment correlation analysis to find out (1) the relationship between the COVID-19 pandemic and the number of tourists in Lumajang Regency and (2) the relationship between the PSBB policy on the number of tourists in Lumajang Regency. The use of parson product moment correlation analysis because the data is in the form of intervals. Riduwan (2013) states that the use of Pearson product moment correlation analysis is to determine the degree of relationship between the independent variable and the dependent variable.

Correlation Correlation is a method used to determine the close relationship between two or more different variables described by the size of the correlation coefficient. The correlation coefficient is a coefficient that describes the closeness of the relationship between two or more variables. The size of the correlation coefficient does not describe a causal relationship between two or more variables, but only describes a linear relationship between the variables. In addition, the correlation coefficient also shows a reciprocal relationship so that it will not be a problem when determining the independent or dependent variables in a study (Azwar, 2015). Correlation is also useful in measuring the level of strength of the relationship between two or more variables within a certain range. The level of closeness of the relationship in this correlation lies between the ranges of 0 to 1. The correlation has the possibility of testing in two directions. If the correlation coefficient is positive, it is said to be unidirectional, and vice versa if the correlation coefficient is negative, it is said to be non-unidirectional. The correlation coefficient value lies between -1 to 1. -1 means there is a perfect negative relationship (inverse), 0 means there is no relationship at all, and 1 means there is a perfect positive relationship. In statistics, the correlation coefficient is closely related to the regression equation because the regression equation itself represents the equation of the relationship between

two or more variables (Telussa et al., 2013). The pearson product moment correlation formula (Riduwan, 2013) is:

$$r_{hitung} = \frac{n(\sum XY) - (\sum X).(\sum Y)}{\sqrt{\{n.\sum X^2 - (\sum X)^2\} \quad \{n.\sum Y^2 - (\sum Y)^2\}}}$$

Description:

$rhitung$	: Correlation coefficient
ΣX	: Total Score of Total Variables X
ΣY	: Total Score of Total Variables Y
n	: Total respondens.

RESULTS AND DISCUSSION

Based on BPS data, there was a significant decrease in the number of tourists, both local and foreign tourists, during the COVID-19 pandemic. From 2019 to 2020, the total number of foreign tourist arrivals to Indonesia decreased by 75 percent, while the number of local tourists decreased by 61 percent. This significant decrease in the number of tourists has a very significant impact on economic conditions because tourism plays an important role in increasing state income, foreign exchange, and employment.
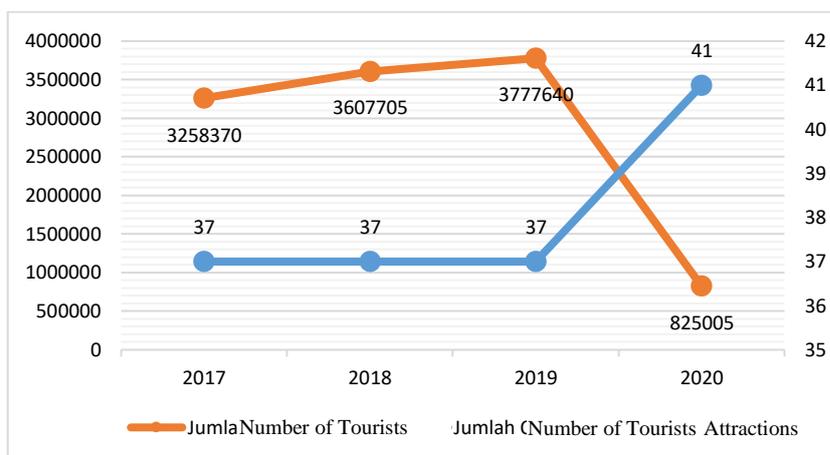

Figure 4. Comparison of Number of Tourists and Number of Tourist Attractions in 2017-2020
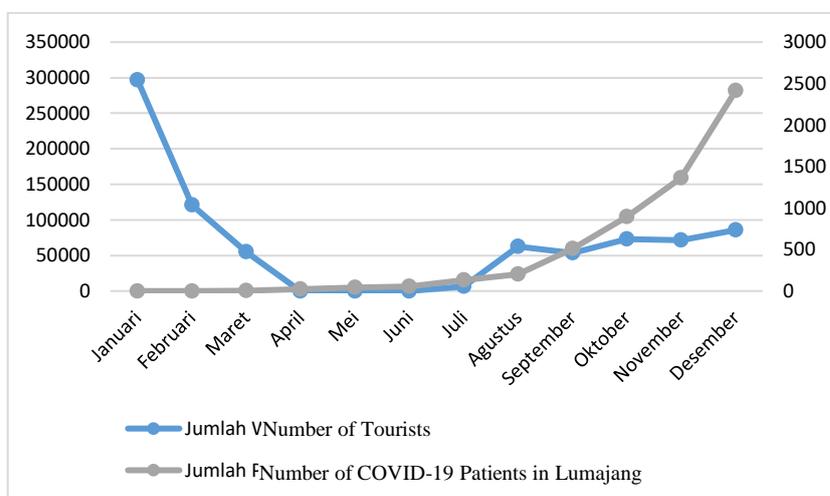Source: Data Processed (2021)

Figure 5. Comparison of the Number of Tourists and the Number of COVID-19 Patients in Lumajang 2017-2020
Source: Data Processed (2021)

Based on the data in Figure 4 above, the pandemic in early 2020 caused the number of tourists in Lumajang Regency to decrease drastically from 377640 tourists in 2019 to 825005 tourists in 2020. This indicates that there is an influence of the COVID-19 pandemic on tourism in Lumajang Regency. On the other hand, the Lumajang tourism sector is experiencing growth. This is indicated by the increasing number of tourism objects in the Lumajang area itself.

When seen in Figure 5, the increase in the number of COVID-19 patients has no effect on the number of tourists in Lumajang Regency. At the beginning of the pandemic, the number of tourists decreased drastically. However, by mid-2020, the number of tourists had begun to show an upward trend. This shows that the increase in the number of COVID-19 patients has no effect on the number of tourists in Lumajang Regency.
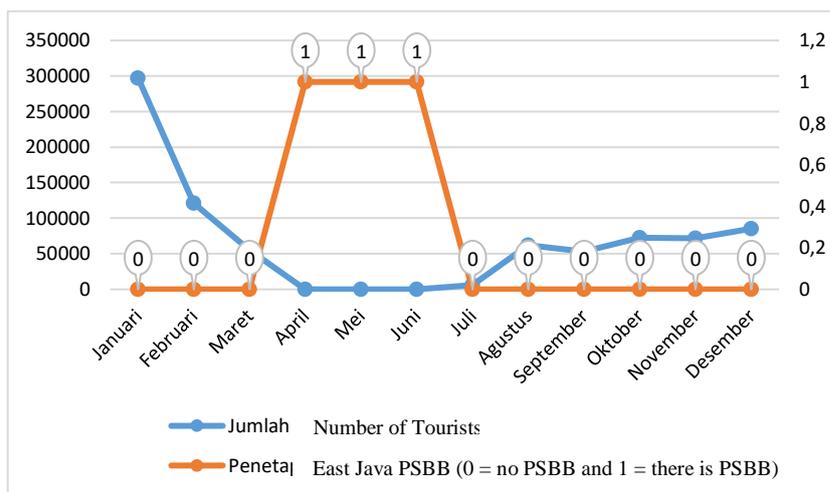

Figure 2. Comparison of the Number of Tourists and the Determination of the East Java PSBB in 2017-2020
Source: Data Processed (2021)

From Figure 6 it is found that the PSBB determination in the East Java region causes the number of tourists to decrease. In this case, the determination of the PSBB in the East Java region directly causes the closure of tourist attractions so that the number of tourists becomes zero.

Table 1. Data and Calculation of Correlation

Name of Month (in 2020)	Total Wisatawan	Determination of East Java PSBB	Total Pasien Confirmed COVID-19 in Lumajang
January	296943	0 (No PSBB)	0
February	120925	0 (No PSBB)	0
March	55271	0 (No PSBB)	3
April	0	1 (There is PSBB)	21
Mei	0	1 (There is PSBB)	45
June	0	1 (There is PSBB)	58
July	6240	0 (No PSBB)	135
August	62399	0 (No PSBB)	205
September	53388	0 (No PSBB)	508
October	72716	0 (No PSBB)	895
November	71763	0 (No PSBB)	1366
December	85360	0 (No PSBB)	2412
Correlation		**-0,51**	**0,03**

Source: Data processed (2021)

From the results of calculations using correlation analysis, it can be concluded that between the number of tourists and the determination of the PSBB in the East Java region, there is a negative and moderate correlation. This shows that the establishment of PSBB in the East Java region has reduced the number of tourists. In this case, the determination of the PSBB in the East Java region directly causes the closure of tourist attractions so that the number of tourists becomes zero. However, the results of the correlation analysis between the number of tourists and confirmed COVID-19 patients in Lumajang Regency showed no correlation. This shows that the addition of the number of COVID-19 patients has no effect on the number of tourists in Lumajang Regency.

The results of the study can be concluded that: (1) from the results of the descriptive analysis it was found that at the beginning of the pandemic, the number of tourists decreased drastically. However, in mid-2020, the number of tourists has started to show an upward trend. This indicates that the increase in the number of COVID-19 patients has little effect on the number of tourists in Lumajang Regency. In addition, there is a correlation analysis that supports that there is no significant relationship between the number of people exposed to Covid and the number of tourists. (2) There is a negative and significant relationship between the implementation of PSBB on the number of tourism in Lumajang Regency. This shows that the implementation of PSBB in the East Java region will be followed by a decrease in the number of tourists. In this case, the determination of the PSBB in the East Java region directly causes the closure of tourist attractions so that the number of tourists is reduced or zero.

CONCLUSION

This research contributes in answering two things. First, this study analyzes the relationship between the COVID-19 pandemic and the number of tourists in Lumajang Regency. Second, this study analyzes the relationship between the PSBB policy on the number of tourists in Lumajang Regency. By using two research methods, namely qualitative and quantitative methods (correlation analysis), this study found two things that can be contributed to research on the tourism sector, especially in Lumajang Regency. First, the results of the descriptive analysis show that at the beginning of the pandemic, the number of tourists decreased drastically and by mid-2020, the number of tourists had

begun to show an upward trend. On the other hand, the results of the correlation analysis show that the increase in the number of COVID-19 patients does not have a significant relationship between the COVID-19 pandemic and the number of tourists in Lumajang Regency. This shows that the increase in the number of COVID-19 patients is not significantly related to the decrease in the number of tourists in Lumajang Regency.

Second, the results of the study also found that between the number of tourists and the determination of the PSBB in the East Java region there was a negative and moderate correlation. This shows that the implementation of PSBB in the East Java region is related to a decrease in the number of tourists. Therefore, from the two results of the analysis, it can be concluded that the development of tourism in Lumajang Regency has a relationship with the implementation of the PSBB policy in the East Java region and not because of the increase in COVID-19 patients in Lumajang Regency itself. In this case, the determination of the PSBB in the East Java region has directly caused the closure of tourist attractions so that the number of tourists is reduced or zero.

In addition, this study also has many limitations due to incomplete data. Therefore, there is a need for further research that can be developed from the results of this initial study. Especially research on the behavior of domestic and out-of-town tourists in traveling during the pandemic. Given that the results of the study show that the development of tourism in the Lumajang area is not influenced by the number of patients exposed to Covid, but is more influenced by the PSBB policy. Moreover, with the 5M health protocol program to prevent COVID-19, of course this will also affect people's behavior in traveling.

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