The Effect Of Covid-19 On The Occurrence Of All Star Hotels On The Island Of Java-Bali During The Pandemic

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Abstract:
Covid-19 is an epidemic that is sweeping across the country right now. The community is greatly affected by this pandemic, especially in the tourism sector, from flights to hotels which are usually crowded with visitors from outside the region and from abroad. Until now, the government is still trying to get the Covid-19 virus to immediately break the chain. The purpose of this analysis is to find out how the influence of Covid-19 on hotel occupancy rates on the islands of Java and Bali. The research sample was obtained from the Central Statistics Agency (BPS). The analysis technique in this study uses regression analysis. From the results of the analysis, it can be seen that there are significant changes in hotel occupancy rates from before and during Covid19. Thus showing that Covid12 has an effect on the hotel economy.

Keywords: Covid-19, Occupancy Rate, Hotel Java Bali

1. Introduction

At the end of 2019 there was a lot of information that abroad there was an intensive Covid-19 virus which had not yet spread to Indonesia until news came back that Covid-19 had spread to Indonesia in early 2020, precisely in March 2020 which is commonly called the corona virus, has claimed many lives (Panday, 2020). On March 2, 2020, President Joko Widodo announced that there were mothers and children affected by the Covid-19 Virus, until the end of March there were 1,528 patients who were declared positive including 136 patients who had died.(www.kompas.com, 2020).

This virus spreads to humans and animals. Then it will attack the respiratory tract which initially in humans is with flu symptoms to cause severe acute respiratory syndrome (SARS). This disease can be spread by droplets from coughing or sneezing. (Severe Acute Respiration Syndrome (SARS)). The virus showed a very significant rapid spread and caused many deaths. The virus has already infected in China and other countries, so WHO confirmed the virus on January 30, 2020. This situation was increasing rapidly every day until March 11, 2020. WHO declared the current outbreak a global pandemic. (Communication for Healthcare (WHO, 2020).

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Due to this virus, many people have been affected, thus causing poverty which is gradually increasing causing a crisis for Indonesia, with economic growth becoming negative based on ideas (Jonnadi, Arius, Amar, Aimon, 2012).

Many business and business sectors have been affected by Covid19. One of the business and business sectors is hospitality, where the large-scale social restrictions (PSBB) for traveling have resulted in reduced hotel occupancy. This has an impact on hotel revenues, and overall impact on the hotel industry. As in the results of previous research by (Tambunan and Panday, 2021) if Covid-19 affects hotel occupancy rates in Central Java Province. With a wider reach, this study was conducted to analyze the impact of COVID-19 on the occupancy rate of star hotels on the island of Java and Bali during the pandemic.

2. Theoretical Background

Economy

Economy is one of the most influential factors in human life. Human life is closely related to economic needs such as housing, food, clothing and others related to human life. A country must regulate economic policies for its country because this is very closely related to the life of its people and national development. (LPPM Batanghari University, 2020).

The losses experienced by Indonesia due to Covid-19 have made the economy worse off with that the government is trying to keep the economy stable with the New Normal system where both community life activities wherever they are must comply with existing protocols and limited activities resulting in employee reductions and salary cuts. Due to this, the percentage of unemployment has increased, production activities have decreased, and state income has decreased which has led to a lack of visitors/tourists to travel to Indonesia. (Panday, 2021).

The economic sectors affected by the Covid-19 Pandemic in Indonesia were numerous, such as layoffs at various companies, decreased salaries for each employee, limited activities in exporting/importing goods, inflation in the country's economic activities, limited air, land and sea transportation activities, there are thousands of hotels experiencing a decrease in placement / occupancy, as well as the loss of tourism foreign exchange due to a reduction in visitors. (Tambunan, 2021)

From the economic impact during the Covid-19 Pandemic, it is very clear that Covid-19 greatly affects economic activities, both for the community and the state. If this pandemic takes a long time, it will make the country even more in economic crisis with a larger percentage.
Hospitality
According to the Decree of the Minister of Tourism, Post and Telecommunication No. KM94/HK103/MPPT1987, the definition of a hotel is one type of lodging accommodation that provides lodging services, provides food and drinks as well as commercial services for hotels. The hotel is a building that provides in no time. Hotel comes from the word hostel which generally comes from the old French language which means "a shelter for immigrants". Currently, hotels are increasingly modern and synonymous with developments that over time the facilities follow current trends with quite a lot of enthusiasts before the pandemic (www.kompas.dampakhotel business).

In this pandemic era, the hotel's economic activities are affected quite heavily due to the lack of hotel occupants. This is due to the government's demands to follow the existing protocol, namely Social Distancing. Social Distancing is one of the protocols that urges people to stay at home and not travel except in very urgent circumstances. In addition, the implementation of Lockdown so that travel routes are tightened both in and out of an area, limiting and even eliminating all activities that result in large crowds of people so that the environment remains conducive (Tambunan, 2021).

3. Methodology

The main object of this research are star hotels on the islands of Java and Bali. This type of research data uses quantitative data. Quantitative data is a type of research which is the basis of research using deductive - inductive data. This data is a theory whose framework, ideas, and research are based on data developed from the problems to be solved to obtain the truth from the results of the field (Thesis Compiler of STAIN Tulungagung, 2012).

In this study, the data source used is secondary data, which is data obtained from other parties such as websites, knowledge books and articles that are used to solve problems. (Research methodology, Burhan, 2005). The data collection technique uses data on the website of the Central Statistics Agency (BPS), which is a non-ministerial government agency responsible for reviewing, compiling and formulating policies in the field of statistics which is open through its website in the form of data on the occupancy rate of Java-Bali star hotels in January – December period 2019 to 2021 (wikipedia.org/Badan_Pusat_Statistik, 2020).

In this study, the data analysis technique used is simple linear regression, which is a statistical method that serves to test the extent of the causal relationship between the Causing Factor Variable (X) and the Resulting Variable. The causal factor is generally denoted by X or also known as the Predictor, while the Effect Variable is denoted by Y or also known as Response. Simple Linear Regression or often abbreviated as SLR.
(Simple Linear Regression) is also one of the statistical methods used in production to forecast or predict the characteristics of quality and quantity. Variable X in this study is Covid-19 and variable Y is the occupancy rate of Java-Bali hotels.

4. Empirical Findings/Result

In this study, the data collected was from the BPS website for Java and Bali and analyzed using SPSS. The following is a description of the overall data related to research data with details per month in the period 2019, 2020 and 2021, namely:

Table 1. Number of Covid-19 Patients in 2019

| Januari | Februari | Maret | April | Mei | Juli | Agustus | September | Oktober | November | Desember |
|---------|----------|-------|-------|-----|------|---------|-----------|---------|----------|----------|
| Jakarta | Jawa Timur | Jawa Barat | Jawa Tengah | Bali | Total Terinfeksi/Bulan |
| 54 | 15 | 42 | 20 | 5 | 136 |
| 87 | 38 | 75 | 41 | 15 | 256 |
| 95 | 49 | 88 | 52 | 19 | 303 |
| 132 | 78 | 112 | 76 | 22 | 420 |
| 165 | 98 | 139 | 91 | 30 | 523 |
| 178 | 126 | 151 | 120 | 37 | 612 |
| 197 | 132 | 157 | 131 | 41 | 658 |
| 180 | 98 | 130 | 118 | 24 | 550 |
| 165 | 75 | 124 | 81 | 15 | 460 |
| 151 | 61 | 88 | 51 | 9 | 360 |

Source: BPS website, 2021

From this data, it can be seen that the emergence of Covid-19 in Indonesia, especially Java-Bali, was in March. With the increase in Covid-19 patients, it continues to increase every month and there is a decline at the end of the month due to the government's efforts with the lockdown system.
Table 2. Number of Covid-19 Patients in 2020

|                | Jakarta | Jawa Timur | Jawa Barat | Jawa Tengah | Bali | Total Terinfeksi/Bulan |
|----------------|---------|------------|------------|-------------|------|------------------------|
| Januari        | 250     | 50         | 67         | 22          | 4    | 393                    |
| Februari       | 487     | 69         | 87         | 31          | 15   | 689                    |
| Maret          | 747     | 93         | 119        | 46          | 19   | 1024                   |
| April          | 4175    | 951        | 862        | 449         | 186  | 6623                   |
| Mei            | 7383    | 4848       | 2157       | 1350        | 363  | 16101                  |
| Juni           | 9525    | 12695      | 3091       | 2766        | 1369 | 29446                  |
| Juli           | 12787   | 18720      | 5423       | 3899        | 2351 | 43180                  |
| Agustus        | 18465   | 22376      | 6987       | 4971        | 5610 | 58409                  |
| September      | 20722   | 25343      | 9034       | 6721        | 7234 | 69054                  |
| Oktober        | 23954   | 28716      | 10234      | 7895        | 9871 | 80670                  |
| November       | 24782   | 29817      | 11002      | 8124        | 10231| 83956                  |
| Desember       | 25987   | 31092      | 12890      | 9890        | 11239| 91098                  |

Source: BPS website, 2021

From this data, it can be seen that at the beginning of the year there was an increase again due to the lifestyle of many people who did not follow government instructions such as doing activities outside with large crowds at New Year's celebrations. This has resulted in a significant increase in impact continuously until the end of the year, because 2020 is the peak of the Covid-19 pandemic in Indonesia.

Table 3. Number of Covid-19 Patients in 2021

|                | Jakarta | Jawa Timur | Jawa Barat | Jawa Tengah | Bali | Total Terinfeksi/Bulan |
|----------------|---------|------------|------------|-------------|------|------------------------|
| Januari        | 30423   | 34287      | 16352      | 12949       | 15790| 109801                 |
| Februari       | 31278   | 35920      | 17038      | 13029       | 16830| 114095                 |
| Maret          | 26090   | 23098      | 15930      | 10838       | 12804| 88760                  |
| April          | 23490   | 22810      | 13893      | 8152        | 10735| 79080                  |
| Mei            | 20889   | 18632      | 10738      | 7729        | 8256 | 66244                  |
| Juni           | 15802   | 13070      | 6209       | 4283        | 4529 | 43893                  |
| Juli           | 9370    | 8272       | 3520       | 1028        | 2038 | 24228                  |
| Agustus        | 5289    | 3640       | 1038       | 989         | 1009 | 11965                  |
| September      | 1730    | 1091       | 872        | 520         | 439  | 4652                   |
| Oktober        | 548     | 346        | 129        | 83          | 76   | 1182                   |
| November       | 115     | 84         | 78         | 54          | 40   | 371                    |
| Desember       |         |            |            |             |      |                        |

Source: BPS website, 2021

From this data, it can be seen that at the beginning of the year the number of Covid-19 patients was still quite high even though the government had implemented PSBB. Because as usual people do a lot of activities with large crowds at the beginning of the new year. However, with good cooperation between the government and the
community, the number of patients continues to decline until the end of the month and until now.

**Table 4. Number of Occupancy of Java-Bali Hotels in 2019**

|                | Jakarta | Jawa Timur | Jawa Barat | Jawa Tengah | Bali | Total Hunian/Bulan |
|----------------|---------|------------|------------|-------------|------|--------------------|
| Januari        | 6984    | 5152       | 4533       | 4249        | 5327 | 26245              |
| Februari       | 6337    | 5265       | 5157       | 4417        | 5648 | 26824              |
| Maret          | 5956    | 5347       | 5269       | 4532        | 5543 | 26647              |
| April          | 5892    | 5301       | 5317       | 4586        | 6003 | 27129              |
| Mei            | 5432    | 4096       | 3879       | 3523        | 5156 | 22086              |
| Juni           | 5051    | 5773       | 5313       | 4914        | 6037 | 27088              |
| Juli           | 6115    | 6008       | 5469       | 4702        | 6171 | 28765              |
| Agustus        | 5811    | 5449       | 4958       | 4515        | 6710 | 27443              |
| September      | 5897    | 5418       | 5060       | 4499        | 6322 | 27196              |
| Oktober        | 6267    | 5993       | 5607       | 4840        | 6330 | 29037              |
| November       | 6417    | 6425       | 5895       | 5218        | 5946 | 29901              |
| Desember       | 6159    | 6277       | 6240       | 5329        | 6255 | 30260              |

Source: BPS website, 2021

From this data, it can be seen that the number of hotel visitors is still within normal limits, but still experienced a decline at the beginning of the pandemic. As described in the table above.

**Table 5. Number of Occupancy of Java-Bali Hotels in 2020**

|                | Jakarta | Jawa Timur | Jawa Barat | Jawa Tengah | Bali | Total Hunian/Bulan |
|----------------|---------|------------|------------|-------------|------|--------------------|
| Januari        | 4112    | 3863       | 2916       | 2473        | 1115 | 14479              |
| Februari       | 4153    | 3639       | 3715       | 2664        | 899  | 15070              |
| Maret          | 4511    | 4020       | 4037       | 3327        | 1024 | 16919              |
| April          | 4659    | 3888       | 3840       | 3218        | 1009 | 16614              |
| Mei            | 4523    | 3500       | 3572       | 2811        | 1035 | 15441              |
| Juni           | 5190    | 4416       | 3819       | 3195        | 1668 | 18288              |
| Juli           | 3172    | 2625       | 1948       | 1522        | 523  | 9790               |
| Agustus        | 3080    | 2939       | 2749       | 2011        | 477  | 11256              |
| September      | 4262    | 4119       | 4459       | 3468        | 946  | 17254              |
| Oktober        | 4433    | 4209       | 4357       | 3505        | 953  | 17457              |
| November       | 0       | 0          | 0          | 0           | 0    | 0                  |
| Desember       | 0       | 0          | 0          | 0           | 0    | 0                  |

Source: BPS website, 2021

From this data, it can be seen that the number of hotel visitors continues to decline by up to 50% from 2019. At the peak of the year the Covid-19 occurred, the government forbade tourists or tourists to visit, so this had an impact on the number of hotel visitors, especially the Java-Bali islands. which is called a metropolitan area.
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Table 6. Number of Occupancy of Java-Bali Hotels in 2021

| Month  | Jakarta | Jawa Timur | Jawa Barat | Jawa Tengah | Bali | Total Hunian/Bulan |
|--------|---------|------------|------------|-------------|------|-------------------|
| Januari| 4474    | 3141       | 3304       | 4485        | 5297 | 20701             |
| Februari| 44243  | 3190       | 3798       | 4428        | 6666 | 62325             |
| Maret  | 4177    | 3951       | 4121       | 4339        | 6119 | 22707             |
| April  | 4291    | 3643       | 3618       | 4690        | 6353 | 22595             |
| Mei    | 4561    | 3008       | 2838       | 4181        | 6755 | 21343             |
| Juni   | 3248    | 3888       | 3104       | 4616        | 7032 | 21888             |
| Juli   | 5879    | 3767       | 3778       | 4744        | 7440 | 25608             |
| Agustus| 5412    | 3843       | 3597       | 4531        | 7383 | 24766             |
| September| 4833   | 3547       | 4153       | 4446        | 6952 | 23931             |
| Oktober| 4872    | 4114       | 4222       | 4616        | 6806 | 24630             |
| November| 5429   | 4173       | 4614       | 4660        | 5592 | 24468             |
| Desember|        |            |            |             |      |                   |

Source: BPS website, 2021

From this data, it can be seen that the number of hotel visitors has approached normal limits as in early 2019, because according to data the number of Covid-19 patients has also decreased, so the government does not set a lockdown and activities outside the home can be carried out even though they are still with restrictions.

So based on the data that has been collected above, the researcher will analyze how the influence of Covid-19 on hotel occupancy rates in Java-Bali using simple linear regression analysis with analysis results as below:

**Normality test**

**Figure 1. Normality Test Results**

Source: Processed data, 2021

Test Results The analysis in the picture above shows the results of the Normality Test where the points approach the line and gather around the line. So it can be concluded that the data is normally distributed and feasible to be tested at a later stage.
Fig 2. Kolmogorov-Smirnov Z . Test Results

| Unstandardized Residual |
|-------------------------|
| N                      | 15 |
| Normal Parameters, b    |
| mean                   | .0000000 |
| Std. Deviation          | 473.70544509 |
| Most Extreme Differences |
| Absolute                | .129 |
| Positive                | .123 |
| negative                | -.129 |
| Test Statistics         |
| asymp. Sig. (2-tailed)  | .200c,d |

Source: Processed data, 2021

Test Results The analysis in the table above shows the results of the Kolmogorov-Smirnov Z test that the results of Asymp. Sig. (2-tailed) is 0.200, so it is more than 0.05.

So it can be concluded that the data is normally distributed and feasible to be tested at a later stage.

Coefficient of Determination

Fig 3. Coefficient of Determination Test Results

| Model Summaryb          |
|-------------------------|
| Model | R   | R Square | Adjusted Square | R    | Std. Error of the Estimate |
|-------|-----|----------|-----------------|------|---------------------------|
| 1     | .904a | .817     | .803           | 491.58737 |

Source: Processed data, 2021

Test results The analysis in the table above shows the results of the Coefficient of Determination Test, namely the Adjusted R Square value resulting in 0.803 or 80.3%, which means that the independent variable has a value of 80.3% and the remaining 19.7% indicates other variables that are not bound in this study.
Hypothesis Test (F Test)

Fig 4. F . Test Results

**ANOVAA**

| Model    | Sum of Squares | df  | Mean Square | F     | Sig.  |
|----------|----------------|-----|-------------|-------|-------|
| Regression | 14019078,685   | 1   | 14019078,685 | 58.012 | ,000b |
| Residual  | 3141555,882    | 13  | 241658,145  |       |       |
| Total     | 17160634.567   | 14  |             |       |       |

Source: Processed data, 2021

Test Results The analysis in the table above shows a significant value of 0.000 which is smaller than 0.05 in the equation 0.000 <0.05, it can be interpreted that all independent variables (simultaneously) have an effect on the dependent variable, because probability (sig F) < a (0.05).

Simple Linear Regression Test and t . Test

Fig 5. Results of Regression Test and t Test

**Coefficients**

| Model    | B       | Std. Error | Beta | t     | Sig.  |
|----------|---------|------------|------|-------|-------|
| 1 (Constant) | 1959,091 | 490,225    |      | 3,996 | ,002  |
| Covid-19 patient | 633     | 0,83       | 0,904 | 7,617 | ,000  |

Source: Processed data, 2021

The results of the analysis test above are the effect of Covid-19 on hotel occupancy rates. The significant value from the analysis results produces a value of 0.000 which is lower than 0.05 or in the equation 0.000 <0.05, meaning that it can be concluded that Covid-19 has a partial and significant effect on the hotel occupancy rate, because if the significant value is less than 0.05 then (H2) will be accepted, which means that there is a significant effect of the independent variable on the dependent variable.

5. Discussion

Based on the results of a simple linear regression test with the help of SPSS, it is explained that Covid-19 has a simultaneous or partial effect on the occupancy rate of star hotels on the island of Java-Bali during the pandemic. This analysis uses simple
linear regression because it only uses one independent variable on one dependent variable.

With the Covid-19, the Government has overcome it with PSBB, Lockdown or PPKM. This causes restrictions on community activities outside the home, closure of tourist areas, closing of visits by foreigners/tourists to Indonesia, restrictions on entry between provinces and between islands.

The existence of such a rule makes five-star hotels, especially the majority on the island of Java-Bali feel the impact, resulting in a decrease in the occupancy rate of the hotel. Because there are no activities or activities that require people to stay, especially hotel visits at tourist attractions.

The results of this analysis are in line with the results of the analysis carried out by Tambunan and Panday (2021) which explained that Covid-19 had an effect on the number of hotel occupancy in Central Java. In addition, the results of this analysis are also in line with the results of the analysis conducted by Sugihamretha (2020) that the Covid-19 outbreak has an impact on the tourism sector in Indonesia.

6. Conclusion

This study aims to analyze whether there is an effect of Covid-19 on hotel occupancy rates on the island of Java-Bali. Based on the analysis test, it shows that the occupancy rate before the pandemic and during Covid19 shows a significant change (in most months). Thus, Covid19 has an effect on hotel occupancy rates on the island of Java-Bali. If the possibility of such a situation persists for a long time, the hotel sector could suffer a very severe loss and the government's treasury will continue to decline.

Based on the analysis and discussion above, there are suggestions as follows:

a. For the government
   Currently, the government has progress in handling Covid-19 so that this situation does not last any longer. The new normal situation has indeed been implemented, but it is better for the government not to completely shut down hotels. Another way that can be done is to reduce the number of hotel residents so that it is better and there is still income for the hotel and employees in it.

b. For Society
   In order to carry out existing protocols to reduce the chain of this Covid-19 virus. So that everything will recover with time and activities can return to normal.

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