

# Analysis of the Impact of Covid-19 on the Performance of Tourism Sector Companies in IDX for the Period 2019-2020

**Andini Dwi Maharani\***, Fira Rizkia Febriani, Khorismawati, Novita Fauzia, John Henry Wijaya  
Faculty of Economics and Business, Widyatama University, Jl. Cikutra No.204A, Bandung, Indonesia  
\*maharani.andini@widyatama.ac.id

**Abstract-** Currently, the world is experiencing a pandemic that is the outbreak of Corona virus Covid-19. The virus was first discovered in Wuhan, China in late December 2019. The virus spreads very quickly to various regions in China and various countries to take many fatalities. On March 2, 2020, for the first time the government announced two cases of Covid-19 positive patients in Indonesia. During the implementation of Social Distancing communities around the world experienced an economic downturn. Quoted from CNBC Indonesia, the Chief Economist of the International Monetary Fund (IMF) predicts the global economy will shrink 3% this year. The economic impact of the Covid-19 pandemic is quite large on the world economy because the Corona virus has forced various business activities and other activities in many countries to be closed and stopped. This study aims to find out the impact after and before Covid-19 on the performance of tourism sector companies listed in IDX. The method used in this research is Different Test. Different test is a form of variable analysis (data) to find out the difference between two groups of data (variables) or more. The results of this study state that there is a significant influence before and after the announcement of Covid-19 in IDX.

**Keywords:** Covid-19; company performance; stock price.

## Introduction

Currently, the world is experiencing a pandemic that is the outbreak of Corona virus Covid-19. The virus was first discovered in Wuhan, China in late December 2019. The virus spreads very quickly to various regions in China and various countries to take many fatalities. On March 2, 2020, for the first time the government announced two cases of Covid-19 positive patients in Indonesian. However, University of Indonesia (UI) Epidemiologist Pandu Riono mentioned the SARS-CoV-2 Corona virus as the cause of Covid-19 that has entered Indonesia since the beginning of January. So the Indonesian government issued a policy of PSBB (Large-Scale Social Restrictions) to break the link of the spread of the corona virus. Indonesian has started to implement lockdown policy in mid-March 2020 conducted simultaneously with other countries.

During the implementation of Social Distancing communities around the world experienced an economic downturn. Quoted from CNBC Indonesia, the Chief Economist of the International Monetary Fund (IMF) predicts the global economy will shrink 3% this year. The economic impact of the Covid-19 pandemic is quite large on the world economy because the corona virus has forced various business activities and other activities in many countries to be closed and stopped. This not only affects the world economy, but has an impact on the Indonesian economy. Indonesian Finance Minister Sri Mulyani said that Indonesia's economic growth projection will only reach 2.3%. In fact, in the worst situations, the economy can be minus up to

0.4%. The causes of this include a decrease in consumption and investment, a decrease in the number of tourism visitors, both domestic and foreign. This year, IMF even predicted that Indonesia's economy will grow only 0.5% from the previous projection of 5% in 2019. This proves that the corona pandemic is very influential on the Indonesian economy.

The Government of Indonesia is rolling out various incentives to mitigate the impact of the corona virus on the domestic economy. Most incentives are directed to support the tourism sector ranging from domestic flight discounts to hotel and restaurant tax exemptions. Understandably, the tourism sector is said to have been hit hardest by the outbreak that originated in Wuhan City, China. In fact, the tourism sector is one of the sectors that has the largest *multiplier effect* in the economy. Because, the tourism sector is supported by various subsectors ranging from transportation, accommodation, to micro, small and medium enterprises industries.

**Table 1. Number of Tourists Visiting Indonesia**

Months	Number of Tourist Visits	Months	Number of Tourist Visits
Des-20	838.978	May-20	163.646
Jan-20	1.272.083	Jun-20	158.256
Feb-20	863.960	Jul-20	157.939
Mar-20	470.970	Agu-20	163.185
Apr-20	160.042	Sep-20	153.498

Source: www.bps.go.id

Based on the table of the number of foreign tourists visiting Indonesia above, it can be seen that the number has decreased significantly from December 2019 to September 2020, it affects the performance of companies that directly impact the share price of each tourism sector company in Indonesia, so that shareholders will consider their decision whether to buy or sell their shares. In addition to shareholders, this is also a consideration for inventors who will invest their capital in Indonesia, especially in the tourism sector.

## LITERATURE REVIEW

### Performance

Each company must always review the performance of the company within a certain period. This activity is often also referred to as company performance. According to Moerdiyanti (2010) revealed that the company's performance is the result of a series of business processes which with the sacrifice of various resources that can be human resources and also corporate finances. If the company's performance improves, it can be seen from the company's activities in order to generate maximum profit. The profit or profit generated will certainly differ depending on the size of the moving company. Based on this process of increasing profit or profit, Nakamura (2011) stated that companies of large size have greater potential to invest their resources. In managing this investment, the company should be able to create value for shareholders as much as possible.

### Stock Price

The share price is one of the indicators of the management of the company. With a high share price can provide profit with the form of capital gain and also a good corporate image, making it easier for

management to get outside funds. According to Jogiyanto (2008), the share price is the price of a stock that occurs on the stock market at a certain time determined by market participants and determined by the demand and supply of shares related in the capital market. According to Simatupang (2010), the stock market price of the company going public is the value traded on the stock exchange. Based on some understanding of stocks according to experts, it can be concluded that the share price is a price formed in accordance with the demand and supply in the stock trading market and is generally the closing price.

## **Hypothesis**

According to Sugiyono (2015), the hypothesis is a temporary answer to the formulation of research problems, where the problem formulation is expressed in the question sentence. Whereas according to Christensen, et al (2016:103) the research hypothesis is the relationship researchers predict between the variables studied. Hypotheses are opinions or statements that are still not necessarily true and must be tested because they are temporary. Hypothesis is a proposition, condition or principle that is considered true and without belief, in order to be drawn logical consequences and in this way then conducted testing (*testing*) about the truth by using the facts - facts of existing data. In this study the hypothesis used is zero hypothesis (*The Null Hypothesis*).

Based on the description of the frame of thought above, the hypotheses formed partially and simultaneously are as follows.

H<sub>1</sub>: There is a Significant Impact Before and After Covid-19 on the Performance of Sector the Tourism Sector Company that in IDX.

## **RESEARCH METHODS**

### **Research Methods**

The method used in this research is Different Test. Different test is a form of variable analysis (data) to find out the difference between two groups of data (variables) or more. Difference test or comparative analysis is often called a significance test. There are two comparative types, which are comparative between two samples and comparative k sample (comparative between more than two samples). Then each comparative model of the sample is divided into two types, namely the sample that is collated (related) and the sample that is not collated or independent (Misbahuddin, 2013).

### **Sample**

Samples are said to be colluding (related) if the samples are not explicitly separated from each other (non mutually exclusive), meaning that one sample member is a member of the other sample. The samples are said to be independent if they are firmly separated from each other, meaning that one sample member is not a member of the other sample (Hasan, 2010).

In the case of one sample, the parametric test used is t-test to distinguish between the average observed sample value and the required average value (population). The t-test assumes that the normal distributed population or sample score comes from a normal distributed population. Interpretation of the t-test assumes that variables are measured at least by interval scale (Ghozali, 2006).

### **Normality Test**

The normality test aims to test whether in the residue the regression model has normal data distribution or not. A good regression model is to have normal distributed residual data (Ghozali, 2013). Normality testing in this study was done with SPSS for windows program. Data normality test criteria is if the result that

appears in data processing is 0.005.

**Statistics t test**

The statistical test t essentially shows how far the impact of one variable explains individually in proving variations of related variables. Hypothesis zero (H0) to be tested is whether a parameter (bi) equals zero, or:

$$H_0: b_i = 0$$

That is, whether an independent variable is not a significant explanation of dependent variables. The alternative hypothesis (Ha), the parameter of a variable is not equal to zero, or:

It has:

That is, it is a significant explanation of dependent variables. To test these two hypotheses used t statistic calculated from the formula as follows:

$$t = (b_i - 0) / S = b_i / S \dots\dots\dots 1$$

where S = standard deviation, which is calculated from the root variance. Variance or S<sup>2</sup> obtained from SSE is divided by the number of degrees of freedom. In other words:

$$s^2 = \frac{SSE}{n - k} \dots\dots\dots 2$$

where n = number of observations; k= number of parameters in the model, including intercept.

**RESEARCH AND DISCUSSION RESULTS**

In this study tested before and after Covid-19 on the performance of 16 sector companies listed on the Indonesia Stock Exchange for the period 2019-2020.

**Normality Test**

Normality tests on regression models are used to test whether residual values resulting from regression are normally distributed. A good regression model is one that has a normally distributed residual value. Test the normality of the data using the graph method by looking at the spread of data at diagonal sources on the normal graph *Kolmogorov-Smirnov*. As the basis for his decision making, if the dots spread around the line and follow a diagonal line and the significance value is greater than 0.05 then the residual data is normal. Residual or normal data is data that spread evenly and the location of the pattern is not too left or right, which is the data obtained has an even distribution of data representing the population.

Paired sample test is part of comparative hypothesis test or comparison test. Data used or in paired sample test is generally interval or ratio scale data (quantitative data). Paired sample test aims to find out if there is an average difference of two samples (two groups) that are paired or related.

Paired test samples are part of parametric statistical analysis. Therefore, the basic rule in parametric statistics analysis, the main requirement is that research data must be distributed normally. To find out if the data we use in paired sample test is distributed normally or not, then we need to do normality test first. Before we enter the steps of the paired sample test, then first we must after know whether the current data ratio before and after Covid-19 distributed normally or not. Therefore, we use normality test to test whether the data is

distributed normally or not. The results of normality test with SPSS can be seen in the table below:

**Table 2. Normality Test  
 One-Sample Kolmogorov-Smirnov Test**

		Unstandardized Residual
N		39
Normal Parameters <sup>a,b</sup>	Mean	0E-7
	Std. Deviation	158.35941253
Most Extreme Differences	Absolute	.167
	Positive	.167
	Negative	-.089
Test Statistic		.167
Asymp. Sig. (2-tailed)		.008 <sup>c</sup>
a. Test distribution is Normal.		
b. Calculated from data.		
c. Lilliefors Significance Correction.		

Source: Process Data Using SPSS

Based on the table above can be seen that the value of significance (Asymp. Sig, what's going on? (2-tailed) amounted to 0.008. It can be concluded that mean has been distributed abnormally because the significance value of Kolmogorov-Smirnov test is less than 0.05 ( $0.008 < 0.05$ ).

### Paired Test result

The hypothesis to be tested in this study relates to the lack of influence between independent variables and dependent variables. Where hypothesis zero (H0) is a hypothesis about the absence of influence, while the alternative hypothesis (H1) is a hypothesis proposed by the authors in this study. The following are the results of t statistical testing using SPSS version 20:

**Table 3. Paired Test**

Paired Samples Statistics					
		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	V1	377.04	104	288.189	28.259
	V22	272.39	104	301.806	29.595
Pair 2	V2	370.46	105	287.126	28.021
	V7	281.42	105	310.856	30.336
Pair 3	V3	373.89	97	287.842	29.226
	V8	275.56	97	307.445	31.216
Pair 4	V4	370.27	85	282.693	30.662
	V9	270.54	85	311.096	33.743
Pair 5	V5	367.86	28	289.537	54.717
	V10	258.32	28	291.632	55.113

Source: Process Data Using SPSS

Judging from the table above states the average value before Covid-19 < after Covid-19, then that means that there is an average difference before after Covid-19. Furthermore, to prove whether the difference is really real (significant) or not, then we need to interpret the results of the paired test sample test containing output paired test samples.

**Table 4. Paired Test Samples Correlations**

<b>Paired Samples Correlations</b>				
		N	Correlation	It's getting you out of here
Pair 1	V1 & V22	104	.823	.000
Pair 2	V2 & V7	105	.852	.000
Pair 3	V3 & V8	97	.830	.000
Pair 4	V4 & V9	85	.837	.000
Pair 5	V5 & V10	28	.884	.000

Source: Process Data Using SPSS

The output above shows the results of correlation test or relationship between the two data or variable pretest relationship with post test. Based on the output above known correlation coefficient value of pair 1 of 0.823, pair 2 of 0.852, pair 3 of 0.830, pair 4 of 0.837 and pair 5 of 0.884 with significance value of 0.000. Because the value of significance < 0.005, then it can be said that there is a relationship between before and after Covid-19.

**Table 5. Paired Samples Test**

		t	df	Sig. (2-tailed)
Pair 1	V1 - V22	6.061	103	.000
Pair 2	V2 - V7	5.556	104	.000
Pair 3	V3 - V8	5.549	96	.000
Pair 4	V4 - V9	5.363	84	.000
Pair 5	V5 - V10	4.144	27	.000

Source: Process Data Using SPSS

The table above, known values is 0.000 < 0.05, then Ho is rejected or Ha is accepted. So, it can be concluded that there are significant differences before Covid-19 and after Covid-19. Which means there is no significant influence before or after the announcement of Covid-19 in IDX.

### **Discussion**

Based on the after results of research before that has been put forward by researchers stated that the average value before Covid-19 < after Covid-19, then that means descriptively there is an average difference before with after Covid-19. Furthermore, to prove sample whether the difference is really real (sample significant) or not, then we need to interpret the results of the test samples paired test containing output paired test samples or in other words there are significant differences both before Covid-19 and after Covid-19. Which means there is a significant influence before and after the announcement of Covid-19 in IDX with correlation or relationship between the two data or variable pretest relationship with posttest. correlation coefficient of pair 1 is 0.823, pair 2 is 0.852, pair 3 is 0.830, pair 4 is 0.837 and pair 5 is 0.884 with

significance value of 0.000.

Because of the significance value  $< 0.005$ , then it can be said that there is a relationship between before and after Covid-19.

This fact can be explained that tourism sector companies listed on the Indonesia Stock Exchange for the period 2019-2020 experienced significant changes to the company's performance.

### **Conclusion**

There period effect is a significant influence before and after the announcement of Covid-19 in IDX. The fact can be explained that tourism sector companies listed on the Indonesia Stock Exchange for the period 2019-2020 experienced significant changes to the company's performance. This fact can be explained that tourism sector companies listed on the Indonesia Stock Exchange for the period 2019-2020 experienced significant changes.

### **References**

1. Ghozali, I. 2015. *Multivariate Analysis Application with SPSS Program*. Semarang: The Penerbi Agency of Diponegoro University.
2. Sugiyono. 2014. *Quantitative, Qualitative, and Combination Research Methods*. Bandung: Alfabeta.
3. Sugiyono, I'm sorry. 2016. *Quantitative, Qualitative, and R&D Research Methodology*. Bandung: Alfabeta.
4. <https://asyharnotes.blogspot.com/2014/11/pengaruh-sektor-pariwisata-terhadap.html>
5. <https://www.kompasiana.com/annisafebrianti/5ebca691d541df28d1413062/penurunan-perekonomian-indonesia-akibat-pandemi-corona>.
6. <https://minangkabaunews.com/artikel-25278-dampak-covid19-terhadap-sektor-pariwisata.html>.
7. <https://www.bps.go.id/indicator/16/1150/2/jumlah-kunjungan-wisatawan-mancanegara-per-bulan-ke-indonesia-menurut-pintu-masuk-2017---sekarang.html>.
8. <https://www.pahlevi.net/pengertian-harga-saham-adalah-jenis-jenis-dan-tujuan/>.
9. <https://pengayaan.com/pengertian-kinerja-perusahaan-menurut-para-ahli/>.
10. <https://rajasoal.com/uji-beda-atau-analisis-komparatif-berdasarkan-teori-para-ahli/#>.