

STOCK PERFORMANCE ANALYSIS OF KOMPAS 100 BEFORE AND AFTER THE PANDEMIC COVID-19 IN INDONESIA

Teguh Agus Setiawan¹, Siti Nur Haliza², Nur' Alvia Mulki³, Suhadiono⁴

Article Information:

Keywords:
Stock Price, Kompas 100, Investment, The COVID-19

Article History:
Received : January 3, 2022
Revised : January 7, 2022
Accepted : January 8, 2022

Article Doi:
<http://doi.org/10.22441/indikator.v6i1.14148>

ABSTRACT

This study analyzes the performance of the Kompas 100 stock before and after the COVID-19 pandemic in Indonesia in the period 2019 – 2020. This study uses stock price data for 40 companies listed in the Kompas 100 stock group on the Indonesia Stock Exchange. Data were analyzed using IBM SPSS Version 25 with a paired sample difference test model (compare means paired samples t test). This study found that there were differences in the situation before and after the COVID-19 pandemic on the volatility of the Kompas 100 stock price on the Indonesia Stock Exchange. In general, there has been a decline in the share price of Kompas 100 on the Indonesia Stock Exchange which reached -12.46% after the pandemic in 2020 compared to before the COVID-19 pandemic situation in 2019.

PRELIMINARY

Coronavirus disease (covid-19) is a disease that is endemic almost all over the world. In just a short time, the spread of this virus continues to increase and even adds to the death toll rapidly. This very fast and difficult to control spread is declared a pandemic and strategic steps are needed to overcome it. This incident began at the end of 2019 with the news of a new emerging infectious disease in Wuhan City, Hubei Province, China caused by Coronavirus Disease (Covid-19). This is reminiscent of the incident 17 years ago, when the Severe Acute Respiratory Syndrome (SARS) outbreak first appeared in China. When viewed from the death rate due to the virus (Case Fatality Rate or CFR), the CFR of Covid-19 is lower than the CFR of SARS, which is 2% while SARS reached 10%. Although the CFR is lower, Covid-19 cases are growing rapidly and have spread to more than 200 countries in the world. As the coronavirus spreads, governments around the world are struggling to find ways to prevent the spread of the coronavirus. Some countries prohibit visitors from abroad and even out of town to visit, and are also required to self-quarantine for 14 days before entering their country/city.

However, as the situation spirals out of control and the risk of a worldwide pandemic increases, this issue could increase the difficulty for the entire world in reducing the spread of the coronavirus. Governments around the world are struggling to find ways to prevent the spread of the coronavirus. Some countries prohibit visitors from abroad and even out of town to visit, and are also required to self-quarantine for 14 days before entering their country/city. However, as the situation spirals out of control and the risk of a worldwide pandemic increases, this issue could increase the difficulty for the entire world in reducing the spread of the coronavirus. Governments around the world are struggling to find ways to prevent the spread of the coronavirus. Some countries prohibit visitors from abroad and even out of town to visit, and are also required to self-quarantine for 14 days before entering their country/city. However, as the situation spirals out of control and the risk of a worldwide pandemic increases, this issue could increase the difficulty for the entire world in reducing the spread of the coronavirus.

In its release, the Indonesia Stock Exchange stated that all stock exchanges in the world had experienced a significant decline in security prices. This is also shown by the composite stock price index on global exchanges which simultaneously fell during the pandemic. The situation and conditions also show that if investors currently invest in stocks, the situation will be the same as when investors bought shares in the last seven years. It turns out that there is an opportunity for investors to play in the Indonesian capital market by investing in stocks and realizing profits when the world economy moves to improve or grow rapidly again after the COVID-19 pandemic is resolved. This phenomenon can also be seen in various other exchanges in the world. Stock markets in the UK and Singapore, showing similar conditions, which is quite severe and interesting in the same pattern. In general, investors around the world can experience the same opportunities if they re-enter the stock market today, and to achieve the potential for huge profits in the future.

Theories about existing stock prices have been debunked in a short time through the COVID-19 pandemic. Currently, there are three major groups of entrepreneurs in the world, namely the first business sector group most affected by COVID-19, such as the tourism sector, lifestyle goods, shopping centers, and cafes. The second business group is a business sector with a turnover of between 30% - 50%. They still have the opportunity to invest in portfolios in the stock market by choosing low-priced and promising stocks through adequate cash flow. The third group is business people who can reap big profits in the COVID-19 pandemic, such as providers of basic necessities, medicines, personal protective equipment, and sectors that produce goods needed during the pandemic. The Kompas 100 stock index, which is the leading or favorite stock on the Indonesia Stock Exchange, which has high liquidity and large market capitalization, has also not escaped the COVID-19 pandemic. Restrictions on large-scale social activities as the main protocol for mental health and safety in Indonesia have severely slowed economic activity. Investors are worried that many companies whose shares are listed on the Indonesia Stock Exchange, especially in the leading stock group in Kompas 100, will be disrupted, so this is what causes these shares to experience price corrections. Panic had occurred in the early stages of the COVID-19 outbreak. Restrictions on large-scale social activities as the main protocol for mental health and safety in Indonesia have severely slowed economic activity. Investors are worried that many companies whose shares are listed on the

Indonesia Stock Exchange, especially in the leading stock group in Kompas 100, will be disrupted, so this is what causes these shares to experience price corrections. Panic had occurred in the early stages of the COVID-19 outbreak. Restrictions on large-scale social activities as the main protocol for mental health and safety in Indonesia have severely slowed economic activity. Investors are worried that many companies whose shares are listed on the Indonesia Stock Exchange, especially in the leading stock group in Kompas 100, will be disrupted, so this is what causes these shares to experience price corrections. Panic had occurred in the early stages of the COVID-19 outbreak.

A large-scale system of social restrictions to lockdowns must be put in place to break the chain of massive spread. As a result, many people lose their jobs and income because of the workplace, and the potential income suddenly stops and disappears. Corona virus transmission has occurred due to body contact between sick people and healthy people since mid-December 2019. Thus, the prevention of crowds in the human population in each location must be reduced (Zhu et al., 2020). Starting from the first case of pneumonia infected with the novel Coronavirus (2019-nCoV) in Wuhan, Hubei Province, China in December 2019 and January 2020. Transmission occurs rapidly through close human contact (Li et al., 2020). The COVID-19 pandemic is indeed extraordinary, and is also capable of shaking up oil price volatility, stock market risks and geopolitics, and the uncertainty of economic policy in the United States in the time-frequency frame. The risk of developing COVID-19 is perceived differently in short-term and long-term situations and can be seen as an economic crisis (Sharif, Aloui and Yarovaya, 2020).

A study of 56 countries during the first quarter of 2020 shows that the relationship between company characteristics and stock price reactions to COVID-19 cases indicates that there has been a decline in stock prices due to the pandemic. The result of this study is to evaluate the reaction of the company's international stock prices to COVID-19 (Ding et al., 2020). The impact of infectious diseases such as the COVID-19 virus shows a negative and significant impact on stock returns in all companies in China (Al-Awadhi et al., 2020). Studies confirming the effect of fractal transmission of the COVID-19 pandemic on the market show that the effect of fractal transmission disappears over time in the medium and long term and can recover from the effects of stock price volatility (Okorie and Lin, 2020). The stock market is responding actively to the COVID-19 pandemic. This is reinforced by the increasing number of accumulated deaths due to the corona virus, which significantly lowers stock prices. That is, stock market returns decrease as the number of confirmed cases increases. In this situation, the stock market also responded more strongly to the number of confirmed cases than to the increase in the number of deaths. The adverse market reaction was stable during the early days of cases and between 40 and 60 days after cases were confirmed earlier (Liu et al., 2020). Through the pandemic, the COVID-19 situation has shifted a valuation theory that is firmly grounded in the company's fundamentals to the reasonableness of the company's stock price with the influence of the current crisis. So a company that used to have good fundamentals can turn drastically into very bad in this abnormal situation and vice versa. A study conducted by Hutauruk and Ghazali (2020), (Hutauruk et al., 2014) shows that the company's financial fundamentals and the ability of earnings per share are the determining factors for the company's

stock price. Thus, in a certain situation outside the company, it can be one of the triggering factors for changes in the share price of the company concerned.

RESEARCH METHODOLOGY

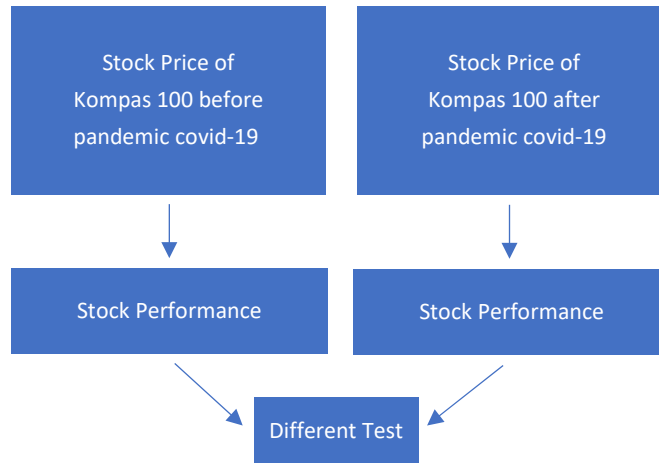
The research method used is an event study using a quantitative approach. Event study is an approach or research methodology that uses financial market data with the aim of measuring the effect of a specific event on the value of a company, and where this is reflected in the price and volume of stock transactions (MacKinlay, 1997). This quantitative approach is based on positivism as a supporter in taking certain populations and samples so that data collection and analysis is statistical in nature for hypothesis testing.

This study uses secondary data originating from the Indonesia Stock Exchange website, especially on historical stock price data at the active closing price in the Kompas 100 stock group until the time span of the research data was obtained. The sampling technique is purposive sampling technique or the sample is taken intentionally with the criteria of all companies whose shares are registered and active in the Kompas 100 stock group on the Indonesia Stock Exchange on December 31, 2019 or before the COVID-19 pandemic and December 31, 2020 or after occurrence of the COVID-19 pandemic. The data in this study were divided into time groups, namely the assumption of closing stock prices before the COVID-19 pandemic (31 December 2019) and closing stock prices after the COVID-19 pandemic (31 December 2020) or reaching 365 days in 2020. The analytical tool used to support this research is to use the paired samples test to test for differences in the comparison mean as an appropriate statistical test tool for this problem (Hair et al., 2010). Furthermore, the analysis of the average difference test used in this study is to use the support of the IBM SPSS version 25 software. The analytical tool used to support this research is to use the paired sample test to test for differences with the comparison mean as an appropriate statistical test tool for this problem (Hair et al., 2010). Furthermore, the analysis of the average difference test used in this study is to use the support of the IBM SPSS version 25 software. The analytical tool used to support this research is to use the paired sample test to test for differences with the comparison mean as an appropriate statistical test tool for this problem (Hair et al., 2010).

Furthermore, the analysis of the average difference test used in this study is to use the support of the IBM SPSS version 25 software.

Framework

The following is a research framework carried out based on the existing problems, namely:



Hypothesis

Based on the results of previous studies and the research framework that has been described, the following hypotheses are formulated:

H0 : There is no difference between the situation before and after the COVID-19 pandemic on the volatility of the Kompas 100 stock price

Ha : There is a difference between the situation before and after the COVID-19 pandemic on the volatility of the Kompas 100 stock price

RESULTS AND DISCUSSION

Stock Price Volatility Analysis In the initial analysis, an initial analysis of stock price volatility was carried out based on data collected from Kompas 100 for the time period before the COVID-19 pandemic and after it occurred in Table 1 as follows:

No	Name	Stock code	Before the Pandemic (31 December 2019)	After the Pandemic (31 December 2020)	Percentage Increase (Decrease)	Note:
1	Astra Agro Lestari Tbk	AALI	Rp14,575	Rp12,325	-15.44%	Down
2	Ace Hardware Indonesia Tbk.	ACES	Rp1.495	Rp1,715	14.72%	Up
3	Adhi Karya (Persero) Tbk.	ADHI	Rp1.175	Rp1,535	30.64%	Up
4	Adaro Energy Tbk.	ADRO	Rp1.555	Rp1,430	-8.04%	Down
5	Aneka Gas Industri Tbk.	AGII	Rp695	Rp900	29.50%	Up
6	AKR Corporindo Tbk.	AKRA	Rp3.950	Rp3.180	-19.49%	Down
7	Sumber Alfaria Trijaya Tbk.	AMRT	Rp880	Rp800	-9.09%	Down
8	Aneka Tambang (Persero) Tbk	ANTM	Rp840	Rp1,935	130.36%	Up
9	Agung Podomoro Land Tbk.	APLN	Rp117	Rp188	60.68%	Up
10	Astra International Tbk.	ASII	Rp6.925	Rp6.025	-13.00%	Down
11	Alam Sutera Realty Tbk.	ASRI	Rp238	Rp242	1.68%	Up
12	Adi Sarana Armada Tbk.	ASSA	Rp740	Rp635	-14.19%	Down
13	Bank Central Asia Tbk.	BBCA	Rp6.685	Rp6,770	1.27%	Up

14	Bank Negara Indonesia (Persero) Tbk.	BBNI	Rp7,850	Rp6.175	-21,34%	Down
15	Bank Rakyat Indonesia (Persero) Tbk	BBRI	IDR 4,400	Rp4.170	-5.23%	Down
16	State Savings Bank (Persero) Tbk.	BBTN	Rp2.120	Rp1,725	-18.63%	Down
17	Bank Danamon Indonesia Tbk.	BDMN	Rp3.950	Rp3.140	-20.51%	Down
18	Bekasi Fajar Industrial Estate Tbk.	BEST	Rp216	Rp180	-16.67%	Down
19	BFI Finance Indonesia Tbk.	BFIN	Rp560	Rp560	0.00%	Stable
20	Regional Development Bank of West Java and Banten Tbk.	BJBR	Rp1.185	Rp1,550	30.80%	Up
21	Regional Development Bank of East Java Tbk.	BJTM	Rp685	Rp680	-0.73%	Down
22	Bank Mandiri (Persero) Tbk.	BMRI	Rp7,675	Rp6.325	-17.59%	Down
23	Global Mediacom Tbk.	BMTR	Rp348	Rp290	-16.67%	Down
24	Bank CIMB Niaga Tbk.	BANGA	Rp965	Rp995	3.11%	Up
25	Bank Brisyariah Tbk	BRIS	Rp330	Rp2,250	581.82%	Up
26	Barito Pacific Tbk.	BRPT	Rp1,510	Rp1.100	-27.15%	Down
27	Bumi Serpong Damai Tbk.	BSDE	Rp1.255	Rp1.225	-2.39%	Down
28	National Syariah Pension Savings Bank Tbk	BTPS	Rp4.250	Rp3.750	-11.76%	Down
29	Charoen Pokphand Indonesia Tbk	CPIN	Rp6,500	Rp6.525	0.38%	Up
30	Ciputra Development Tbk.	CTRA	Rp1,040	Rp985	-5.29%	Down
31	Puradelta Lestari Tbk.	DMAS	Rp296	Rp246	-16.89%	Down
32	Delta Dunia Makmur Tbk.	DOID	Rp280	Rp352	25.71%	Up
33	Dharma Satya Nusantara Tbk.	DSNG	Rp460	Rp610	32.61%	Up
34	Elnusa Tbk.	ELSA	Rp306	Rp352	15.03%	Up
35	Erajaya Swasembada Tbk.	ERAA	Rp359	Rp440	22.56%	Up
36	Surya Esa Perkasa Tbk.	ESSA	Rp268	Rp210	-21.64%	Down
37	XL Axiata Tbk.	EXCL	Rp3.150	Rp2,730	-13.33%	Down
38	Gudang Garam Tbk.	GGRM	IDR 53,000	Rp41,000	-22.64%	Down
39	Gajah Tunggal Tbk.	GJTL	IDR 585	Rp655	11.97%	Up
40	HM Sampoerna Tbk.	HMSP	Rp2,100	Rp1,505	-28.33%	Down

(Table 1. Compass 100 Stock Volatility)

Based on the results of the initial analysis in Table 1, it shows that the total price of all shares before and after the COVID-19 pandemic was Rp. 145,513 and Rp. 127,405. Meanwhile, the average stock price before and after the COVID-19 pandemic was IDR 3,638 and IDR 3,185. This also shows that stock prices have decreased by -12.46% after the COVID-19 pandemic. There were 16 companies that experienced an increase in stock prices after the COVID-19 pandemic and as many as 23 companies that experienced a decrease in price and 1 company that experienced a fixed price. Companies that managed to experience an increase in stock prices after the COVID-19 pandemic in ascending order were Ace Hardware Indonesia Tbk (ACES), Adhi Karya (Persero) Tbk (ADHI), Aneka Gas Industri Tbk (AGII),

Statistical Analysis and Hypothesis Testing

The next analysis is to conduct a paired test, where a paired test is carried out to compare the average difference between treatments when observations are carried out in pairs. In this

case, the difference between paired values is assumed to be normally distributed (Hsu and Lachenbruch, 2008) (Ho, 2006). Paired sample testing compares the mean of two matched case groups or examinations at two different time points (Ross et al., 2017). The use of paired t samples must consider the consistency of the average standard deviation and the correlation between data obtained from two different occasions (Rietveld and van Hout, 2017). Uses the difference test to determine whether two independent samples have different mean values.

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Sebelum	3637,8250	40	8552,87873	1352,32887
	Sesudah	3185,1250	40	6643,82566	1050,48107

(Table 2. Paired Samples Statistics)

The table above shows that after the COVID-19 pandemic the average share price of Kompas 100 was Rp. 3,185.13 or has been negatively corrected by (12.53%) from the average price of Kompas 100 shares before the COVID-19 pandemic was Rp. Rp 3.37.83. In addition, the correlation of the paired samples can also be shown in Table 3 as follows:

Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	Sebelum & Sesudah	40	,997	,000

(Table 3. Paired Samples Correlations)

The output results in Table 3 also show the results of the correlation or relationship between two data showing the situation before and after the COVID-19 pandemic. The correlation coefficient is 0.997 with a significance value (Sig.) of 0.000 or <0.05 which indicates a significant relationship between the two periods. Furthermore, the results of the different paired sample test on the Kompas 100 stock price in the situation before and after the COVID-19 pandemic are in Table 4 as follows:

Paired Samples Test

		Paired Differences				t	df	Sig. (2-tailed)	
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Sebelum - Sesudah	452,70000	1987,46618	314,24599	-182,92252	1088,32252	1,441	39	,158

(Table 4. Paired Samples Test)

The next step is to conduct an analysis to answer the hypothesis that has been put forward. Furthermore, determining the significance in this case is 5%. Determining the value of t count and based on these calculations, the value of t count is 1.441. The results of the t

distribution table with $= 5\%/2 = 0.025$ with degrees of freedom (df) $n-1 = 40-1 = 39$, then the t table value = 2.022. It was concluded that because t count < t table ($1.441 < 2.022$) then H_0 was rejected, meaning that there was a difference in stock value between before and after the COVID-19 pandemic situation. Thus, t count < t table or $1.441 < 2.022$ or shows an insignificant effect (Santoso, 2012, 2014, 2018). In addition, because the significance value is greater than or > 0.05 or $0.158 > 0.05$, H_0 is rejected and H_a is accepted. Thus, the Kompas 100 stock price experienced a difference in value during the period before and after the COVID-19 pandemic or stock prices with high volatility and tended to decline. The results of this analysis also show that the research hypothesis (H_0) is rejected and (H_a) is accepted.

CONCLUSION

Based on the results of the study, it can be concluded that there are differences in stock performance before and after the COVID-19 pandemic on the Kompas 100 stock which illustrates the decline in performance during the pandemic that hit Indonesia. This can be seen by the performance of stocks that are included in the Kompas 100 category during the pandemic, which has decreased stock performance because during this pandemic all the world's economies experienced a decline, which affected the performance of Kompas 100 shares.

The COVID-19 pandemic has provided a new experience in the world of the world stock market in general, and especially in the Kompas 100 - IDX. It requires important attention from investors and issuers to the situation that brought about the economic crisis in almost all fields. This study will contribute to supporting analysis for investors, issuers, stakeholders, and other interested parties to be wiser in investing and be able to predict the Kompas 100 stock price in the future, in the midst of the ongoing COVID-19 pandemic situation. the time limit can be known with certainty.

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