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IMPACT BEFORE AND AFTER THE COVID-19 PANDEMIC ON LQ45 STOCK VOLATILITY

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ABSTRACT

The purpose of this study was to find out the difference between LQ45 stocks before and after the COVID-19 pandemic. The period used in this study is 2019-2020 using data from 45 companies whose shares are included in the LQ45 group listed on the Indonesia Stock Exchange. The data in this study were processed using IBM SPSS version 25 with a different test model (compare means paired samples t-test). It is found if there is a difference in the situation before and after the COVID-19 pandemic in the volatility of the price of the LQ45 shares listed on the Indonesia Stock Exchange. In general, there was a decrease of -6.14% after the incident in 2020 compared to before the COVID-19 pandemic situation occurred in 2019. There were 13 companies or reached 28, there were as many as 32 companies, or as much as 71.11 percent whose share value decreased. Issuers with the core business of national television, mining, pulp, distributor of heavy equipment, communication equipment, construction, some banking, spinning and weaving, and animal feed can be a choice for future investment.

Keywords: *Stock prices, Investments, LQ45-Indonesia Stock Exchange, Pandemic COVID-19.*

1. INTRODUCTION

Coronavirus (COVID-19) began to appear in the city of Wuhan in December 2019 and quickly spread throughout China. This disease is also widespread, without clinical symptoms for sufferers. This disease is very dangerous. and attacks people with old age and other congenital diseases related to the respiratory tract[1]. Prevention that might be done to prevent further spread of the virus is to implement health protocols through large-scale social restrictions to locking. Therefore, the safety of the soul and being able to avoid the coronavirus are the most critical factors in this period. The COVID-19 pandemic was felt by countries affected by this virus and had a positive impact on the economy, which gave birth to a massive economic crisis throughout the world[2]. Although several countries that were previously affected by the COVID-19 virus have moved towards improvement, several other countries are still at the peak of the pandemic, which in this case includes Indonesia. Various public sectors and the business world were

greatly affected by this global event, including the global stock market, especially on the Indonesia Stock Exchange[3].

At present, there are three significant gatherings of business visionaries on the planet, specifically the principal business area bunch generally impacted by Coronavirus, like the travel industry area, way of life products, malls, and bistros. The subsequent business bunch is a business area that has a turnover of between 30% - 50% [4]. They actually have the potential chance to put resources into a portfolio in the financial exchange by choosing low-estimated and promising stocks through satisfactory income. The third gathering is money managers who have had the option to create immense gains during the Coronavirus pandemic, like suppliers of food, meds, individual defensive gear, and areas that produce merchandise required during a pandemic. The LQ45 stock record, which is the main or most loved stock on the Indonesia Stock Trade, which has high liquidity and enormous market capitalization, has not been saved from the Coronavirus pandemic [5]. Limitation of huge scope social exercises as the

fundamental convention for psychological wellness and security in Indonesia has significantly eased back financial movement. Financial backers are stressed that many organizations whose offers are recorded on the Indonesian Stock Trade, particularly those in the main stock gathering on LQ45, will be upset, so this makes these stocks experience a value correction [6].

The Coronavirus pandemic is for sure unprecedented, and is likewise fit for shaking oil cost unpredictability, financial exchange, and international dangers, as well as monetary strategy vulnerability in the US in a period recurrence outline. The gamble of creating Coronavirus is seen contrastingly in short and long haul circumstances and should be visible as a financial crisis[7]. The spread of the COVID-19 pandemic has also affected the Indian stock market. There is a statistically strong negative correlation between the COVID-19 pandemic and the closing price variable[8]. The COVID-19 pandemic had a strong and negative impact on oil prices, CO2 emissions, and stock market volatility in the first quarter of 2020 using the VAR method[9]. The COVID-19 pandemic has been devastating because of its impact on the Spanish stock market. There had never been such a phenomenon before. Thus, the Spanish stock market must take a vital policy response to the unfavorable situation after this pandemic[10].

In general, the Dow Jones stock price index experienced a significant decline or change during the COVID-19 epidemic, while the S&P 500 stock index and Euronext 100 stock index did not experience significant changes[4]. However, the price of the composite stock index on the Indonesia Stock Exchange had a positive and more significant effect after the COVID-19 pandemic than before[7]. The COVID-19 pandemic, which was also the most severe pandemic in human history, had a huge impact on the Japanese financial market. There is a strong correlation between the COVID-19 distribution network and business networks that function as financial risk management[4]. This pandemic situation also has an impact on share prices on the Indonesia Stock Exchange in the US dollar exchange rate[8].

Based on several empirical findings from previous research, it shows that the post-pandemic impact of COVID-19 has had a strong influence on financial markets or stock prices in the United States and Asia. However, the influence of stock indexes in Europe in this case is not too big. Seeing this situation, the spread of the COVID-19 pandemic which has strong social and economic impacts in many countries will be an illustration of the risk of the financial stock market in the future.[11].

2. THEORETICAL STUDY

The concept of a portfolio begins when a person or investor invests in more than one investment instrument. Portfolios are not only carried out in two different investment instruments but also deposits or two different stocks. Investment actions with this model intend to diversify the level of risk so that the funds invested have minimal risk[12]. Other instruments will replace the decline in one investment instrument. Thus, as an investment owners, investors must have a diversified portfolio of funds so that the funds previously held do not experience a significant decline. In carrying out proper portfolio risk management, attention must be paid to compatible portfolio construction as well as proper portfolio management[13].

Markowitz first introduced portfolio theory through the principle of not placing eggs in one basket, but eggs must be placed in several baskets to avoid the risk of broken eggs.[14]. This theory became very famous with investment and rate of return. However, Markowitz focuses more on the level of risk than the rate of return. This argument also underlies that investors will always choose a high rate of return with low risk. So investors will always stick to the level of risk of their portfolio. Markowitz's theory focuses on the portfolio to spread risk. This theory is then criticized for further improvement. Elton developed this theory by proposing an alternative to selecting which stocks to include in the portfolio by using excess return to beta (ERB). The ERB itself is the difference between the rate of return on stock and the rate of return on risk-free assets, which is then divided by the beta of the stock[15].

network analysis model applied in the portfolio model. This model is presented in the form of a model that is always associated with inputs and outputs, especially in the form of cash in and cash out[16]. Portfolio analysis can provide an in-depth and comprehensive overview of financial risk modeling, with an emphasis on practical applications, empirical realities, and a historical perspective[9]. Research conducted by Manurung and Berlian (2004), based on Markowitz's portfolio theory on the Indonesia Stock Exchange, can determine the optimal portfolio in an active area. This study provides asset allocation from investors' investments with various risks that can be tolerated by investors. Furthermore, research by ((Gneezy, Kapteyn, and Potters, 2003) shows that more information and more flexibility result in less risk-taking. The market price of risky assets will be much higher if the feedback frequency and decision flexibility are reduced. The results of the theoretical study and previous empirical work show that investment theory focuses on the level of risk and return on investment.

One of the most basic theories, when an investor invests, is the valuation theory. The theory discusses the valuation of the assets invested, both in the form of real

assets and financial assets or in this case shares. The valuation of these two types of assets is very different because of their very different characteristics. Investors should conduct an initial analysis through the collection of historical data and information. In addition to the main framework in the study of valuation theory, it turns out that the impact of economic analysis can also be a separate valuation material for investors in providing an assessment of the resilience of individual stocks that are their investment targets.

In the stock price valuation approach, what is estimated is the value of these shares in the future. The values of the approaches used are generally fundamental and stochastic approaches. The fundamental approach is an approach by assessing the company's fundamentals and economic fundamentals that have an impact on these fundamentals. Furthermore, this fundamental approach can also be expressed with a relative value approach. The relative value approach suggests that stock prices are compared in a way that is proportional to other variables. Approach relative to other variables is the act of choosing, which is considered appropriate and reasonable with the stock price. Thus, with the fair value of the company, the fair value is influenced by variables that affect stock prices. Thus the fair price of a company can also be seen from its shares. After adopting the GAAP-IFRS based on the results of each relevant difference between the book value and stock income and using the stock price as the dependent variable, the relevance of the book value increases with the market price of the stock. Meanwhile, the relevance of share income experienced a significant decline in stock market prices[17].

An investigation of 56 nations during the principal quarter of 2020 showed that the connection between organization qualities and stock value response to Coronavirus cases demonstrated that there had been a decrease in stock costs because of the pandemic. The aftereffects of this study are to assess the response of organizations' global stock costs to Coronavirus [9]. The effect of irresistible illnesses, for example, the Coronavirus infection shows a negative and critical effect on stock returns in all organizations in China [2]. Concentrates on affirming the impact of fractal transmission from the Coronavirus pandemic available show that the impact of fractal transmission vanishes over the long run in the medium and long haul and can recuperate from the impacts of stock cost unpredictability [10]. The financial exchange is effectively answering the Coronavirus pandemic. This was supported by the rising number of collected passings due to the Covid, which fundamentally brought down stock costs. That is, securities exchange returns decline as the quantity of affirmed cases increments. In this present circumstance, the financial exchange likewise answers all the more emphatically to the quantity of affirmed cases than to the expansion in the

quantity of passings. Unfriendly market responses balanced out during the beginning of cases and somewhere in the range of 40 and 60 days after cases were affirmed before [2]. Through the pandemic, the Coronavirus circumstance has moved the valuation hypothesis which is unequivocally founded on organization basics to the decency of organization stock costs affected by the ongoing emergency. So an organization that used to have great basics can definitely change to be exceptionally terrible in this strange circumstance as well as the other way around.

A review led by Hutauruk and Ghazali (2020), [7] shows that the organization's monetary essentials and the capacity to acquire per share are the deciding variables at the organization's stock cost. So a specific circumstance outside the organization can be one of the setting off factors for changes in the organization's portion cost.

Based on the literature and empirical studies used to support the research, a conceptual research framework can be created which can be shown in Figure 1 as follows:

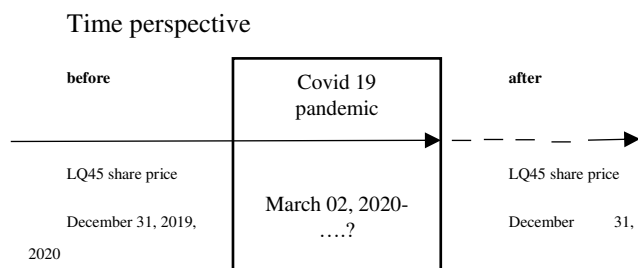


Figure 1. Conceptual framework

(source: adapted from theory and empirical 2023)

Based on the description in Figure 1, the research hypothesis can be put forward as follows:

H_0 : There is no difference between the situation before and after the COVID-19 pandemic in the volatility of LQ45 stock prices

H_a : There is a difference between the situation before and after the COVID-19 pandemic in the volatility of the LQ45 stock price

3. RESEARCH METHODOLOGY

This study uses a quantitative approach research methodology. An event study is a research approach or methodology that uses financial market data to measure the effect of an event that is specific to the value of a company, and where this is reflected in the price and volume of stock transactions [4].

This quantitative methodology depends on positivism as a help in taking specific populaces and

tests with the goal that the assortment and examination of information are measurable in nature in the system of speculation testing. This study utilizes optional information starting from the Indonesian Stock Trade site, especially on authentic stock cost information at shutting costs that are dynamic in the LQ45 stock gathering up to the time of the examination information. The examining method is purposive testing strategy or the example is taken purposely with the measures of all organizations whose offers are enrolled and dynamic in the LQ45 gathering of offers on the Indonesia Stock Trade on December 31 2019 or before the Coronavirus pandemic happened and December 31 2020 or after the Coronavirus pandemic.

The information in this study is partitioned into time gatherings, to be specific the presumption of shutting stock costs before the Coronavirus pandemic (31 December 2019) and shutting stock costs after the Coronavirus pandemic (31 December 2020) or arriving at 365 days in 2020.

The logical instrument used to help this exploration is to utilize a matched examples test to test for contrasts with the mean of the correlation as a fitting measurable test device for this issue [18]. Moreover, the examination of the typical contrast test utilized in this review is to utilize support from IBM SPSS variant 25 programming.

4. 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 LQ45 for the period before the COVID-19 pandemic occurred and after it occurred in Table 1 as follows:

Table 1

No	initial	Sebelum Pandemi Covid-19	Sesudah Pandemi Covid-19	Presentasi kenaikan /penurunan	ket
		31DES2019	31DES2020		
1.	SCMA	1.405.00	2.280.00	62.51%	Naik
2.	INDY	1.190.00	1.720.00	44.80%	Naik
3.	INCO	3.630.00	5.110.00	40.25%	Naik
4.	INRP	7.710.00	10.415.00	35.49%	Naik
5.	UNTR	21.525.00	26.590	23.60%	Naik
6.	IRAA	359.00	440.00	22.56%	Naik
7.	TMG	11.475.00	13.850.00	20.70%	Naik
8.	PTPP	1.585.00	1.865.00	17.67%	Naik
9.	PTBA	2.660.00	2.810.00	5.64%	Naik
10.	SMGR	12.000.00	12.425.00	3.54%	Naik
11.	BBCA	33.000.00	33.850.00	2.58%	Naik
12.	SRIL	260.00	262.00	0.77%	Naik
13.	CPIN	6.500.00	6.525.00	0.38%	Naik
14.	WRKA	1.990.00	1.985.00	-0.25%	turun
15.	TKIM	10.275.00	10.225.00	-0.49%	turun
16.	BSDE	1.255.00	1.225.00	-2.39%	turun
17.	WSKT	1.485.00	1.440.00	-3.03%	turun
18.	JPEA	1.535.00	1.465.00	-4.56%	turun
19.	BBRI	4.400.00	4.170.00	-5.23%	turun
20.	CTRA	1.040.00	985.00	-5.29%	turun
21.	BTPS	4.010.00	3.750.00	-6.48%	turun
22.	ADRO	1.555.00	1.430.00	-8.04%	turun
23.	KLBF	1.620.00	1.480.00	-8.64%	turun
24.	PWON	570.00	510.00	-10.53%	turun
25.	JSMR	5.175.00	4.650.00	-10.53%	turun
26.	UNVR	8.400.00	7.350.00	-12.50%	turun
27.	TPJA	10.375.00	9.075.00	-12.53%	turun
28.	ASII	6.925.00	6.025.00	-13.00%	turun
29.	EXCL	3.150.00	2.730.00	-13.33%	turun
30.	INDF	7.925.00	6.850.00	-13.56%	turun
31.	ICBP	11.150.00	9.575.00	-14.13%	turun
32.	TLKM	3.970.00	3.310.00	-16.62%	turun
33.	BABR	7.675.00	6.325.00	-17.59%	turun
34.	BBTN	2.120.00	1.725.00	-18.63%	turun
35.	AKRA	3.950.00	3.180.00	-19.49%	turun
36.	BNNI	7.850.00	6.175.00	-21.34%	turun
37.	GGRM	55.000.00	41.000.00	-22.64%	turun
38.	PGAS	2.700.00	1.655.00	-32.73%	turun
39.	INTP	19.025.00	14.475.00	-23.92%	turun
40.	BRPT	1.510.00	1.100.00	-27.15%	turun
41.	MNCN	1.575.00	1.140.00	-27.62%	turun
42.	HMSP	2.100.00	1.505.00	-28.33%	turun
43.	MEDC	865.00	590.00	-31.79%	turun
44.	ANTM	840.00	321.00	-61.78%	turun
45.	LPPI	4.210.00	1.275.00	-69.71%	turun
Total Saham Yang Mengalami Kenaikan		104,689.00	119,882.00	21.85%	naik
Rata-Rata		7,979.86	9,110.14		
Std. Dev		9,895.43	10,511.13		
Total Saham Yang Mengalami Penurunan		181,670.00	146,566.08	-17.64%	turun
Rata-Rata		6,115.93	4,986.83		
Std. Dev		9496.20135	7420.07053		
Total Keseluruhan		297,004.01	276,848.07	-6.14%	turun
Rata-Rata		6,600.08	6,152.16		
Std. Dev		9461.24156	8520.62558		

Source: IDX LQ45- (data to be processed in 2023)

Based on the results of the initial analysis in Table 1, shows that the total price of all shares before and after the COVID-19 pandemic was IDR 297,004.01 and IDR 276,848.07. Meanwhile, the average share price before and after the COVID-19 pandemic was IDR 6,600.08 and IDR 6,152.16. This also shows that the stock price decreased by -6.14% after the COVID-19 pandemic with a standard deviation of 9461.24156 before the pandemic and 8520.62558 after the pandemic. 13 companies experienced an increase in their share prices after the COVID-19 pandemic and 32 companies that experienced a decrease in their prices. Companies that have managed to experience an increase in share prices after the COVID-19 pandemic, based on the order of increase, are PT Surya Citra Media Tbk (SCMA),

Statistical Analysis and Hypothesis Testing

The following examination is to do matched tests, in which matched tests are performed to analyze the mean distinctions between medicines when perceptions are made two by two. For this situation, the distinction between the matched qualities is thought to be regularly distributed [19]. Matched example testing analyzes the method for two matched case gatherings or assessments at two different time points [9]. The utilization of

matched examples t should consider the consistency of the mean standard deviation and the relationship between's the information acquired from two unique occasions [4]. Utilize the distinction test to decide if two free examples have various means. The difference t-test is done by comparing the difference between the two average standard error values of the difference in the average of the two samples or the formula can be written as follows[9].

The standard error differences in mean values are usually distributed, so the purpose of the difference test is to compare the means of two groups that are not related to each other. The other output results in this difference test are in the form of paired sample statistics in the following table:

Table 2. Paired Samples Statistics

		Means	N	std. Deviation	std. error
Pair1	Before	6,600.08	45	9461.24156	1415.67087
	Pandemic				
	COVID19				
	After	6,152.16	45	8520.62558	1376.68987
	Pandemic				
	Covid19				

Source: IBM SPSS 25 (data processed 2023)

In Table 2 it shows that after the COVID-19 pandemic, the average LQ45 share price was IDR 6,152.16 or it had been corrected negatively by (6.78%) from the average price of LQ45 shares before the COVID-19 pandemic of Rp. 6,600.08. Besides that, the correlation of the paired samples can also be shown in Table 3 as follows:

Table 3. Paired Samples Correlation

		N	correlation	Sig
Pair1	Before the Pandemic	45	0.861	0.000
	COVID19&After			
	Covid19 pandemic			

Source: IBM SPSS 25 (data processed 2023)

The output results in Table 3 also show the results of the correlation or relationship between the two data which show the situation before the pandemic and after the COVID-19 pandemic. The correlation coefficient yields a value of 0.861 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 paired different sample tests on the LQ45 stock price in the situation before and after the COVID-19 pandemic are in Table 4 as follows:

Table 4. Paired Samples Test

		Pair1
		Before-after COVID-19
<i>Paired Differences</i>	Means	437.80812
	std. Deviation	2145.78201
	std. Mean error	325.08712
	95% Confidence Lower	-228.32171
	<i>The interval of the upper difference</i>	1221.24067
<i>t</i>		1,223
<i>df</i>		44
<i>Sig.(2 tailed)</i>		0.1788

Source: IBM SPSS 25 (data processed 2023)

Next is to look at the results of the research data normality test using the One-Sample Kolmogorov-Smirnov Test through Table 5 as follows:

Table 5. Data Normality Test

		BEFORE	AFTER
N		45	45
Normal Parameters ab	Means	6,600.08	6,152.16
MostExtreme	std. Deviation	9461.24156	8520.62558
Differences	absolute	.242	.233
	Test Statistics		
	Positive	.224	.222
	Negative	-.242	-.233
		.242	.233
Asym. Sig. (2-tailed)		.000	.000

- Test distribution is Normal
- Calculated from data
- Lilliefors Significance Correction

Source: IBM SPSS 25 (data processed 2023)

The results of the data normality test in the paired data difference test before and after the COVID-19 pandemic in Table 5 show that the data distribution is otherwise normal.

The next step is to analyze to answer the hypothesis that has been put forward. Furthermore, determining the significance in this case is equal to 5%. Determine the value of t count and based on these calculations, the value of t count is 1.337. The results of the t distribution table with $\alpha = 5\%/2 = 0.025$ with degrees of freedom (df) $n-1 = 45-1 = 44$, then the value of t table = 2.015 is obtained. It was concluded that because t count < t table (1.337 < 2.015) then H_0 was rejected, meaning that there was a difference in stock values between before and after the COVID-19 pandemic situation. So that then t count < t table or 1.213 < 2.015 or shows an

insignificant effect[20]. Besides that, because the significance value is greater than or > 0.05 or $0.188 > 0.05$, H_0 is rejected and H_a is accepted. Thus, the LQ45 share 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.

Discussion

Based on the results of the analysis, shows that there is a positive and not significant difference between the average stock price before the COVID-19 pandemic and the average stock price after the COVID-19 pandemic for LQ45 shares on the Indonesia Stock Exchange. In the early period after the pandemic, stock prices tended to experience high volatility or price declines in all business sectors. Over time, starting from the 1st quarter of 2020, stock prices began to experience price improvements in several corporate sectors, and this was getting better in the 2nd quarter of 2020 and continued until the 3rd quarter of 2020. But until the end year or on December 31, 2020, there were only 13 companies in LQ45 whose share prices had increased while the other 32 tended to decrease.

This experience shows that systemic risk has occurred and investors must be really strong in experiencing and studying this situation and must be able to make investment decisions with the right strategy. The COVID-19 pandemic situation was initially on a short-term scale, but gradually moved on a massive long-term scale. The results of this study also show that Markowitz's portfolio theory can be applied as an alternative to reduce the level of risk, by splitting investments into various other stock options and not focusing on just one stock.[21]. In addition, stock risk in the form of stock beta also needs attention[22]. In this situation, the stock price is also sometimes in a position full of irregularities, so it is necessary to obtain addressing and analysis from time to time.[23],[24]. Besides that, it is also in line with the signal theory by Spence (1973) where the government can announce various economic indicators in each period for anticipation for all parties. In addition, in certain situations and conditions, companies with the most profitable prospects will optimally provide signals about their conditions so that investors will know which issuers to choose and continue their investment.[25].

The conditions that occurred at LQ45-IDX show that stock price volatility has occurred which is quite high and almost evenly distributed in almost all business sectors after the COVID-19 pandemic, where business actors and investors experience panic by adjusting to new situations and pressures. economy Crysis. However, entering the 4th quarter of 2020, it was seen that several companies experienced a fairly fast recovery and even experienced growth compared to the

period before the pandemic occurred. The eight companies that have managed to experience an increase in their share prices after the COVID-19 pandemic occurred, namely, in particular, were dominated by the national television sector, PT. Surya Citra Media Tbk rose to 62.51%, followed by the mining sector, namely: PT. Indika Energy Tbk (INDY) rose to 44.80%, PT. Vale Indonesia Tbk (INCO) increased by 40.25%, PT Indotambangraya Megah Tbk (ITMG) increased by 20.70%, and PT Bukit Asam Tbk increased by 6.02%. This was followed by the national television sector, namely through PT Surya Citra Media Tbk, which increased by 5.64%.

Then followed by shares in the pulp business, distributor of heavy equipment, communication equipment, construction, property, some banking, spinning and weaving as well as animal feed.

Conclusion

Coronavirus (COVID-19) is a virus that infects the human respiratory system, with a pandemic-scale spread that originated in Wuhan China at the end of 2019, spreading massively throughout the world. Until now there has not been found a drug that can overcome it. Health protocols are being enforced around the world ranging from large-scale social distancing to lockdowns, diligent hand washing, and wearing masks. All aspects of social and economic life were greatly affected. Financial markets were no exception when they were badly affected in the early days[26]. Most of the world's stock markets experienced severe price declines with high volatility, so they had to be corrected. The negative and significant impact of the COVID-19 pandemic has cumulatively increased the number of victims exposed. Leading stocks with high liquidity with large market capitalization and included in the LQ45 stock index on the Indonesia Stock Exchange have also been affected by the COVID-19 pandemic. The results of the statistical analysis show that there is a difference in stock prices between before and after the COVID-19 pandemic. There has been share price volatility and the majority of LQ45 member companies experienced a significant decline in share prices[1].

This study will contribute to supporting analysis for investors, issuers, stakeholders, and other interested parties to be wiser in investing and to be able to predict the price of LQ45-IDX shares in the future, during the ongoing COVID-19 pandemic situation and cannot be known with certainty.

AUTHORS' CONTRIBUTIONS

The COVID-19 pandemic has provided new experiences in the world of world stock markets in general, and especially in LQ45 - IDX. Investors and issuers need important attention to the situation that brought about the economic crisis in almost all fields.

Portfolio theory from Markowitz deserves to be a major concern for investors and issuers in dealing with this situation and as a step for future investment sustainability. The mining sector, the television media sector, the heavy equipment distributor sector, Islamic banking, property, spinning and weaving as well as animal feed need to get important attention for investors who want the continuity of their investment, bearing in mind that this sector can be a wise investment choice in the future.

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The conditions that occurred at LQ45-IDX show that stock price volatility has occurred which is quite high and almost evenly distributed in almost all business sectors after the COVID-19 pandemic, where business actors and investors experience panic by adjusting to new situations and pressures. economy Crisis. However, entering the 4th quarter of 2020, it was seen that several companies experienced a fairly fast recovery and even experienced growth compared to the period before the pandemic occurred. The eight companies that have managed to experience an increase in their share prices after the COVID-19 pandemic occurred, in particular, were dominated by the national television sector, namely PT. Surya Citra Media Tbk rose to 62.51%, followed by the mining sector, namely: PT. Indika Energy Tbk (INDY) rose to 44.80%, PT. Vale Indonesia Tbk (INCO) increased by 40.25%, PT Indotambangraya Megah Tbk (ITMG) increased by 20.70%, and PT Bukit Asam Tbk increased by 6.02%. This was followed by the national television sector, namely through PT Surya Citra Media Tbk, which increased by 5.64%.

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