

UDC 332

## IMPACT OF THE ANNOUNCEMENT OF THE IMPLEMENTATION OF PPKM ON STOCK RETURNS IN THE NON-CYCLICALS SECTOR ON THE INDONESIA STOCK EXCHANGE

Kusumantari I Dewa Ayu Diah\*, Sutrisna Dewi Sayu

Faculty of Economics and Business, University of Udayana, Bali, Indonesia

\*E-mail: [ayudiahkusumantari@gmail.com](mailto:ayudiahkusumantari@gmail.com)

### ABSTRACT

Covid-19 pandemic entered Indonesia in March 2020 had an impact on various activities, include economic activities. The Indonesian government has also issued various policies, one of which is the implementation of PPKM to limit community activities. This study aims to determine the effect of PPKM announcements on stock returns on the IDX. This study use non-cyclicals sector which got the most impact of decrease close price value in July 2021. The sample was determined using a purposive sampling technique and obtained 78 companies. Data were analyzed using one sample T-test. The research period is 11 trading days, from June 24 to July 8, 2021. The results indicate PPKM announcement had impact on the stock return of the non-cyclicals sector on the IDX. The practical implication is this study can be used as a consideration for investors in making investment if there are events related to government policies in the future.

### KEY WORDS

Abnormal return, event study, efficient market, stock market.

The emergence of the Covid-19 pandemic has a very influential impact on all aspects, both on public health, education, social society and the economy. From an economic point of view, the impact of the pandemic has had an impact on business activities, showing that many workers have been laid off, companies that have started to lay off their businesses, to a sharp decline in income in almost all industries. Indonesia is a country that has not been spared the impact of Covid-19. The announcement of the first case of Covid-19 in Indonesia by President Jokowi on March 2, 2020 caused the Jakarta Composite Index (JCI) to fluctuate and slump to 6.5%. The incident occurred on March 9, 2021 until the IDX stopped trading shares ([finance.detik.com](http://finance.detik.com)).

Table 1 – Composite Stock Price Movements and All Sectors in Q1 2020

Index	Q4 2019	Q1 2020	Variance
IHSG	6,300	4,539	- 1,761
Agriculture	1,524	928	- 596
Mining	1,549	1,184	- 365
Basic Industry & Chemical	978	580	- 398
Miscellaneous Industry	1,224	733	- 491
Consumer Goods	2,053	1,659	- 394
Property, RE & Bid. Constructi	504	338	- 165
Infras, Utilities, & Transportatio	1,138	805	- 332
Finance	1,355	990	- 365
Trade, Service, & Investment	770	602	- 168

Source: *IDX Statistics Report (Q1) 2020, processed.*

There was a drastic decrease in the close price at the end of the first quarter of 2020 compared to the end of 2019. Cnbc.com noted that during 2020 the IDX had made seven temporary trading halts for 30 minutes due to the decline in the Composite Stock Price Index (JCI), which is regulated in Kep-00024/BEI/03-2020 dated March 10, 2020 regarding Changes in the Guidelines for Handling Continuity of Trading on the Indonesia Stock

Exchange in an Emergency Condition. The regulation contains a temporary suspension of transactions (trading halt) because the Composite Stock Price Index (JCI) experienced a sharp decline of 5% due to the influence of international markets which were affected by the pandemic. This data illustrates that the Indonesian stock market is very sensitive to the news of Covid-19 which has hit most countries in the world. The governments of various countries, including Indonesia, have also taken decisions to limit community activities to prevent the spread of Covid-19, which has an impact on hampering economic activities and placing emphasis on future world economic growth.

The capital market is one of the choices for the company's source of capital. The capital market can also be an alternative for public investment (Indonesia Stock Exchange Report, 2009). The more important the role of the capital market in the economy of a country, the more sensitive the capital market to the factors that influence it. The main goal of investors in investing is to maximize returns, without forgetting the investment risk factors that must be faced. Therefore, companies always try to make their shares attractive to investors with technical or political policies. This study will only focus on using capital gains in assessing stock returns. The current development of the Covid-19 event is one of the things that greatly affects stock market conditions around the world. The stock market is significantly influenced by investor sentiment. If the market is trending up and there is little perceived risk then investors behave more optimistically, on the contrary when the market is in a downward trend then investor sentiment becomes relatively pessimistic and investors will tend to wait to enter the market until the revival begins (Liu et al. (2020) ). Such a situation causes an overreaction of short-term investors. The motive of investors to invest in the stock market is to get a return in the form of dividends or capital gains as well as company ownership in the form of share ownership. The first step that investors take before investing is to calculate the return on shares that will be received and the value of the company. The share price represents the firm value of a public company. A higher share price equals a higher firm value (Suhadak et al. (2019)).

Research by Yan (2020), Ramelli and Wagner (2020), Alfaro et al. (2020), Al-awadhi et al. (2020), Bash (2020), Liu et al. (2020), and Ashraf (2020) found that the pandemic event had a major effect on stock returns. Baker et al. (2020) also adds that the Covid-19 pandemic has resulted in the highest stock market volatility among all emerging infectious diseases, including the Spanish Flu of 1918. Likewise, Zhang et al. (2020) found that Covid-19 has led to increased global financial market risks. Wang and Enilov (2020) conducted research in developed countries that are members of the G7, which found that Canada, France, Germany, Italy, and the US found that their stock returns were affected by Covid-19, while the United Kingdom and Japan did not find significant results. on stock returns due to the pandemic.

The results of research by Takahashi and Yamada (2021) in Japan found that Covid-19 had an effect on stock returns. Research on the Chinese and Asian markets was carried out again by Liu et al. (2020) which found that each sector experienced various impacts due to the occurrence of Covid-19. Stock returns for pharmaceutical and IT companies were found to have increased (positive stock returns) after the Covid-19 outbreak, but on the other hand the Transportation, Lodging and Catering sectors declined (negative). Research on the impact of Covid-19 events in Indonesia was investigated by Trisnowati and Muditomo (2021) who found the effects of Covid-19 had different impacts on the 8 sectors studied. Dilla, et al (2020) in their research found that each industrial sector experienced different impacts, namely the Basic and Chemical Industry sectors, the Infrastructure, Utilities and Transportation sectors found abnormal returns in the 6-day and 11-day event windows. Covid-19 in Indonesia does not seem to have decreased until mid-2021. One of the actions taken by the Indonesian government to suppress the surge in Covid-19 cases at that time was to implement the Implementation of Community Activity Restrictions (PPKM). PPKM was announced by the government on July 1, 2021 and has been in effect since July 3, 2021. Emergency PPKM is thought to have had a downward impact on stock prices in several sectors.

Table 2 – Close Price of 11 Sectors in June and July 2021

Sektor	Close Price		Varian Close Price	
	Juni	Juli		
Energy	720	760	40	5.58%
Basic Materials	1,170	1,164	- 6	-0.52%
Industrial	958	926	- 32	-3.32%
<b>Consumer Non Cyclical</b>	<b>704</b>	<b>660</b>	<b>- 44</b>	<b>-6.31%</b>
Consumer Cyclical	740	801	61	8.21%
Healthcare	1,342	1,358	16	1.17%
Financials	1,320	1,354	34	2.54%
Properties & Real Estate	781	804	23	2.91%
Technology	10,703	11,733	1,030	9.62%
Infrastruktur	900	932	31	3.50%
Transport & Logistic	979	1,044	64	6.58%

Source: *IDX Statistics Report (January – July) 2021, processed.*

The non-cyclicals sector experienced the highest close price decline (6.31%) from the previous month. The non-cyclicals sector is a sector that includes companies that produce general goods or services needed by the community and are generally not greatly influenced by certain events because basically these goods or services are primary needs (IDX Announcement No.: Peng-00007/BEI.POP/ 01-2021). Data showing that the highest close price decline was experienced by the non-cyclicals sector is very interesting because this is inversely proportional to the character of the non-cyclicals sector which should not be too affected by certain events. One example of a company that is included in the non-cyclicals sector is PT Unilever Indonesia Tbk (UNVR). The President Director of UNVR (Ira Noviarti) through a press release quoted in *market.bisnis.com* revealed that the company's financial performance in Q1 2021 decreased compared to the previous year due to restrictions on community activities. The decline in the company's performance as seen in the net profit generated gave unfavorable sentiment to investors. Emergency PPKM limits community activities more than the restrictions that occurred in January to May 2021.

The analysis of Philip Sekuritas (Helen) also stated that there were three factors that caused the stock price of the non-cyclicals sector to continue to decline (*kontan.co.id*). First, a number of issuers experienced a decline in revenue and net profit performance. Second, the sector rotation of market players when the economy experiences a crisis, the defensive sector persists, but when the economy begins to expand, market players turn to other sectors that have positive sentiments and are still affected by people's purchasing power from the Covid-19 pandemic. Third, the decline in company performance was caused by the cost of raw materials, public demand, profit margins, and advertising and promotion costs. This study was conducted to determine whether the decline in the close price of non-cyclicals stocks was the impact of the announcement of the implementation of PPKM in the non-cyclicals sector which was included in defensive stocks, meaning that the sector could provide stable returns regardless of economic conditions, but in terms of data shows that this sector experienced the highest decline. In addition, there are still many differences or inconsistencies in research results regarding the impact of an event on stock returns. The hypothesis in this study is H1: PPKM announcements have an impact on stock returns of the non-cyclicals sector on the IDX.

## METHODS OF RESEARCH

The variable of this research is stock return which is measured by using abnormal return. In this study, quantitative data includes data on the closing price of shares (close price) to calculate the actual return and expected return in the non-cyclicals sector listed on the Indonesia Stock Exchange for the 2021 period. The data collected is the daily stock price

(close price). and JCI (Daily Stock Composite Index) daily during the observation period. The population in this study are all non-cyclicals sector companies listed on the Indonesia Stock Exchange in July 2021, which are 91 companies. The technique in sampling is purposive sampling where the sample is taken intentionally according to research needs.

Table 3 – Research Sample

No	Criteria	Total
Population		91
1	Companies that take corporate action	(2)
2	Companies that do not provide complete close prices	(2)
3	Companies that are not actively traded during the event period	(9)

Descriptive analysis was used to determine the maximum, minimum, average (mean), and standard deviation of the non-cyclical company abnormal return variables before and after the announcement of the Enforcement of Community Activity Restrictions (PPKM). Hypothesis testing in this study will use the event study method. The event study model that will be used is the market model, so the research requires an estimation period and a window period.

## RESULTS AND DISCUSSION

Descriptive statistics are used to determine the maximum, minimum, average (mean), and standard deviation of the average abnormal return variable before and after the announcement of the Enforcement of Community Activity Restrictions (PPKM). Descriptive statistical testing of these variables shows the following results:

Table 4 – Abnormal Return Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Dev
t-5	78	-0,0729	0,1293	-0,001283	0,0360386
t-4	78	-0,0700	0,2536	-0,002491	0,0445728
t-3	78	-0,0629	0,1290	-0,003232	0,0301903
t-2	78	-0,0743	0,0719	-0,003263	0,0279127
t-1	78	-0,0766	0,2075	-0,002364	0,0346069
t-0	78	-0,0765	0,2480	0,014829	0,0492069
t+1	78	-0,0733	0,1193	0,002041	0,0328782
t+2	78	-0,0687	0,1714	-0,004429	0,0338786
t+3	78	-0,0792	0,1607	0,000826	0,0383277
t+4	78	-0,0766	0,2478	-0,004653	0,0368617
t+5	78	-0,0694	0,2477	0,000665	0,0392103

Source: Data processed, 2022.

The highest negative abnormal return value occurred on the third day after the announcement of the Implementation of Community Activity Restrictions (PPKM) with a value of -0.0792. The highest positive abnormal return in the non-cyclicals sector occurred on the fourth day before the PPKM announcement, with a value of 0.2536. The worst average abnormal return occurs on the fourth day after the announcement of the PPKM, while the best average abnormal return occurs on day 0 or when the PPKM is announced. A negative abnormal return indicates that the realized return obtained by investors is lower than expected, on the contrary, a positive abnormal return indicates that the realized return is higher than the expected return. The abnormal return value which decreased again on the third day (seen from the minimum value) and the fourth day (seen from the average value) indicated that after the announcement of PPKM on July 1, 2021, it became one of the factors that the abnormal return value became increasingly negative.

CAR movements in 78 non-cyclicals sector companies tend to be in negative values. Abnormal returns had improved on t0 (1 July 2021) compared to the previous day, but the CAR declined significantly, especially on the second and fourth days after the announcement of PPKM by President Jokowi. The value of Cumulative Abnormal Return which is mostly

negative in the event period indicates that investors often get lower stock returns than the expected returns.

Table 5 - Cumulative Abnormal Return

Period	Cumulative Abnormal Return (CAR)
t-5	-0,100
t-4	-0,194
t-3	-0,252
t-2	-0,254
t-1	-0,184
t0	1,156
t+1	0,159
t+2	-0,345
t+3	0,064
t+4	-0,362
t+5	0,051

Source: Data processed, 2022.

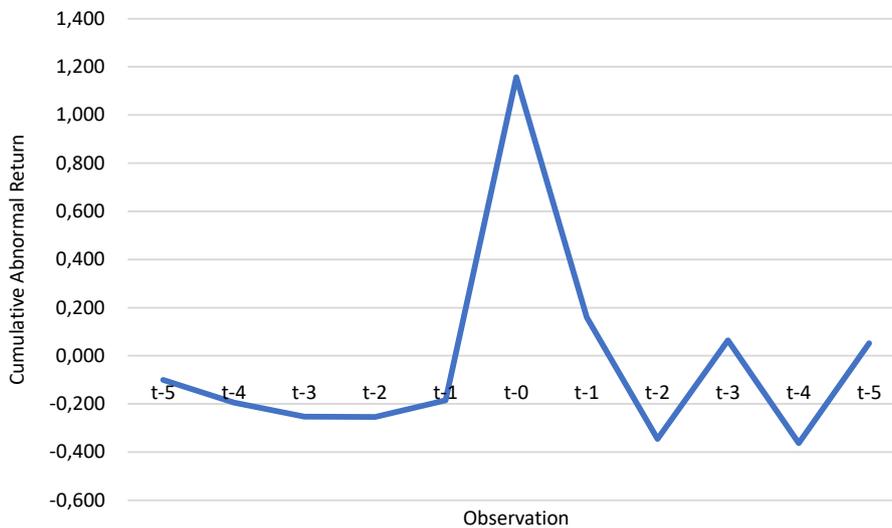


Figure 1 – Graph of Cumulative Abnormal Return over the Event Period

Table 6 – Cumulative Abnormal Return T count value and T table

Period	T-count	T-table	Information
t-5	-7,396	±1,991	Significant
t-4	-9,260	±1,991	Significant
t-3	-6,690	±1,991	Significant
t-2	-6,614	±1,991	Significant
t-1	-8,167	±1,991	Significant
T	-8,364	±1,991	Significant
t+1	-7,130	±1,991	Significant
t+2	-7,680	±1,991	Significant
t+3	-8,433	±1,991	Significant
t+4	-9,399	±1,991	Significant
t+5	-9,144	±1,991	Significant

Source: Data processed, 2022.

The movement of the CAR value in the window period showed a significant negative value ranging from -6.614 on the 2nd day before the announcement to the highest on the 4th day after the announcement, which was -9.399. The one sample test shows the cumulative significance of stock abnormal returns occurring on h-5 to h+5 events. This significant value indicates that there was an abnormal stock return in the window period caused by the

announcement of the PPKM implementation on July 1, 2021. The abnormal stock return in the non-cyclicals sector indicates that in general investors have responded to the announcement of the PPKM implementation. The result of T-count one sample T-test shows the significance of Cumulative Abnormal Return (CAR) on the announcement of the implementation of the Implementation of Community Activity Restrictions (PPKM) in the entire event period (t-5 to t+5). The significance that occurred before the PPKM Implementation Announcement was made, indicating that the announcement had been anticipated by investors. Capital market participants predict that this information will have a negative impact and investors choose to sell, causing stock prices to fall. If examined further, the abnormal return value had increased at t-3 and t-2 compared to at t-5 and t-4. However, this value fell again at t-1 before the announcement of the implementation of the Implementation of Community Activity Restrictions (PPKM).

Furthermore, the movement of the CAR value after the event in the window period showed a significant negative value ranging from -7.130 on the first day after the announcement to the highest on the fourth day after the announcement, namely -9.399. A negative CAR value indicates that the return of each stock during the window period is smaller than the market return. The existence of negative abnormal returns during the window period indicates that the market responds negatively to non-cyclical stock market conditions due to the impact of the PPKM announcement. The market is starting to think that the existence of PPKM will further burden the company's financial performance which will lead to a decrease in profit. The decline in the national economy will reduce people's purchasing power even though the products sold by the non-cyclical sector are products that are definitely needed by the community. According to the researcher, there are two things that cause this condition to occur, namely: The implementation of PPKM makes some activities decrease which indirectly has an impact on stock returns. The implementation of PPKM causes some sectors to be unable to carry out their normal operations, so that the community will be affected, such as a reduction in salary or income. The decline in people's incomes causes people's purchasing power for goods to also decrease even though these goods are primary goods.

Regarding the non-cyclicals sector, PPKM also stipulates that shopping centers/malls/trade centers are also temporarily closed, where the place is one of the non-cyclicals sectors that can increase sales. The existence of a temporary closure will cause a decrease in income from the non-cyclicals sector which in turn affects the company's performance. The results of significant hypothesis testing in this study are in line with signaling theory which shows that events can signal reactions to information occurring in the market. Signaling theory states that information published as an announcement will provide a signal for investors in making investment decisions. These signals will then influence the decisions that will be taken by investors. In this study, information from the announcement of the implementation of PPKM gave a bad signal to investors, which was indicated by the presence of negative abnormal returns.

This study also concludes that the capital market in Indonesia is included in the semi-strong efficiency market because information from the announcement of the PPKM implementation is absorbed or responded quickly by the market. The response given by investors causes the stock return to be abnormal (abnormal return). In 1991, Fama (in Tandililin, 2010:224) suggested improvements to the classification of market efficiency, the efficiency of the semi-strong form was changed to an event study. Event Studies more specifically investigate the market response to the information content of an announcement or publication of a particular event.

The efficient market hypothesis predicts that the market will give a positive market response to good news, and a negative market response to bad news. The market response is reflected in positive abnormal returns (good news) and negative abnormal returns (bad news) (Tandililin, 2010:565). Based on the results of the study, it was found that the calculated T value according to the SPSS results showed a negative value which reflected that there was a negative abnormal return due to bad news. Such a situation causes the market to be negative. The funds that have been prepared to carry out transactions will be

withdrawn by investors and investors will wait for the right time to invest again. A negative abnormal return is an indication that the company's performance is poor. The results of this study also indirectly support the argument given by the President Director of PT Unilever Tbk (Ira Novianti) that the decline in company performance seen in the resulting net income gives investors a bad sentiment. Abnormal stock returns that occur in all window periods indicate that the information content moves the stock market towards a significant negative effect. This is predictable for several reasons: Information on government policies contained in the PPKM Announcement has been leaked before. Some media or parties may already know information about the government's plan regarding the implementation of PPKM. In general, capital market conditions in the non-cyclical sector will move negatively in 2021. The PPKM regulation exacerbates investor expectations, which is reflected in increasingly negative conditions, especially on the fourth day after the announcement. The results of this study are consistent with the results of research conducted by Yan (2020), Ramelli and Wagner (2020), Alfero, et al (2020), Al-awadhi, et al (2020), Bash (2020), Liu, et al (2020) and Ashraf (2020) who found that an event had an impact on stock returns.

## **CONCLUSION**

Based on the results of the analysis, it can be concluded that the announcement of the implementation of PPKM has an impact on the stock return of the non-cyclicals sector on the IDX. Based on these limitations, proposed research suggestions related to this research. The suggestions in this study are as follows: For stock investors on the Indonesia Stock Exchange (IDX) should still pay attention and anticipate an event when making investment decisions that have the potential to affect stock returns. For further researchers who wish to conduct similar research, they can conduct research related to other government policies in other sectors and/or all sectors. In addition, further researchers can also try to analyze stock price movements at the time of PPKM or other policies, especially related to policies issued during the Covid-19 incident.

## **REFERENCES**

1. Al-awadhi, A. M., Alsaifi, K., Al-awadhi, A., & Alhammadi, S. 2020. Death and contagious infectious diseases: Impact of the COVID-19 virus on stock market returns. *Journal of Behavioral and Experimental Finance*, 27(January), 1–6.
2. Alfaro, Laura, Anusha Chari, Andrew N. Greenland, and Peter K. Schott. 2020. Aggregate and Firm-Level Stocks Returns during Pandemics, in Real Time. National Bureau of Economics Research, 1-33.
3. Ashraf, Badar Nadeem. 2020. Stock markets' reaction to Covid-19: Moderating role of national culture. *Elsevier – Finance Research Letter*, 1-9.
4. Baker, Scott R., Nicholas Bloom, Steven J. Darvis, Kyle Kost, Marco Sammon, and Tasaneeya Viratyosin. 2020. The Unprecedented Stock Market Reaction to COVID-19. *Review of Asset Pricing Studies* / v 10 n 4 2020, 742-758.
5. Bash, Ahmad. 2020. International Evidence of COVID-19 and Stock Market Returns: An Event Study Analysis. *International Journal of Economics and Financial Issues*, 2020, 10(4), 34-38.
6. Dilla, Salsa., Sari, Linda Karlina., Achسانی, Noer Azam. 2020. Estimating the Effect of The Covid-19 Outbreak Events on The Indonesia Sectoral Stock Return. *Jurnal Aplikasi Bisnis dan Manajemen (JABM)*, Vol. 6 No. 3: page 662-668.
7. Fama, Eugene F. 1970. Efficient Capital Market: A Review of Theory and Empirical Work. *The Journal of Finance* Vol. 25, No. 2, Papers and Proceedings of the Twenty-Eighth Annual Meeting of the American Finance Association New York, N.Y. December, 28-30, pp. 383-417.
8. Liu, HaiYue, Aqsa Manzoor, CangYu Wang, Lie Zhang, and Zaira Manzoor. 2020. The COVID-19 Outbreak and Affected Countries Stock Markets Response. *Int. J. Environ. Res. Public Health* 2020, 17, 2800.

9. Liu, Haiyue, Yile Wang, Dongmei He, and Cangyu Wang. 2020. Short term response of Chinese stock markets to the outbreak of COVID-19. *Applied Economics*, 52:53, 5859-5872.
10. Ramelli, Stefano, dan Alexander F. Wagner. 2020. Feverish Stock Price Reactions to COVID-19. *The Review of Corporate Finance Studies* 9 (2020) 622–655.
11. Suhadak, Kurniaty, Siti Bagil Handayani, dan Sri Mangesti Rahayu. 2019. Stock return and financial performance as moderation variable in influence of good corporate governance towards corporate value. *Asian Journal of Accounting Research*, 4(1), 18–34.
12. Takahashi, Hidenori dan Kazuo Yamada. 2021. When the Japanese Stock Market Meets COVID-19: Impact of Ownership, China and US Exposure, and ESG Channels. *Elsevier: International Review of Financial Analysis* 74 (2021) 101670.
13. Tandelilin, Eduardus. 2017. *Pasar Modal: Manajemen Portofolio & Investasi*. Depok: PT. Kanisius.
14. Trisnowati, Yanuar., dan Muditomo, Arianto. 2021. COVID-19 and Stock Market Reaction in Indonesia. *Journal of Accounting and Investment* Vol. 22, page: 23-36.
15. Wang, Wenzhao., dan Martin Enilov. 2020. The global impact of COVID-19 on financial markets. *Social Science Research Network*.
16. Zhang, Dayong, Min Hu, dan Qiang Ji. 2020. Financial markets under the global pandemic of Covid-19. *Elsevier - Finance Research Letters* Volume 36, October 2020, 101528.