

# The Short-Term Effect of the Announcement of Covid-19 Pandemic in Indonesia on the Consumer Goods Industry

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#### **ABSTRACT**

President Joko Widodo's announcement of the introduction of COVID-19 to Indonesia on March 2, 2020 has created panic buying by people at convenience stores. Panic buying by the public can be information for investors to determine stock prices and the level of stock return in the capital market. This research is an event study of the stock returns of the consumer goods industry in the event window for the announcement of the COVID-19 epidemic by the President. The timelines used are (t-1, t+1) and (t-2, t+5). From the results of statistical tests using SPSS V.24, it shows that the stock returns of the consumer goods industry on both timelines have no effect, which means that events did not affect the stock return of the consumer goods industry, although those companies looked at have a stable profit level during the COVID-19 epidemic (later becoming a pandemic). With these results, the implications for traders in the capital market, every event does not necessarily affect the level of stock returns, other factors must be considered, while for investors who buy shares for the long term still have to consider the company's fundamentals.

Keywords: Stock retuns, Consumer Goods, Covid-19

## 1. INTRODUCTION

Year 2020 is the Corona Virus Disease -19 pandemic year. The virus, which was first discovered in December 2019 in Wuhan, Hubei province, China, has spread rapidly to almost all countries in the world in early 2020. Corona Virus Disease -19 or known by the abbreviation Covid-19 is an infectious disease caused by SARS-CoV -2. A virus that is very dangerous and easily transmitted between humans, either directly through secretions from the mouth or breathing from an infected person to a healthy person, or indirectly, namely through objects such as stairs, doors and others where there are droplets containing COVID-19. -19. This very fast and massive spread to almost the entire world, finally the World Health Organization (WHO) declared Covid-19 a global pandemic on March 12, 2020 [1]. The entry of Covid-19 in Indonesia at the end of February 2020, a 64-year-old mother, and her 31-year-old daughter after they had physical contact with their guests infected with COVID-19 who had just arrived from Japan [2]. Even though at that time there were Indonesian citizens who had been infected with COVID-19, they were not in Indonesian territory. With the virus in Indonesia, the President of Indonesia, Joko Widodo, on March 2, 2020 announced that COVID-19 had entered Indonesia [3]. This announcement can be said to be a political announcement from the head of state because the announcement is an

announcement that has an impact on the direction of political, economic and social policies. The striking impact of this announcement is that there is panic in the community in meeting their daily needs. Panic buying occurs, especially in Jakarta and other big cities in Indonesia, such as Semarang, Surabaya, and Bali [4]. This is because, they are afraid of the Lock Down policy as has been done by other countries after the Covid-19 epidemic occurred in their country. They buy immunity medicines, and protective equipment against the spread of the virus such as masks, hand sanitizers, and others. In addition, they also buy up food to stockpile in case of lock down. This panic buying took place a few days after the announcement date.

The phenomenon of panic buying by the public for products of daily needs, for investors in the capital market, can be a signal to issuers that produce products that are the target of the public to buy in large quantities. This can be a signal indicating the sustainability of the issuer during the COVID-19 epidemic (before it was declared a pandemic by WHO on March 12, 2020) [1]. In previous research that has been carried out [5] stated that the Cumulative Abnormal return in the event window (-20,-1), (+1,+9) and (+10,+20) shows the Miscellaneous Industry sector, the Consumer Goods sector and the Consumer Goods sector. Trade has a significant influence, and in the post-event conditions the Consumer Goods sector, Various Industries,



the Infrastructure sector and the Finance sector show a significant influence. Based on the phenomena and results of previous studies, this study only focuses on the consumer goods industry with a narrower event window to avoid information bias. The purpose of this study is to prove the market reaction to events in society in line with empirical studies. The problem is, this event is often responded to by investors in investing in the capital market without analyzing it empirically first. In this research, investors are expected not only to see events or phenomena that occur in society, but also to conduct a brief empirical study so that investors do not make the wrong investment decisions.

#### 2. LITERATURE REVIEW

## 2.1. Efficient Market Hypothesis

Efficient Market Hypothesis (EMH) is a concept that explains the relationship between stock prices and information. EMH assumes that market prices are a reflection of all available information and investors' expectations, thus any new information can be entered correctly without delay into prices [6]. The ability of the market to properly reflect the entry of new information is often referred to as market rationality. There are three forms of EMH, namely 1) Weak efficient market hypothesis where future stock prices cannot be predicted based on past prices or there is no information that can move stock prices, 2) Semi-strong Efficient Market Hypothesis is that stock prices adjust from available information. or known by the public which is absorbed quickly and unbiased, and 3) Strong Efficient Market Hypothesis, namely stock prices that reflect all general or limited information that can reflect stock prices. The efficient market hypothesis implies that new information that is financially relevant to the market and is absorbed by investors, the relevant market will react and will immediately be translated into stock prices. In other words, the market price is considered to have an instant reaction to any new information that is revealed in the market [7]

In this research, there are several information factors that will be absorbed by the market. First, the Covid-19 pandemic can be said to be a disaster that does not only occur in Indonesia but in the world. Stock prices react quickly to information about natural and non-natural disasters, for example when the earthquake in California affected shares of Real Estate companies [8], Hurricane Andrew in the United States affected the property insurance industry [9], and [10], there was also a market reaction in the aviation industry after the events of September 11, 2000[11]. Related to Panemic COVID-19, the stock market conditions in America during the Covid-19 pandemic were worse than the Spanish Flu pandemic of 1918-1919 [12]. Also, bad news triggered significant negative abnormal return for firms with high exposures to

COVID-19 such as travel and lodging sectors in Thailand [13].

President Joko Widodo's announcement that COVID-19, which states that COVID-19 has entered Indonesia, can be said to be a political announcement from a head of state, because the announcement applies to all people and will affect political, social and economic policies. The market will react to political instability, economic risks and various policies [14]. Market reactions to policies or political announcements do not always have a significant effect, as happened to political events in Taiwan [15]. The significance of political events on the capital market depends on the stability and reliability of the government system, the maturity of the capital market and investors, so that information on political events uninformative or very informative. Another case of research [16] which shows that unexpected political and economic events in Turkey systematically adjust the price of the stock market. Thus, there is a relationship between stock market prices and political stability [17]. In the Efficient Market Hypothesis, market participants or investors must recognize the different implications of the new information on stock prices.

## 2.2. Event Study

Event study is a study that aims to evaluate the effect of an event on changes in stock prices [18]. Conventionally, the event study approach is carried out on the basis of the efficient market hypothesis, ie all new information enters the market and is received by investors as a result of unexpected events that affect current and future asset prices [19]. Usually, the event of interest is a one-time occurrence. The main purpose of an event study is to define the things to be investigated in the event window (assessment period) [20]. This methodology is known for assessing the effect of all types of events on stock returns. Stock prices in the market are very volatile. Stock price volatility refers to a statistical measure of the rate of return for a security, it is also an indicator of risk. The higher the volatility, the more risky the market [17], and vice versa. News of key events can affect stock prices and change the pattern of stock returns for a company (or industry). An event is considered as good news i.e., investors believe that the event portends a bright future for the company. As a result, the company's stock price will increase. This price increase represents a capital gain. Changes in stock prices, then, have a major effect on stock returns. Event studies examine stock returns for certain companies (or for an industry) before and after the announcement of a particular event.

Information on political events and disasters is quickly digested into stock market prices. The stock price will affect the rate of return on stock investment in the market. Event studies will examine stock returns for a particular company or industry, before and after the announcement of that particular event.



In event study research, one must first identify an event and the date of the event. The hypothesis of the event study approach makes it possible to measure the impact of certain events in the period (one day) during which new relevant information enters and is absorbed by the market [13]. This observation period is known as the event window Analysis of events, whether this event is information that will affect stock market prices, and Estimated Abnormal Returns, either for individual companies, or certain industries, or even in the aggregate to the capital market. Estimated Abnormal Returns a methodology for examining the returns on a selected company/industry stock separated from the aggregate rate of return for that event. The separation of the movement of stock returns from the stock returns of a particular company/industry is often called "abnormal returns". The next step is to determine the event window. The event window is the grace period before (pre-event) and after (post-event). An inside illustration of the event window can be seen in the figure below:

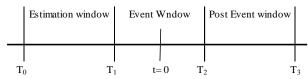


Figure 1 An Event Study Timeline [20]

Legends: t=0 indicates the announcement date of an event, T1+1 to T2 represents the event window, and T0+1 for T1 represents the pre-event, T2+1 to T3 represents the post-event.

What needs to be considered in determining the post-even. The grace period of the event date with a post-event date that can bias the event information itself so that the analysis of the effect on stock prices can be biased. This is because during the time from the event date to the post-event window, things may occur that affect the meaning of the event so that the event is no longer pure, and this bias can improve or worsen stock prices. On the other hand, if the event date is too close to the post-event window, then the impact of the event information may not be fully absorbed by the market. In fact, the event window that is too long can reduce the power of statistical analysis [21]. Thus the analysis of the effect of stock prices due to events becomes insignificant.

## 2.3. Hypothesis

In the efficient market hypothesis, stock prices that occur in the market reflect what is happening outside the company or society and investors' expectations based on information absorbed by stock players in the market [6]. Events or events that occur in the community are beyond the control of the company, and these events are related to the performance of the industry. These events can be in the form of natural disasters, epidemics/pandemic diseases, terrorists and political events. In this study, the announcement of the start of the COVID-19 pandemic in Indonesia can be said to be a political event. In previous

research, political events did not affect stock price volatility in Taiwan [15], but the situation is different in Turkey [16]. In political events, the general reaction of the people is to store more food and daily necessities to anticipate the occurrence of shortages of these goods due to political turmoil, limited mobilization and distribution, and disruption to the country's economy.

Based on the explanation above, the hypothesis that is built is the influence of political events, the announcement of the President of the Republic of Indonesia stating that COVID-19 has entered Indonesia, meaning that the Covid-19 pandemic has started in Indonesia, on stock prices in the consumer goods industry.

#### 3. METHODS

This research methodology is quantitative with secondary data taken from consumer goods companies listed on the Indonesia Stock Exchange and Mirae Asset.com. The data were processed using the Statistical Package for the Social Sciences (SPSS) version 24 in performing for the effect on stock return in pre-event and post-event. The conventional approach of event study involves the specification of a market model for each firm in which observations are assumed that the event information immediately constitutes new information relevant to the stock market. The conventional approach of event study involves the specification of a market model for each firm in which observations are assumed that the event information immediately constitutes new information relevant to the stock market.[13] . Based on the phenomenon, this study takes the subject of consumer goods companies listed on the Indonesia Stock Exchange. There are 18 companies in the consumer goods industry listed on the Indonesia Stock Exchange with products ranging from basic foods to snacks. Meanwhile, the stock price was obtained from Mirae Assets.com, which is a securities company.

The event window used in this study is divided into two timeline event windows, namely the event window (-1, +1), and the event window (-2, +5). The consideration of using these two timeline event windows is that information about Indonesian citizens living in Indonesia who are infected with COVID-19 has been known to the public a few days before being announced by the President, this is a pre-event window. Meanwhile, in determining the postevent window, taking into account the existence of panic buying on the day of the announcement until one week after the announcement (5 working days of the Indonesian stock exchange, or 7 calendar days). The background determines the event windows t-1 and t-2, because the composite stock price index at that time fell by 1.69% and 1.50%. While determining t+1, t+5, because the composite stock price index at t+1 rose by 2.93%, t+2 rose again by 2.39%, then fell slopingly to t+4, and t+5 fell by 6, 56%. From t+5 the index continues to fall in the negative direction. Thus t+1 indicates the reaction after the announcement, while t+5 (one week after announcement date) represents the negative growth



moment of the composite price index. Therefore, a picture of the timeline event window used in this study as follows:

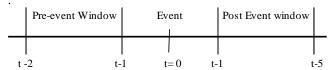


Figure 2 Two Timeline of Event Window

#### 4. RESULT AND DISCUSSION

#### 4.1. Results

Data on share prices of companies in the consumer goods sector for t-1, t-2, t+1 and t+5 can be seen in the tables below:

Table 1 Consumers Goods Stock Price

| No. | Perusahaan |   | t-2    | t-1    | t0     | t+1    | t+5    |
|-----|------------|---|--------|--------|--------|--------|--------|
| 1   | ALTO       | Tri Banyan Tirta                          | 400    | 400    | 400    | 400    | 398    |
| 2   | CAMP       | Campina Ice Cream Industry                | 262    | 214    | 190    | 192    | 173    |
| 3   | CEKA       | Wilmar Cahaya Indonesia                   | 1,500  | 1,370  | 1,440  | 1,515  | 1,440  |
| 4   | CLEO       | Sariguna Primata                          | 434    | 430    | 414    | 438    | 426    |
| 5   | HOKI       | Buyung Poetra Sembada                     | 216    | 208    | 218    | 228    | 222    |
| 6   | ICBP       | Indofood CBP Sukses Makmur                | 10,550 | 10,275 | 10,150 | 10,950 | 10,375 |
| 7   | INDF       | Indofood Sukses Makmur                    | 6,900  | 6,500  | 6,675  | 7,125  | 6,375  |
| 8   | MYOR       | Mayora Indah Indonesia                    | 1,800  | 1,800  | 1,765  | 1,840  | 1,770  |
| 9   | PCAR       | Prima Cakrawala Abadi                     | 250    | 246    | 204    | 214    | 264    |
| 10  | PSDN       | Prashida Aneka Niaga                      | 149    | 180    | 180    | 180    | 121    |
| 11  | ROTI       | Nippon Indosari Corporindo                | 1,280  | 1,280  | 1,270  | 1,280  | 1,280  |
| 12  | SKBM       | Sekar bumi                                | 300    | 300    | 300    | 300    | 300    |
| 13  | SKLT       | Sekar Laut                                | 1,610  | 1,610  | 1,610  | 1,610  | 1,610  |
| 14  | STTP       | Siantar Top                               | 10,000 | 8,000  | 6,400  | 6,400  | 6,000  |
| 15  | ULTJ       | Ultrajaya Milk Industry & Trading Company | 1,550  | 1,610  | 1,515  | 1,515  | 1,470  |
| 16  | ADES       | Ades Waters Indonesia                     | 895    | 825    | 845    | 880    | 785    |
| 17  | KINO       | Kino Indonesia                            | 2,850  | 2,780  | 2,940  | 2,970  | 2,930  |
| 18  | UNVR       | Unilever Indonesia                        | 7,300  | 7,150  | 6,825  | 7,125  | 7,025  |

Source: miraeasset.co.id

Table 2 Consumer Goods Stock Return

| No. | Perusahaan |   | t-2     | t-1     | t+1   | t+5     |
|-----|------------|---|---------|---------|-------|---------|
| 1   | ALTO       | Tri Banyan Tirta                          | 0.00%   | 0.00%   | 0.00% | -0.50%  |
| 2   | CAMP       | Campina Ice Cream Industry                | -27.48% | -11.21% | 1.05% | -8.95%  |
| 3   | CEKA       | Wilmar Cahaya Indonesia                   | -4.00%  | 5.11%   | 5.21% | 0.00%   |
| 4   | CLEO       | Sariguna Primata                          | -4.61%  | -3.72%  | 5.80% | 2.90%   |
| 5   | HOKI       | Buyung Poetra Sembada                     | 0.93%   | 4.81%   | 4.59% | 1.83%   |
| 6   | ICBP       | Indofood CBP Sukses Makmur                | -3.79%  | -1.22%  | 7.88% | 2.22%   |
| 7   | INDF       | Indofood Sukses Makmur                    | -3.26%  | 2.69%   | 6.74% | -4.49%  |
| 8   | MYOR       | Mayora Indah Indonesia                    | -1.94%  | -1.94%  | 4.25% | 0.28%   |
| 9   | PCAR       | Prima Cakrawala Abadi                     | -18.40% | -17.07% | 4.90% | 29.41%  |
| 10  | PSDN       | Prashida Aneka Niaga                      | 20.81%  | 0.00%   | 0.00% | -32.78% |
| 11  | ROTI       | Nippon Indosari Corporindo                | -0.78%  | -0.78%  | 0.79% | 0.79%   |
| 12  | SKBM       | Sekar bumi                                | 0.00%   | 0.00%   | 0.00% | 0.00%   |
| 13  | SKLT       | Sekar Laut                                | 0.00%   | 0.00%   | 0.00% | 0.00%   |
| 14  | STTP       | Siantar Top                               | -36.00% | -20.00% | 0.00% | -6.25%  |
| 15  | ULTJ       | Ultrajaya Milk Industry & Trading Company | -2.26%  | -5.90%  | 0.00% | -2.97%  |
| 16  | ADES       | Ades Waters Indonesia                     | -5.59%  | 2.42%   | 4.14% | -7.10%  |
| 17  | KINO       | Kino Indonesia                            | 3.16%   | 5.76%   | 1.02% | -0.34%  |
| 18  | UNVR       | Unilever Indonesia                        | -6.51%  | -4.55%  | 4.40% | 2.93%   |

Source: Data Processed by the Author

The data is processed using SPSS V.23. The results of statistical tests using the Wilcoxon Test, the nonparametric significance test for the estimation of abnormal returns [22], on the stock prices of 18 issuers in the consumer goods sector in the event window are as follows:

**Table 3** Test Statistics

|                     | -1,+1  | -2, -5 |
|---------------------|--------|--------|
| Z                   | -0.874 | -1.655 |
| Asymp Sig (2 tailed | 0.384  | 0.98   |

Source: Data Processed by SPSS v.23

From the results of statistical tests, it was found that the value of Asymp sig. 2 (tailed), both for the timeline (-1, +1) which shows a value of 0.384, which is greater than 0.005, and (-2,+5) with a value of 0.98 which is also greater than 0.05, indicating that the COVID-19 announcement event did not significant effect on stock prices before and after being announced. Changes in the stock prices of issuers did not change much on the first day after being announced, but after 7 calendar days after the announcement, it was seen that the most share prices had decreased. This can be seen in Table 1, the composite stock price indes declined in T+4 to T+5 falling 6.5%, from 5498,5400 to 5136,1050, a week after announcement date. The decline in stock prices on the 7th day shows the reaction of information to stock prices is inversely proportional to what is seen in the community, namely the increase in sales of companies selling daily necessities.

This study is different from the results of research [5] which states that the consumer good industry has an influence before and after the announcement of the COVID-19 epidemic by President Joko Widodo on the timeline (-20,-1), (+1,+9) and (+10,+20).

## 4.2. Discussion

Based on the results of statistical tests and discussion of statistical test results, it shows that there is no effect on the announcement of the entry of COVID-19 by President Widodo for company shares in the consumer goods industry in the event windows (-1, +1) and (-2, +5). When viewed from the closing price in table 2, there were several stock prices that rose at t+1 and t+5, although generally they decreased. The decline in stock prices was more due to the policy of the existence of Large-Scale Social Restrictions or lock downs, resulting in a decrease in company productivity which could lead to reduced company profits.

With limited data and other more information regarding company data, and without paying attention to stock market transactions in one day (interday transaction), it can be concluded that the events in this study when viewed from the theory of the Efficient Market Hypothesis, this event is included in the weak form of the Efficient Market Hypothesis.

This research has implications for traders that not all information from an event will have a significant influence on stock prices and stock returns, and form the Strong Efficient Market Hypothesis, it would be better to conduct a short empirical study to be able to make more accurate decisions. As for investors in the capital market, perform fundamental and industry analysis rather than make informed decisions or events happening in society.



## 5. CONCLUSION

Based on this research, the announcement of the entry of the SARS-CoV -2 virus known as Corona Virus 19 by the President is weak information from the point of view of the Efficient Market Hypothesis theory. The public's reaction to panic buying of consumer goods did not increase the share price of issuers of consumer goods. In conclusion, firstly, the President's speech regarding the entry of the corona virus 19 into Indonesia, which is a political event, is not information that affects the stock market, especially in the consumer goods sector. Second, the real phenomenon in society is not necessarily responded to by the capital market, and lastly, investors should consider the issuer's fundamentals and monitor the situation some times after the event in making investment decisions, while traders should be able to take advantage of the situation.

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