



Capital Market Reaction to Events Before and After the Announcement of Russia's Invasion of Ukraine: Study on Capital Market of ASEAN Countries

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Abstract

The purpose of this study is to examine the information content and to determine the capital market reaction of the announcement of the Russian invasion of Ukraine on February 24, 2022, and to analyze the difference in abnormal returns before and after the announcement of the Russian invasion of Ukraine on the capital markets of ASEAN member countries. This research uses an event study approach and uses the Paired Sample T-Test as a data analysis technique. The population in this study is the capital market of ASEAN member countries with sampling techniques using purposive sampling method. The observation period used is 115 days consisting of 100 days of estimation period and 15 days of event period (7 days before the event, 1 day event date, and 7 days after the event). The results of this study indicate that based on descriptive statistics there are abnormal returns between before and after the event and based on the results of the paired sample t-test there is no difference in abnormal returns before and after the announcement of the Russian invasion of Ukraine.

Keywords: Abnormal Return, Russia's invasion of Ukraine, Event Study, ASEAN capital market

Introduction

The capital market plays an important role in a country's economy. Stock prices in the capital market can be influenced by various factors, both internal and external. The capital market is considered to have a very sensitive nature to various events that occur. Almost all events that contain information can affect capital market conditions, such as macroeconomic conditions to global political conditions that have an impact on the global economy (Hidayat, 2016).

The Russian invasion of Ukraine was officially announced by the Russian president, Vladimir Putin, on February 24, 2022. The events that occurred not only shook global political conditions but also had an impact on the global economy, because both countries have an important role in fulfilling global supplies of oil, gas, energy and food commodities (Rakhmayanti, 2022). Many countries in the world such as the United States and European Union countries have imposed sanctions on Russia, one of which is sanctions in the form of an oil embargo (Krisna et al., 2022). This will result in reduced oil supply and soaring oil prices, which in turn will have an impact on macroeconomic conditions, such as inflation and slowing economic growth as well as a global energy and food crisis due to higher prices for goods and product distribution (Lubis, 2022).

Russia is one of the countries that has a role in the Southeast Asian region. In 2021, Russia accounted for more than 37% of Southeast Asia's oil and gas imports (Bakrie et al., 2022). Since the beginning of President Vladimir Putin's instruction to invade Ukraine, there has been economic uncertainty that occurs has an impact on stock and financial market conditions which will cause investor caution in investing their investment funds. It is known that on the day of the announcement of Russia's invasion of Ukraine on February 24, 2022, the stock price index on global stock markets was under pressure. The capital markets of ASEAN member countries were also affected by the event. As evidenced by the values of the stock price index in the capital markets of ASEAN countries that experienced a weakening on the day of the announcement of the event as follows, the Indonesian stock index (JCI) decreased 1.48% to 6,817, the Singapore stock index (STI) decreased 3.45% to 3,276, Thailand stock index (SETi) decreased 1.99% to 1,662, Malaysia stock index (KLCI) decreased 0.77% to 1,573, Philippines stock index (PSEi) decreased 2.06% to 7,212, Vietnam stock index (VNI) decreased 1.15% to 1,494.

The occurrence of an event that disrupts commodity prices will definitely have a major effect on stock prices. To see the reaction of ASEAN countries's capital markets to the announcement of Russia's invasion of Ukraine can be measured using abnormal returns as the value of price changes, and to ascertain whether the information can affect the capital markets of ASEAN countries. If there are differences in abnormal returns received by investors, it can be said that the event has information content that can affect capital market conditions. From the explanation above, the purpose of this study is to test the information content and to determine the capital market reaction of the announcement of the Russian invasion of Ukraine by analyzing the abnormal return before and after the announcement of the Russian invasion of Ukraine on the capital market of ASEAN member countries.

Literature Review

Capital Market

According to (Rokhmatussa'dyah & Suratman, 2015), the capital market is a place where long-term financial instruments are traded and activities contained in the capital market include public offerings, securities trading, funding facilities and investing activities for companies and institutions. The capital market plays an important role in a country's economy because the

Capital Market Reaction to Events Before and After the Announcement of Russia's Invasion of Ukraina: Study on Capital Market of ASEAN Countries

capital market serves as a means of funding for companies and institutions and serves as a means for investors who want to invest in the capital market to get profits in the future.

Market Efficiency

According to (Jogiyanto, 2016), market efficiency is defined as the relationship between security prices and information. The capital market is said to be efficient if the market is able to react quickly and accurately to reach a new equilibrium price that fully reflects all available information. Abnormal returns are caused by a market that cannot fully absorb information and the information is only absorbed by a few people, so the market will not be fully efficient (Kusuma, 2022). According to (Fama, 1970), there are three main forms of market efficiency, namely:

1. Weak form market efficiency
2. Semi-strong form market efficiency
3. Strong form market efficiency

Event Study

According to (Handini & Astawinetu, 2020), event study is a study that studies the effect of an event on stock prices in the market, both when the event occurs and sometime after the event occurs. Event studies are used to test the information content of an announcement to see the market reaction to the announcement of the event. In event studies there are event windows in which there are estimation periods and window periods. In the window period there is an event date or date when the event occurs. The window period aims to determine the research period so as not to be disturbed by other events and to determine the speed of market reaction in responding to information (Suganda, 2018).

Signaling Theory

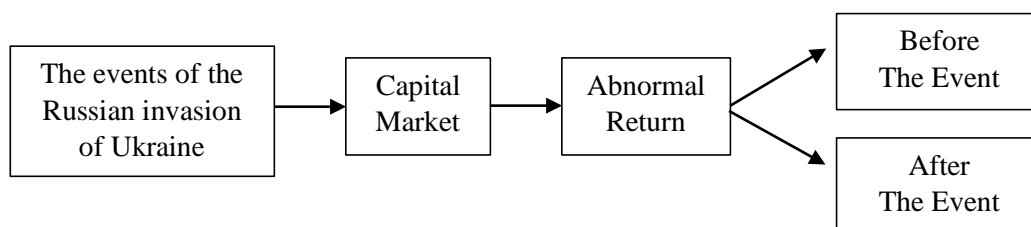
According to (Suganda, 2018), signaling theory is a theory that explains the information signals used by investors in making investment decisions by analyzing signals from the announcement of an event that has information in it. The market will react positively if the published information indicates favorable signals and the market will react negatively to information that is considered unfavorable (Welley et al., 2021). Investor responses to positive and negative signals will affect market conditions.

Stock

According to (Evelyn Wijaya, 2017) stocks are one of the financial instruments traded in the capital market in the form of a piece of paper as proof of capital / fund ownership in a company that issues these securities. Stocks are often used as investment instruments for long-term purposes due to their high profit potential. However, investing in stocks also carries a high risk because stock prices can fluctuate and can be affected by various factors such as company performance, market conditions, economic conditions and social and political issues (Sartono, 2011).

Abnormal Return

According to (Jogiyanto, 2016), abnormal return is the difference between the actual return and the expected return used to analyze the event study. Abnormal returns arise as a result of a significant increase in trading activity due to information or events that can affect stock prices (Subekti & Rahmawati, 2020). The abnormal return phenomenon often occurs around the announcement of an event at market close.



Charts 1. Research Model

Based on the theoretical study and research model above, the following hypothesis can be formulated :

H₁ = There is a market reaction on abnormal stock returns before the announcement of Russia's invasion of Ukraine.

H₂ = There is a market reaction on abnormal stock returns after the announcement of Russia's invasion of Ukraine.

H₃ = There is a significant difference in market reaction on abnormal stock returns before and after the announcement of Russia's invasion of Ukraine.

Research Method

Research Approach

This research is a quantitative study using the event study approach method used to analyze the market reaction to the announcement of Russia's invasion of Ukraine on the abnormal return of ASEAN countries' capital market stocks.

Population, Sample and Sampling Technique

The population used in this study is the capital market of ASEAN member countries consisting of 10 countries. The sampling technique in this study using purposive sampling method which is a selection or sampling technique with certain considerations or criteria (Sugiyono, 2017). So that the sample obtained in this study is ASEAN member countries that are active in the capital market, namely 6 countries.

Data Type and Source

This research uses secondary data which is previously available data collected from indirect sources or second parties, for example from government or library written sources (Ahyar et al., 2020). The data source in this study was obtained through the official website

Capital Market Reaction to Events Before and After the Announcement of Russia's Invasion of Ukraina: Study on Capital Market of ASEAN Countries

www.investing.com in the form of a daily stock price index for the capital markets of ASEAN countries. The research time starts from September 27, 2021 to March 31, 2022 with an observation period of 115 days consisting of 100 days of estimation period and 15 days of event period (7 days before the event, 1 day event date and 7 days after the event). In this study, the announcement of the Russian Invasion of Ukraine is the independent variable, while the abnormal return is the dependent variable.

Operational Definition of Variables

1. Realized Return

Realized return is the amount of actual gains that is made on the value of a portfolio over a specific evaluation period. Realized return is calculated based on historical data of the previous period. The realized return can be calculated using the formula (Jogiyanto, 2016):

$$Ri.t = \frac{Pt - Pt_{-1}}{Pt_{-1}}$$

2. Expected Return

Expected return is the profit or loss that an investor anticipates on an investment that has known historical rates of return. It is calculated by multiplying potential outcomes by the chances of them occurring and then totaling these results. Expected return can be calculated using the formula (Jogiyanto, 2016):

$$E(Ri.t) = \frac{\sum_{j=t1}^{t2} Ri.j}{T}$$

3. Abnormal Return

Abnormal return is the difference between realized return and expected return. Abnormal return can either be positive or negative depending on how the security or a fund has performed in comparison to its benchmark. Abnormal return can be calculated using the formula (Jogiyanto, 2016):

$$ARit = Ri.t - E(Ri.t)$$

Data Analysis Technique

A normality test is performed to test whether the observed data has been normally distributed or not, which is performed using the Kolmogorov-Smirnov test. Furthermore, hypothesis testing is carried out, if the data is normally distributed, it will use a parametric test (Paired Sample Test) and if the data is not normally distributed, it will use a non-parametric test (Wilcoxon Signed Rank Test).

Results

A. Normality Test

| Capital Market | | Sig. (2-tailed) | Terms | Description |
|-----------------------|---------------|----------------------------|--------------|----------------------|
| Indonesia | 7 Days Before | 0,200 | | Normally Distributed |

| | | | | |
|------------|---------------|-------|--------|----------------------|
| | 7 Days After | 0,131 | > 0,05 | Normally Distributed |
| Singapore | 7 Days Before | 0,200 | | Normally Distributed |
| | 7 Days After | 0,200 | | Normally Distributed |
| Thailand | 7 Days Before | 0,200 | | Normally Distributed |
| | 7 Days After | 0,198 | | Normally Distributed |
| Malaysia | 7 Days Before | 0,200 | | Normally Distributed |
| | 7 Days After | 0,200 | | Normally Distributed |
| Philippine | 7 Days Before | 0,083 | | Normally Distributed |
| | 7 Days After | 0,200 | | Normally Distributed |
| Vietnam | 7 Days Before | 0,200 | | Normally Distributed |
| | 7 Days After | 0,200 | | Normally Distributed |

Table 1. Normality Test

Source: Output Result SPSS 24 (2023)

Based on the results of the normality test above, it can be seen that in the Indonesian capital market the test results before the event were 0.200 and after the event of 0.131, in the Singapore capital market the test results before the event were 0.200 and after the event of 0.200, in the Thai capital market the test results before the event were 0, 200 and after the event of 0.198, in the Malaysian capital market obtained test results before the event of 0.200 and after the event of 0.200, in the Philippines capital market obtained test results before the event of 0.083 and after the event of 0.200, in the Vietnam capital market obtained test results before the event of 0.200 and after the event of 0.200. Because all the data that has been tested above has a significance value greater than 0.05, it can be concluded that the data used in this study has been normally distributed, then further hypothesis testing can be done using the Paired Sample T-Test.

B. Paired Sample T-Test

| Capital Market | Sig. (2-tailed) | Terms | Description |
|----------------|-----------------|--------|---------------|
| Indonesia | 0,081 | > 0,05 | No Difference |
| Singapore | 0,536 | | No Difference |
| Thailand | 0,667 | | No Difference |
| Malaysia | 0,963 | | No Difference |
| Philippine | 0,525 | | No Difference |
| Vietnam | 0,282 | | No Difference |

Table II. Paired Sample T-Test

Source: Output Result SPSS 24 (2023)

Capital Market Reaction to Events Before and After the Announcement of Russia's Invasion of Ukraina: Study on Capital Market of ASEAN Countries

Based on the results of this study, it shows that as many as 6 ASEAN member countries that are active in the capital market do not experience differences in the average abnormal returns obtained by investors between before and after the announcement of the Russian invasion of Ukraine. This is evidenced by the results of the paired sample t-test in the six countries which have a value greater than the predetermined significance level of greater than 0.05. In the Indonesian capital market, the significance value is 0.081, the Singapore capital market is 0.536, the Thai capital market is 0.667, the Malaysian capital market is 0.963, the Philippine capital market is 0.525, and the Vietnamese capital market is 0.282. From the results of this study it can be concluded that there is no difference in abnormal returns obtained by investors in the capital markets of ASEAN countries between before and after the announcement of the Russian invasion of Ukraine. The results of this study prove that the announcement of the Russian invasion of Ukraine does not have a significant enough information content to affect the market so that the market response to the event is not too large and does not have a big influence for investors on their investment activities in the capital market, especially in the capital market of ASEAN countries.

The results of this study are in line with previous research conducted by (Krisna et al., 2022) which concluded that testing using the paired sample test for the movement of average abnormal returns in the observation period 14 days, 7 days and 3 days before and after the invasion announcement occurred, there was no significant effect on the share price of the energy industry in the Indonesian capital market. The results of this study are also in line with research conducted (Kusuma, 2022) obtained research results that at the initial event of the Russia-Ukraine war and the event of sanctions against Russia showed no significant abnormal return on companies included in the LQ-45 stock index. The results of this study are also in line with. The results of this study are also in line with previous research conducted (Kasim, 2023), it can be concluded that the Russian Invasion of Ukraine did not have a significant impact on the average abnormal return on stocks incorporated in the Kompas 100 Index on the Indonesia Stock Exchange.

Discussion

The conflict between Russia and Ukraine has resulted in a significant increase in energy prices in the world, causing new challenges in the global economy. The conflict not only caused a spike in energy prices but also caused some prices in other commodities to increase, because as we know the two countries are major exporters of energy and foodstuffs. According to data from the World Bank in 2022, the conflict between Russia and Ukraine caused a 50% increase in energy prices and a 20% increase in global food prices.

The conflict has a direct impact on the economies of Southeast Asian countries, because Southeast Asian economies are import-dependent on oil and gas commodities, so an increase in energy prices will have an impact on increasing the prices of other commodities in Southeast Asian countries. Since 2019, Russia has become the ninth largest trading partner for Southeast Asia. Russia and ASEAN have collaborated economically through a number of agreements over the years, with the aim of increasing trade and investment between Russia and ASEAN.

The conflict also impacted the capital markets of ASEAN countries. Although the Asian region is located far away from Eastern Europe and the impact felt by Asian countries is not as great as the impact felt by countries in Europe, but the event has enough impact on economic stability and capital markets around the world, including in the ASEAN region. On the day the invasion was announced, Asian and global stock markets plunged while the dollar, gold and oil prices soared. As ASEAN countries are exporters of various commodities from Russia and Ukraine, the conflict between Russia and Ukraine has created price fluctuations in the global market that could affect exports and revenues of ASEAN countries that depend on commodity exports. If the conflict disrupts supply chains or international trade, then economic growth in ASEAN countries may be hampered. This may affect the performance of the capital market. In addition, the global crisis caused by Russia's invasion of Ukraine may lead to a decline in foreign direct investment (FDI) into ASEAN countries. Similarly, the sanctions imposed by western countries against Russia are considered unfavorable for countries in Southeast Asia that depend on very close economic relations or cooperation with Russia. As a result, there will be high demand for Southeast Asia and negatively impact or affect Southeast Asia's economic growth.

In responding to the Russia-Ukraine conflict, ASEAN maintains the principle of non-intervention or will not interfere in the conflict that occurred between Russia and Ukraine with the aim of not making the atmosphere worse and worsening the situation which is believed that if the impact of the war continues to drag on, it will have a negative impact on the economy of ASEAN countries. ASEAN prioritizes cooperative relations with various countries around the world, including Russia and Ukraine. Therefore, in dealing with the Russia-Ukraine conflict, ASEAN prefers not to interfere in the conflict to maintain good cooperative relations with both parties. Because ASEAN prefers not to interfere in the conflict between Russia and Ukraine, the event does not really affect the condition of the capital market of ASEAN countries. So that the condition of the capital market of ASEAN countries is considered still stable, as indicated by the absence of differences in abnormal returns received by investors between before and after the announcement of the Russian invasion of Ukraine.

Conclusion

Based on the test results and discussion described above, it can be concluded that the announcement of the Russian invasion of Ukraine did not significantly affect the capital markets of ASEAN countries, as evidenced by the absence of differences in abnormal returns before and after the event received by investors. The capital markets of ASEAN countries did not overreact to the information of the Russian invasion of Ukraine, although the value of the stock price index in the capital markets of ASEAN countries fell on the day of the announcement of the Russian invasion of Ukraine.

Capital Market Reaction to Events Before and After the Announcement of Russia's Invasion of Ukraina: Study on Capital Market of ASEAN Countries

Suggestion

For investors not to be too hasty in making decisions related to investments made by not being easily influenced by negative issues, therefore if there are similar events in the future capital market investors must be more selective and thorough in analyzing data or information as a consideration in making decisions to avoid losses on invested capital. For future researchers, it is hoped that they can conduct research not only on abnormal return indicators, but also can use trading volume activity or other stock indicators, and are expected to conduct research by adding or using the object of countries in the European region. Future researchers are also expected to conduct research with a longer event window, not only the 7 days before and 7 days after.

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