Capital Market Reaction to The Strengthening of The Rupiah Exchange Rate Against The US Dollar Exchange Rate

M. Zaky Mubarak Lubis1*, Gusti Dirga Alfakhri Putra2, Zam Zuriyati Mohamad3

zakylubis@uinib.ac.id1*

UIN Imam Bonjol1*2, Balai Gadang, Koto Tangah, Kota Padang, Sumatra Barat, Indonesia
Universiti Tunku Abdul Rahman3, Bandar Sungai Long, Cheras, Selangor, Malaysia

Received Date : 28.02.2024
Revised Date : 12.03.2024
Accepted Date : 27.04.2024

ABSTRACT

The purpose of this study is to analyze the response of Indonesian capital markets to differences in average abnormal returns and average trading volume activity before and after the strengthening of the IDR/USD exchange rate. This study is a quantitative study using the event study method. The sample used consists of the stocks included in the LQ45 index, the most active stocks with a large daily trading volume. Hypothesis testing and paired t-test. The results of the hypothesis test show that: there is no significant difference in the average abnormal returns before and after the strengthening of the rupiah against the US dollar because are sig. (2-tailed) value of 0.417 > 0.05; there is no significant difference in the average trading volume activity before and after the strengthening of the rupiah against the US dollar because sig. (2-tailed) value of 0.080 >0.05.

Keywords : Market Reaction; Event Study; Abnormal Return; Trading Volume Activity; Exchange Rate

ABSTRAK

Tujuan penelitian ini adalah untuk menganalisis respon pasar modal Indonesia terhadap perbedaan rata-rata abnormal return dan rata-rata trading volume activity sebelum dan sesudah terjadinya penguatan nilai tukar Rupiah terhadap Dollar Amerika Serikat. Penelitian ini merupakan penelitian kuantitatif dengan menggunakan metode event study. Sampel yang digunakan terdiri dari saham-saham yang termasuk dalam indeks LQ45 yang merupakan saham-saham teraktif dengan volume perdagangan harian yang besar. Pengujian hipotesis dan uji t berpasangan. Hasil uji hipotesis menunjukkan bahwa: tidak terdapat perbedaan yang signifikan pada rata-rata abnormal return sebelum dan sesudah terjadinya penguatan nilai tukar rupiah terhadap dollar AS karena nilai sig. (2-tailed) sebesar 0,417 > 0,05; tidak terdapat perbedaan yang signifikan pada rata-rata trading volume activity sebelum dan sesudah terjadinya penguatan nilai tukar rupiah terhadap dollar AS karena nilai sig. (2-tailed) sebesar 0,080 > 0,05.

Kata Kunci : Reaksi Pasar; Event Study; Abnormal Return; Trading Volume Activity; Nilai Tukar
The existence of the capital market is a new reality and phenomenon in modern life. The capital market plays an important role and is one of the signs of economic progress in any country, including Indonesia. Capital market activities are an important means to advance the Indonesian economy, because the Indonesian capital market occupies a strategic position as a source of financing for the business world in accordance with the Capital Market Law No. 8 of 1995 (Jamaludin et al., 2018).

As an economic tool, capital market development is inseparable from various economic and non-economic influences. Microeconomic impacts such as company strategy, company performance, financial report releases, or changes in company dividends are repeatedly discussed by capital market participants. Macroeconomic changes such as deposit interest rates, inflation, and exchange rates, as well as various economic controls and deregulations carried out by the government, will also affect price fluctuations and transaction volumes in the capital market (Nuryana, 2016).

The Indonesian capital market has shown its development with the highest number of IPO companies in 2019 in ASEAN. The greater the role of the capital market in economic activities, the more sensitive the market reaction will be to events around it. This is because the economic conditions of a country will influence the stability of stock prices and trade transactions on the capital market (Sambuari et al., 2020). Therefore, stock trading activities in the capital market, which is part of economic activity, cannot be separated from the influence of an event. Events or information that can affect investment activities in the capital market include the strengthening of the Rupiah exchange rate against the US Dollar.

Companies in Indonesia generally pay close attention to the exchange rate of the rupiah against the dollar, as companies typically use the rupiah to pay for production materials and other commercial business transactions. The relationship between stock prices and exchange rates influence each other and play a role in stimulating the economy (Sa’adah & S, 2022). The exchange rate is one of the macroeconomic variables that has an important role in maintaining the stability of a country’s economy. The exchange rate is the price of a currency relative to the currency of another country (Ekananda, 2014). Exchange rate stability is one of the keys to a country’s economy. The weakening of the exchange rate can have a negative effect on the economy and the capital market (Yuliati, 2005). One form of influence of the rupiah exchange rate on the economy is the higher the exchange rate and the weakening of the rupiah has an impact on the price of goods, especially imported goods and imported product raw materials for domestic products, which ultimately has the effect of increasing the price of goods and will reduce economic growth (Wiriani & Mukarromah, 2020). On the other hand, when the rupiah exchange rate increases, the flow of incoming foreign exchange will increase, which is good for the country’s economy (Arifin & Mayasya, 2018).

The rupiah exchange rate strengthened sharply against the US dollar on Friday (May 6, 2020) to return to the green zone in 2020 which is a strong increase since the beginning of the year (ytd). At the opening of trading, the rupiah only slightly strengthened 0.07% to the level of Rp14,050/US$, but in less than an hour the rupiah was able to break the psychological level of Rp14,000/US$. After that the rupiah was unstoppable and the increase in the rupiah exchange rate continued up to 1.6% to Rp13,835/US$ on the spot market. As of 12:00 WIB, the rupiah still stands at Rp13,835/US$, which is the highest level since February 24. During the April-May period, the rupiah also appreciated above 10%. Thanks to this strengthening, the rupiah has recorded a gain of 0.32% since the beginning.
of the year. The position of the rupiah at the end of 2019 was IDR 13,880/US$. The rupiah finally returned to the green zone in 2020 after more than 3 months in the red zone (Indonesia, 2020).

Macroeconomic and microeconomic conditions and stock price movements are influenced by the strengthening of the Rupiah against the US Dollar. Various events that affect the economy and investor behavior in the capital market can cause fluctuations in stock prices. When there is a significant appreciation of the Rupiah against the US Dollar, it is expected that there will be a change or increase in the abnormal return and volume activity of companies included in the LQ45 Index.

According to research conducted by (Tahu, 2019), who found that the depreciation of the rupiah exchange rate against the US dollar on September 4, 2018 could not detect any reaction from the Indonesian capital market. This is supported by the absence of substantial changes in the average return and trading volume anomalies before and after the depreciation of the rupiah against the US dollar.

(Putra & Wirawati, 2019) conducted a similar analysis and found substantial differences between return anomalies and US dollar trading volume activity for various LQ45 issuers on the IDX before and after rupiah depreciation. The findings of this study support the market efficiency hypothesis, which states that the market reacts to incoming information and how that information drives the movement of security prices towards a new equilibrium price.

Another study conducted by (Anang, 2019) found that the capital market reacted to the depreciation of the rupiah against the US dollar in 2018. This was done by comparing the deviated results before and after the event. However, there was no trading volume activity.

Based on some of these findings, researchers are interested in examining the reaction of the capital market to the strengthening of the rupiah exchange rate against the US dollar which is different from some previous studies based on the state of rupiah depreciation against the US dollar. In the concept of event study, events become an important aspect in data collection. The appreciation of the rupiah value is a differentiator from the depreciation that is the basis of some previous studies. The samples of this study are companies listed on the LQ45 index which are the most active stocks with a large daily trading volume, so that the movement of the LQ-45 index greatly affects the movement of the Composite Stock Price Index (JCI). While the purpose of this study is to determine whether there are changes in the average abnormal return and average trading volume activity before and after the strengthening of the rupiah exchange rate against the US dollar.

RESEARCH METHOD

A documentation approach was used to collect data for this study. This form of research is known as an event study. The data used is secondary data taken from the official website of the Indonesia Stock Exchange (IDX) and Yahoo Finance. The research period is 11 trading days, which includes 5 days before the event (pre-event), 1 day during the event (event date), and 5 days after the event (post-event). The day of the event or event date is the strengthening of the Rupiah exchange rate against the US Dollar. The population in this study consisted of 45 issuers from the LQ45 Index listed during the event period. Purposive sampling was used to determine the sample.

The variables studied are average abnormal return (AAR), which is the average difference between actual return and expected return, and average trading volume activity...
(ATVA), which is the ratio of the average number of shares traded at a certain time to the number of shares outstanding in a company during a certain period.

The normality test is carried out on the data to be studied before testing the hypothesis in this study, namely the Average Abnormal Return (AAR) data before and after the event, and the average trading volume activity (ATVA). The Shapiro-Wilk test is used to assess normality using the IBM SPSS Statistics 23 statistical tool. Hypotheses were evaluated using the Paired Sample T-test.

![Diagram of the strengthening of the rupiah exchange rate](image)

**Figure 1. The strengthening of the rupiah exchange rate**

The strengthening of the rupiah exchange rate is a significant event that can affect capital market activity. This is because the information on the strengthening of the rupiah against the dollar becomes information that affects investors’ decisions in the capital market. The market will react to events that contain information. The market reaction will be witnessed by abnormal returns. The bigger the surprise, the bigger the market reaction. The market reacts because the event contains information or in other words, the event contains economic value that can change the value of the company (Jogiyanto, 2013). H1, there is a significant average difference in abnormal returns before and after the strengthening of the rupiah against the US dollar.

Market reaction is also indicated by changes in trading activity which is reflected in the trading volume of the company's shares concerned. Differences in trading volume indicated by an increase or decrease in the volume of stock trading volume. In previous studies, it was found that there was no significant difference from exchange rate changes to market reaction (Anang, 2019). H2, there is a significant difference in the average trading volume activity before and after the strengthening of the rupiah exchange rate against the US dollar.

**RESULTS AND DISCUSSION**

Normality test was conducted before evaluating hypothesis 1. Normality test using Shapiro-Wilk test resulted in sig value. AAR of 0.314 > 0.05 before the strengthening of the rupiah against the US dollar. While the value of Sig. AAR increased by 0.066 after the rupiah exchange rate strengthened against the US dollar. Because the data is normally distributed, the paired sample t-test is used to test hypothesis 1. The assessment is based on the fact
that if the significance value is smaller than 0.05, then hypothesis 1 is accepted. Meanwhile, if the significance level is greater than 0.05, hypothesis 1 is rejected.

The findings of the paired sample t-test using SPSS software are sig. (2-tailed) value of 0.417. Hypothesis 1 is rejected because the result is 0.417 > 0.05. Thus, there is no significant difference in the average abnormal return of issuers in the LQ45 index before and after the strengthening of the rupiah exchange rate against the US dollar.

**Average Trading Volume Activity Analysis**

The normality test is carried out initially to determine whether the data to be evaluated in Hypothesis 2 is normally distributed or not. The findings of the normality test using the Shapiro-Wilk test show the value of Sig. ATVA of 0.976 > 0.05 before the strengthening of the rupiah exchange rate against the US dollar. While the value of Sig. ATVA increased by 0.895 after the rupiah exchange rate strengthened against the US currency. The data can be concluded to be normally distributed.

Because the data is normally distributed, hypothesis 2 is tested using the paired sample t-test. The assessment is based on the fact that if the significance value is smaller than 0.05, then hypothesis 2 is accepted. Meanwhile, if the significance level is greater than 0.05, hypothesis 2 is rejected.

The findings of the paired sample t-test using SPSS software are sig. (2-tailed) value of 0.080. Hypothesis 2 is rejected because the result is greater than 0.05. Thus, there is no significant difference in the average volume trading activity of emitters in the LQ45 index before and after the strengthening of the rupiah exchange rate against the US dollar.

Based on data analysis and hypothesis testing regarding the strengthening of the rupiah against the US dollar, it can be concluded that the capital market does not react to the strengthening of the rupiah against the US dollar because there is no significant difference in AAR and ATVA before and after the event.

The absence of visible changes is because relatively few investors consider the strengthening of the rupiah against the US dollar as an event that contains meaningful information for investment choices. As a result, it can be concluded that the event is not informative or does not contain information.

According to the signaling theory by (Hartono, 2017), the information released will provide signals to investors in making investment decisions. Thus, it can be concluded that the increase in the rupiah exchange rate against the US dollar basically does not really affect capital market players. This is consistent with research conducted by (Naibaho et al., 2022), (Gunistiyono et al., 2021), and (Maswiguno & Yunita, 2020) which found no difference in the average anomalous return before and after an event. Other studies by (Abdillah & Sukmaningrum, 2020), (Ismanto, 2020) and (Yusrina & Sukmaningrum, 2019) found no difference in the average trading volume activity before, during, or after the event.

Significant differences in abnormal returns do not occur in the strengthening of the Rupiah against the Dollar, this is because market participants are getting used to predicting when the strengthening of the Rupiah against the Dollar will occur. The capital market reaction to the strengthening of the Rupiah against the Dollar was predictable given that the issues surrounding the strengthening of the Rupiah against the Dollar had been circulating prior to that date. Therefore, investors bought more when stock prices after the strengthening of the Rupiah against the Dollar corrected and they thought it was cheap to buy back stocks that would be included in their portfolios again. Meanwhile, stock trading activity between before and after the event did not show a significant difference. This is because the strengthening of the Rupiah against the Dollar can already be predicted by market participants. The absence of a price reaction to this information reflects the
absence of revised aggregate confidence in the market as a result of previously known information (Paulus, 2018).

CONCLUSION

Based on the discussion in the previous section, the following conclusions can be drawn: First, the results of the Paired Sample T-test show that there is no significant difference in the average abnormal return before and after the strengthening of the rupiah against the US dollar. The strengthening of the rupiah against the US dollar does not give a significant reaction to the capital market due to other economic condition factors that make investors tend to be more cautious in investing.

Second, the results of the Paired Sample T-test show that there is no significant difference in the average trading volume activity before and after the strengthening of the rupiah against the US dollar. This also applies to trading volume activity, that the factor of strengthening the exchange rate has not made significant changes in terms of investors due to other factors such as global economic conditions. This indicates that the markets did not react during the event period. In other words, the announcement of exchange rate increases is unable to influence investors to take excessive action before and after the events because of the change in exchange rates is a frequent event so that investors can be better prepared for the changes in the effects of these events.

RECOMMENDATIONS

This research has limitations on event studies that must adjust to the time period of an event. In the future, it can be developed with events that can be a significant differentiating factor other than exchange rates. Things that can be other information factors that can be a signal for investors such as cabinet announcement events, war events between countries such as Ukraine and Russia and Covid 19 events.

Events that occur unpredictably will provide the possibility to be able to have a different effect on market reactions. Research not only tests the information content of an event, but also goes on to test the efficiency of the market. Because, basically, an event study can not only be used as a test of the content of information in an event but also as an initial step to test market efficiency. Using other methods like the market model in calculating abnormal returns and adding samples of research like JII70.

REFERENCES


Arifin, S & Mayasha, S. Faktor-Faktor yang Mempengaruhi Nilai Tukar Rupiah Terhadap Dolar Amerika Serikat. Jurnal Ekonomi-Qu (Jurnal Ilmu Ekonomi) 8 (1). http://dx.doi.org/10.35448/jequ.v8i1
https://doi.org/https://doi.org/10.20473/vol6iss201912pp2512-2526