How Political situation affected Major Stock’s Abnormal return in Indonesia

Lufthia Sevriana1*, Erie Febrian2
1 Fakultas Ekonomi dan Bisnis-Manajemen, Universitas Islam Bandung (Unisba), 2 Universitas Padjadjaran

Abstract
The purpose of this study is to analyze the market’s response to the political situation, namely student demonstration. This study presents data on abnormal stock return movements with simple calculations. This study presents data on the movement of abnormal stock returns with a quantitative approach using the event study method. The result of deep analysis using event study method from major stocks in each sector, prove that There is negative response by the market to the student demonstration during the end of September 2019 that create abnormal return condition until it gets back to be normal in the middle of October. The sectors studied include the banking sector, construction, infrastructure, consumer needs, media, industrial materials, machinery, mining, and health care. Stock returns in Indonesia with inefficient market conditions are vulnerable to issues. Capital markets tend to be easily influenced by political and macroeconomic conditions, but even though the condition of return is abnormal, investors still have the potential to get favourable results.

Keywords: Stock market, Market efficiency, Event study, Stock Price, Stock Returns

Email korespondensi: lufthia.sevriana@gmail.com

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INTRODUCTION

Students return to demonstrate when the 2019 presidential inauguration takes place. The aim of the demonstration was to ensure the cancellation of the Draft Criminal Code, Corrections, Land and others. The student demonstration committee conducted a fairly strict selection to determine who could take part in the demonstration to avoid intruders participating in the demonstration. However, the DPR rejected the demonstration on the grounds that they should respected the inauguration process.

In fact, conflict is a natural thing, especially in a democratic country. Delivering aspirations is something that must be done to achieve the middle way of the ongoing conflict (Syahri, 2019). Student demonstrations as a form of freedom of opinion and opening the way for discussion are part of the nation's maturation process. Due to the government's reaction to prohibiting the holding of these demonstrations, the Indonesian capital market also showed an abnormal reaction.

In the Indonesian capital market, the bank and consumer retail sectors are still leading, following the mining sector which is dependent on world commodity prices, then next look at government policy trends as well as market tastes that focus on which industry sector (Goeryadi, 2019). The leverage model, were discovered by (Black, 1976) and tested in the property sector by (Christie, 1982) is an opponents of feedback volatility. Initially, the theory used to examine stock returns is the theory of volatility, this approach is considered more appropriate to predict returns compared to the leverage-based approach because it states that returns changes lead to volatility situational changes (Bekaert & Wu, 2000).

Foreign investors tend to be more aggressive when the market is bullish, thus triggering domestic investors to follow (Chandra, 2011). The following is the most active sectors bought by investors in IDX (Shim, 2014), namely (1) banking, (2) construction, (3) infrastructure, (4) consumer discretionary, (5) media, (6) consumer staple, (7) building materials, (8) machinery (9) mining (10) health care.

Returns are expected to always be positive, but if there is sentiment towards the market, then returns tend to be negative. If it happens for some time, the trend can be said to be an abnormal return trend. This research presents the calculation of abnormal return data on the major stock in each sector which is the choice of foreign investors (Chandra, 2011).

(Verawaty, Noviardi, Salindra, 2018) stated that there was no significant difference between abnormal returns before and after the peaceful action 212. Returns can be obtained through the flow of prices and stock returns on the Asia-pacific market which is still growing and is inefficient (Hamid, et. al, 2010).

The increase in fuel prices caused a negative reaction in the form of abnormal returns (Setyawan, 2006). There are different reactions from the market to the Stock Return Variability indexed in LQ-45 (Zaqi, 2006). Stock price fluctuations cannot be predicted during the 2004 elections so there are difficulties in predicting stock returns (Meidawati, 2004).
Novelty from this research is in terms of the choice of entities whose abnormal return models are recognized not only from one sector but from 9 sub-sectors and their subsectors. So it will be different from the Market liquidity that has been studied from previous studies. Presidential election with different conditions of inauguration (example: 2000/2001 vs 2019/2020) where at the previous presidential inauguration, there was no debated bill.

Sentiment and the reality of commodity demand in the world are two main things that influence market movements. The decline in large cap stocks triggered the weakening of the capital market in Indonesia (Pranajaya, 2017). The decline in large cap stocks triggered a weakening of the capital market in Indonesia. During elections, market liquidity generally increases. If the government’s attitude seems to be looking for a solution to a sensitive problem for the market, stock movements tend to be positive. The market’s irrational attitude can be selected as reflected in the decline in the Stock Index.

Most research results are based only on the assumption that market equilibrium conditions can be represented by Expected Return (Fama, 1970). Prices are assumed to reflect all information proportionately for each investor. In fact, in an investment portfolio, the unexpected movement of a stock can reduce the dispersion of returns. The purpose of this study is to see whether there is a negative response by the market to the student demonstration during the end of September 2019 that creates abnormal return conditions.

LITERATURE REVIEW

Efficient Market Hypothesis does not apply in capital markets in developing countries like Indonesia. In Indonesia, timing in capital market transactions can even be done when there is negative sentiment in the market. With the use of event study, there is a time period that is set for a maximum of 250 days. This method is commonly used to view price movements and calculate stock returns. There is no transaction, the data is issued. Abnormal return is the difference from return minus expected return. The effect of an event on stock returns can be determined by
Calculating the cumulative abnormal return. Cumulative abnormal returns are represented by a notation \( h_{\min} \) of at least 7 days and smooth for at least 7 days. Then after all the components are calculated we can make our own regression formula using the existing data, namely \( \text{return} = \alpha + \beta \text{of return} + \text{expected return} \). (Bash and Alsaifi, 2019) (Buigut and Kapar, 2020) (Pandey and Kumari, 2021) (Afik, Haim and Lahav, 2019)

Practically, investor reactions to stock price movements cannot be considered equally (Hamid, 2010). Even in developed countries with established capital markets, there is still a case of information asymmetry (Hau, 2000). According to (Bowe & Domuta, 2004), foreign investors who own shares of Indonesian companies tend to buy shares in large quantities (herding) when there is instability in economic conditions.

The Philippines, South Korea, Indonesia, Malaysia, and Thailand experienced Economic crisis at the same time 1997-1998. At the time of the crisis, economic growth slowed and stock prices tended to fall (Barro, 2001). The high volatility in the stock markets in developing countries is a challenge for researchers (Santis & Imrohoroglu, 1997).

After the economic crisis, companies in ASEAN countries are trying to increase capital from the capital market rather than borrowing from banks (Click & Plummer, 2005). This causes the capital market to grow, and with the integration of the ASEAN capital market, the assumption that an efficient market will be able to attract more foreign investors to trade. (Click & Plummer, 2005).

(Chevallier, et. al, 2018) found that (1) The interdependence of the emerging stock markets in the ASEAN countries is driven by higher exposure to the US shocks than to shocks affecting the developed economic of East Asia. (2) The cross market linkages in the Pacific Basin region have become stronger over time. (Johnson & Soenen, 2002) had investigated that (1) Equity markets of Australia, China, Hongkong, Malaysia, New Zealand, and Singapore are highly integrated with the stock market in Japan. (2) Asian market becomes more integrated over time, especially since 1994.

In the 1990s, Ng found that (1) No evidence was found to indicate a long-run relationship among the South-East Asian stock markets over the period 1988-1997. (2) South-East Asian stock markets becoming more integrated. (3) Stock market returns of Indonesia, the Philippines and all become more closely linked with that of Singapore.

(Tai, 2007) concluded that (1) Both currency and world market risks are priced and time-varying. (2) The stock markets for India, Korea, Malaysia, Philippines, and Thailand were segmented from the world capital markets before their liberalization dates, but all six markets have become fully integrated since then. (3) The market liberalization has reduced the cost of capital and price volatility for most of the countries. (4) Contagion effects is found.

Besides that, (Yang, Kolari, Min, 2014) Examined long-run relationships and short-run dynamic causal linkages among U.S., Japanese, and ten Asian emerging stock markets, with particular attention to the 1997-1998 asian financial crisis. He found that both long-run cointegration relationships and short-run causal linkages among these markets were strengthened during the crisis and that these markets have generally been more integrated after the crisis than before the crisis.

During the last two decades, the growth of the ASEAN capital market show growth in their trend cycle, but there also two classifications of which countries are market efficient, and which countries are market inefficient. (Sharma & Wongbangpo, 2002) had observed that there is a similarity between Malaysian and Singapore stock market because the terms of patterns and directions are alike. Meanwhile, stock market of Thailand and Indonesia are categorized to be inefficient because their market volatility are easy to be affected by news or information.

(Wang, 2007) found that (1) Foreign trading, particularly foreign selling, has a dominant effect on local market volatility in Indonesia and Thailand (2) After market liberalization, domestic investors become price follower. (Nimtrakoon, 2015) found that (1) there is no notable difference in Modified Value
Added Intellectual Coefficient (MVAIC) across ASEAN countries (2) there is a positive connection between Intellectual Capital and Market value and also positive relationship between IC and financial performance (3) Capital employed efficiency and human capital efficiency are the most dominant value drivers for both market value and financial performance.

(Vega, 2006) concluded that stock associated with the high PIN, consensus public news surprise, and low media coverage experience low or insignificant drift. Meanwhile Woolrdige & (Snow, 2006) found that (1) stock markets reaction to strategic investments conforms most closely to the predictions of Shareholder Value Maximization hypothesis (2)investments of varying size and duration might be held as a result of a positive reaction by the stock market. Stock market movement is commonly sensitive to information, even to a game result. (Ashton, Gerrard, Hudson, 2011) concluded that the link between international soccer results and stock market prices does indeed exist but has declined within the sample period from 2002-2009, particularly the impact of wins.

Besides the similar results of previous research, there are also different results that emerged to be discussed. (Huang, 2006) found that The random walk hypothesis is rejected in Korea, Malaysia, Hongkong, Singapore, and Thailand markets because all of those stock markets had a positive mean return. Only in Indonesia, the mean return is negative, that is the signal of inefficient stock market condition. Contrary to (Huang & Shim, 2014) stated that there are at least seven reasons Why Indonesian Stocks are potential to buy, i.e. (1) The growth of economy (% GDP), (2) There are improvement in business fundamentals (Corporate Debt Ratio), (3) Positive impact from reforms to corporate profits (annualized stock market return), (4) So many foreigners that has come back (Foreigners are back), (5) Beginning of interest rate downcycle (2014 10 Y treasury yields), (6) consistent dividend yield (US$ 10.000 investment in 2003), (7) risk factors are easy to hedge.

(Asgarwal et, al, 2009) found that there are information disadvantage hypotheses that caused mixed performances in Indonesia capital market trading activities. But (Dvorak, 2005) had Proved that domestic investors have higher profits than foreign investors. That because domestic clients of global brokerages have a short-lived information advantage, but that clients of global brokerages are better at picking long term winners.

**Hypothesis Development**

Based on previous research, by sticking to the theory of feedback volatility, the hypothesis of this study is :

\[ H_1: \text{"There is a negative response by the market to the student demonstration during the end of September 2019 October that create abnormal return condition until it gets back to be normal in the middle of October 2019"} \]

**RESEARCH METHOD**

**Research Design**

This research uses the event study, while this research uses a quantitative approach. method which is specifically used to test market reactions in the face of certain information. The research period is from Monday to Friday during the student demonstration period (23 September 2019) until it subsides on 11 October 2019. LQ 45 data was taken from 19 companies for 15 days in 10 industrial sub-sectors in LQ 45. The total sample studied was 285 data.

**Data Analysis Method**

*Abnormal return* is the difference between the actual *return* and expected *return*. The steps to calculate the *abnormal return* value are as follows:
1. Calculate the actual return

\[
\text{Actual Return} = \frac{\text{Price}_t}{\text{Price}_{t-1}} - 1
\]

Price \( t \) is the price on the day of observation, Price \( t-1 \) is the price on the previous day. The price data used is Adj.close.

2. Calculate the market return

\[
\text{Market Return} = \frac{\text{Price indeks}_t}{\text{Price indeks}_{t-1}} - 1
\]

Price index \( t \) in this study is the LQ 45 price index on the day of observation, Price \( t-1 \) is the LQ 45 price index on the previous day. The data used is close price data.

3. Calculating the regression equation for the abnormal return pattern

The first thing to do is create an LQ45 close price table, \( \text{Return}_t \), and \( \text{Return}_{t-1} \) as follows

**Table 2. Price Data of LQ45 during 23 September-11 October 2019**

<table>
<thead>
<tr>
<th>Price ( t )</th>
<th>( \text{Return}_t )</th>
<th>( \text{Return}_{t-1} )</th>
</tr>
</thead>
<tbody>
<tr>
<td>976.780029</td>
<td>-0.015612522</td>
<td>0</td>
</tr>
<tr>
<td>961.530029</td>
<td>-0.000416029</td>
<td>0</td>
</tr>
<tr>
<td>961.130005</td>
<td>0.018717541</td>
<td>0.015612522</td>
</tr>
<tr>
<td>979.119995</td>
<td>-0.006812222</td>
<td>0.018717541</td>
</tr>
<tr>
<td>972.450012</td>
<td>-0.004421809</td>
<td>0.006812222</td>
</tr>
<tr>
<td>968.150024</td>
<td>-0.008263182</td>
<td>0.004421809</td>
</tr>
<tr>
<td>960.150024</td>
<td>-0.019174122</td>
<td>0.008263182</td>
</tr>
<tr>
<td>941.73999</td>
<td>-0.00670036</td>
<td>0.019174122</td>
</tr>
<tr>
<td>935.429993</td>
<td>0.007707709</td>
<td>-0.00670036</td>
</tr>
<tr>
<td>942.640015</td>
<td>-0.012305903</td>
<td>0.007707709</td>
</tr>
<tr>
<td>931.039978</td>
<td>0.007464784</td>
<td>-0.012305903</td>
</tr>
<tr>
<td>937.989999</td>
<td>-0.003454184</td>
<td>0.007464784</td>
</tr>
<tr>
<td>934.75</td>
<td>-0.001422859</td>
<td>-0.0003454184</td>
</tr>
<tr>
<td>933.419983</td>
<td>0.015694997</td>
<td>-0.001422859</td>
</tr>
<tr>
<td>948.070007</td>
<td>0.015694997</td>
<td>-0.001422859</td>
</tr>
</tbody>
</table>

Source: Data processed in 2019

\( \text{Return}_s \) are obtained through calculations

\[
\text{Market Return} = \frac{\text{Price indeks}_t}{\text{Price indeks}_{t-1}} - 1
\]
Returns t-1 is obtained through calculation

\[ Return\ t - 1 \text{ third line} = Return\ t - Return\ t - 1 \text{ second line, etc} \]

Next, calculate the covariance of the entire Return t and Return t-1 column data

Then calculate the variance from the Return t-1 data only a + b regression equation begins to form with component b obtained through calculations:

\[ b = \frac{\text{covarians return } t \text{ and return } t - 1}{\text{variants Return } t - 1} \]

Meanwhile component a is obtained through calculations

\[ a = (\text{average Return } t) - (b \times \text{average return } t - 1) \]

4. Calculate the abnormal return after multiplied by the expected return

\[ \text{Expected return} = \text{actual return} - \text{market return} \]

Abnormal return can be found through the following formula

\[ \text{Abnormal Return} = (a + b) \times \text{Expected return} \]

5. Calculating the cumulative abnormal return

\[ \text{cumulative abnormal return} = \text{abnormal return } t - \text{market return } t - 1 \]

RESULT AND DISCUSSIONS

Results

The regression equation obtained from the calculation of variance and co variance explained in the section on research methods is as follows:

\[ \hat{r} = -.0013 - .0811 \cdot \hat{r}_{t-1} \]

The shape of each graph looks similar only with a different lag due to the duration of the process of absorbing different information in each company. In the Banking sector there are cumulative abnormal return data of BBCA & BBRI as follows:

Source: Data processed in 2019
The lowest data return on BBCA occurred on September 26 in the amount of -0.021, while on the BBRI occurred on September 27 in the amount of -0.022. In the Construction sector there are BSDE & WIKA cumulative abnormal return data as follows:

![Cumulative Abnormal Return BSDE](image1.png)

Source: Data processed in 2019

![Cumulative Abnormal Return WIKA](image2.png)

Source: Data processed in 2019

The lowest TLKM data return occurred on September 26, and the lowest WIKA data return occurred on October 11, amounting to -0.022.

The Consumer discretionary sector there are cumulative abnormal return data of ASII & LPPF as follows:

![Cumulative Abnormal Return ASII](image3.png)

Source: Data processed in 2019

![Cumulative Abnormal Return LPPF](image4.png)

Source: Data processed in 2019

The lowest data return on ASII and LPPF occurred on September 26th. ASII data return is -0.022 while the LPPF data return is -0.021. In the media sector there are cumulative abnormal return data of SCMA & MNCN as follows:

![Cumulative Abnormal Return SCMA](image5.png)

Source: Data processed in 2019

![Cumulative Abnormal Return MNCN](image6.png)

Source: Data processed in 2019
The lowest data *return* on SCMA and MNCN occurred on September 26th. SCMA *return* data is -0,018 while MNCN data *return* is -0,019.

![Figure 13. Cumulative abnormal return UNVR 23 sept-11 oct 2019](image1)

Source: Data processed in 2019

![Figure 14. Cumulative abnormal return INDF 23 sept-11 oct 2019](image2)

Source: Data processed in 2019

In the Consumer Staple sector there are UNVR & INDF The lowest data *return* on UNVR and INDF occurred on September 26th. The UNVR data *return* is -0,019 while the INDF data *return* is -0,021. In the Industrial Material sector there are cumulative *abnormal return* data of SMGR and INTP as follows:

![Figure 15. Cumulative abnormal return SMGR 23 sept-11 oct 2019](image3)

Source: Data processed in 2019

![Figure 16. Cumulative abnormal return INTP 23 sept-11 oct 2019](image4)

Source: Data processed in 2019
In the Machinery sector there are cumulative abnormal return data of UNTR and AKRA as follows:

![Cumulative abnormal return UNTR 23 sept-11 oct 2019](image1)

![Cumulative abnormal return AKRA 23 sept-11 oct 2019](image2)

Source: Data processed in 2019  
Source: Data processed in 2019

The lowest data return on UNTR and AKRA occurred on 26 September. UNTR data return is -0.019 while AKRA data return is -0.020.

In the Mining sector there are cumulative abnormal return data of ADRO and INCO as follows:

![Cumulative abnormal return ADRO 23 sept-11 oct 2019](image3)

![Cumulative Abnormal Return INCO 23 sept-11 oct 2019](image4)

Source: Data processed in 2019  
Source: Data processed in 2019
The lowest data return on ADRO and INCO occurred on September 26th. ADRO return data is -0.018 while INCO return data is -0.022. In the Health Care sector there are KLBF abnormal return data as follows.

The lowest return of KLBF data occurred on September 26, amounting to -0.020.

Discussions
Sharma & Wongbangpo, 2002) had observed that stock market of Thailand and Indonesia are categorized to be inefficient because their market volatility are easy to be affected by news or information. The result of deep analysis from major stocks in each sector proves that there is negative response by the market to the student demonstration during the end of September 2019 that create abnormal return condition until it gets normal again in the middle of October.

The sensitivity of Indonesia capital market to information shows agreement to (Woolrdige & Snow, 2006) who has examined the Stock market movement is commonly sensitive to information, even to a game result. (Ashton, Gerrard, Hudson, 2011) Provided a reassessment of the link between international soccer results and stock market returns and concluded that the link between international soccer results and stock market prices dose indeed exist.

RESEARCH FINDING
Tables and graphs from the cumulative abnormal return results show the response of the company's stock movements to the information of the student demo action. Almost all of the major stock samples gave a negative response to the student demonstration on 26th September, except BBRI and WIKA. BBRI experienced the lowest return on 27th September while WIKA experienced the lowest return on 11th October. September 26th was indeed the date of the peak of the student demonstration in the courtyard of the DPR building. At that time, almost all Universities in Indonesia sent student representatives to conduct demonstrations.

CONCLUSION AND RECOMMENDATION
The conclusion of this study is that major stocks in each sector proves a negative response by the market to the student demonstration during the end of September 2019 that create abnormal return condition until it gets back to be normal in the middle of October. But in inefficient market, there are still so many opportunities to obtain Returns. So it can be said that
even though the condition of return is abnormal, investors still have the potential to get favorable results.

The limitation of this research is that the sample selection is limited only in Indonesia, so it cannot be seen in comparison with other emerging market countries. The research method also only uses simple regression tools which make the analysis results per time horizon less detailed. Recommendations for future research, the sample should be broadened to be ASEAN stock market sample, especially based on the efficient market characteristic in ASEAN-5. Furthermore, it is necessary to use another tool for data panel analysis to make the analysis more accurate.

REFERENCES


Lufthia Sevriana & Erie Febrian. *How Political situation affected Major Stock’s Abnormal return in Indonesia*


**Profil Penulis**


Erie Febrian, S.E., M.Comm., Ph.D adalah dosen senior di Bidang Keuangan dan Perbankan di Universitas Padjadjaran. Ia meraih gelar PhD dari International Islamic University Malaysia. Pada