The Announcement of an Increase in Cigarette Excise Rates and Its Implication Towards Indonesia Capital Market

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ABSTRACT

Purpose of this research is to investigate the reaction of Indonesia capital market to the announcement of an increase in cigarette excise rates on September 13th 2019. The cigarette sub sector companies that has been listed on the Indonesia Stock Exchange are used as sample. Event study is a research approach to investigate the reaction of the Indonesia capital market towards the announcement of increasing cigarette excise rates. In this study, market adjusted model was chosen to explain the expected return from the announcement of an increase in cigarette excise rates. Nine days of windows period were used which consist of four days before the announcement, announcement date, and four days after the announcement of the increase in cigarette excise rates. There were two proxies that have been aksed to explain capital market namely abnormal return, and trading volume activity. The finding of the result showed that the market reacted to the announcement which was found from the abnormal return at t-4 and t+3. On the other hand, there was no significant reaction towards the announcement proxied by trading volume activity.

Keywords: *Increase in cigarette excise rates, abnormal return, event study, trading volume activity*

1. INTRODUCTION

Investment is a commitment to a number of funds or other resources made at this time, by obtaining future profits (Tandelilin, 2017). An investor buys a number of shares today in the hope of profiting from future share price increases or dividends in return for the time and risk associated with the investment. One of the goals of investing is to get a more decent life in the future. At the moment there are many forms and ways to invest, ranging from deposits, bonds, land to portfolios. A person who invests is referred to as an investor. Investors are people who invest their capital to make a profit in the future. Information related to investment is a fundamental need for investors, to know all the ins and outs of events that will occur and as a consideration in investment decision making.

According to Brigham & Houston (2014), signalling theory is an action taken from the company's management behaviour to provide guidance for investors regarding management's view on the company's prospects for the future. Additional explanation related to the theory, according to Scott (2012), signalling theory is an action taken by a high type manager which would not be rational if done by a low type manager. Based on this theory, the signalling theory is a theory used to translate actions taken by management that can then influence investors' decisions on the information released. Signalling theory plays an important role in decision making by investors in the capital market, because decision making by investors refers to the signals given by the company's management.

Efficient capital markets are defined in different ways and objectives. Tandelilin (2017) explained that the capital market is defined as an organized financial system, including commercial banks and all intermediaries in the field of finance and securities. Capital market efficiency is where the price of all securities traded has reflected all available information.

Hartono (2017), the information published will give a signal for investment decision making by investor. The information which contains positive value, will look for that the market will respond the announcement at the time. A quick and accurate market reaction indicates that the market is efficient. If the market reacts quickly and accurately to incoming information and immediately forms a new balance price, then market conditions like this are called efficient markets. Tandelilin (2017) defines the concept of efficient markets more on the emphasis of information aspects, meaning that an efficient market is a market where the price of traded securities has reflected all available information.

Fama (1970) explained that an efficient market occurs when the price reflects all the information available in the public (fully reflect). But in reality, prices don't always reflect all the information available. Therefore, testing of the content of information is necessary to do. Testing of the content of information carried out to see the presence or reaction of the capital market to an endorsement is categorized into a study event.

According to Suganda (2018), the event study in the field of capital market uses a study conducted empirically to analyse the impact of an event on the capital market of a country. In other words, this study was conducted to investigate the reaction of the capital market to an event. In capital market research, especially market efficiency testing, event study is a methodology used to test market efficiency of semi strong form. Benchmarks or indicators used in the study event are abnormal return and Trading Volume Activity.

According to Hartono (2017), abnormal return (AR) are an advantage of actual returns against normal returns. Normal returns are expected returns by investors. Therefore, abnormal returns are the difference between the real returns that occur against the expected return (Tandelilin, 2017). Suganda (2018) states that Trading Volume Activity is an indicator that can be used to monitor stock trading activities on the exchanges of a country. TVA is the result of shares traded on the exchange at any given time. Stock Trading Volume Activity is an instrument that can be used to see the reaction of capital markets to information. Stock trading volume is a stock trading activity that occurs at a certain time obtained by comparing or dividing between shares traded and shares outstanding on the Indonesia Stock Exchange.

Announcement of the increase in cigarette excise rates occurred on September 13, 2019. The Ministry of Finance and President Joko Widodo (Jokowi) agreed to raise the tobacco excise rate (CHT) or cigarette excise by 23% and retail selling price (HJE) by 35% which will begin on January 1, 2020. The increase in cigarette excise rate has an effect with the decline in the share price which can be seen from the fall in the share price. A falling share price could reduce investors who own shares in tobacco industry companies to take off and make investors choose to buy shares in other sectors such as mining or manufacturing. After The Minister of Finance Sri Mulyani confirmed the increase in cigarette excise rate by 23% and increased the retail cigarette selling price excise rate by 35%, at the opening of trading Monday, September 16, 2019, the Composite Stock Price Index (IHSG) decreased by 87.9 points or 1.29% to 6,247. one of the influences of the decrease in JCI figures is due to the ratification of the customs increase on September 13, 2019. Of the four stocks in the cigarette sub-sector on Indonesia Stock Exchange, three of them experienced a very sharp decline. Three companies that experienced a decrease due to the increase in cigarette excise rates were GGRM (PT Gudang Garam Tbk), WIIM 9PT Wismilak Inti Makmur Tbk), and HMSPS (PT HM Sampoerna). While those that did not experience a decrease due to cigarette excise tax were PT. Bentoel International Investama Tbk where the share price is getting higher.

The impact of the increase in cigarette excise rates is not only in the world of trade, but affects the capital market. Based on the news obtained at the event has had an impact on a number of cigarette sub-sector issuers that registered on the Indonesia Stock Exchange and many shares of cigarette sub-sector companies released by foreign investors and domestic investors.

This study was conducted to find out if there is a reaction of market participants reflected in abnormal returns through the announcement of the increase in cigarette excise rates and whether there is a difference in market reaction to the announcement of cigarette excise rate increase which is reflected in the significant difference between ATVA before and ATVA after. This research is expected to provide empirical evidence and contribute to knowledge in the field of capital markets, in addition to knowing the impact caused by the increase in cigarette excise rates on the cigarette sub-sector in the Indonesian capital market.

2. LITERATURE REVIEW

The increase in cigarette excise rates in Indonesia according to some news has an effect on the lower share price of cigarette sub-sectors in the Indonesia capital market and caused JCI to decline on September 13, 2019. Based on this statement, the researcher

wanted to test whether the news was true when it was tested directly. Thus, the hypothesis raised in this study is as follows.

2.1 Market Reaction to The Increase in Cigarette Excise Rates Reflected in Abnormal Return

The difference between the real return and the expected return called abnormal return. AR can occur due to information that makes investors take undue action. With the announcement of an increase in cigarette excise can affect the reaction of the capital market. In the research conducted by Devi (2017) proved that with the announcement of the increase in cigarette excise there is no significant difference in AR and other research also stated that there is a market reaction to the announcement of the decline in the price of domestic market obligation coal reflected in the indicator of abnormal returns.

H_1: There is a market reaction to the announcement of an increase in cigarette excise rates reflected in the significant abnormal return.

2.2 Market Reaction to The Increase In Cigarette Excise Rates Reflected In Trading Volume Activity

Trading Volume Activity (TVA) is the number of shares that traded on the Indonesia Stock Exchange. The volume of trade may be affected by the announcement of an increase in cigarette excise rates. Research that has been conducted by Devi (2017) proves that with the announcement of the increase in cigarette excise rates there is no significant difference between theATVA before and the ATVA after and other research also states that the announcement of the decline in the price of domestic market obligation coal as reflected in the trading volume of market activity does not give a significant reaction

H_2: There is a difference in market reaction to the announcement of cigarette excise rate increase which is reflected from the significant difference between ATVA before and ATVA after the announcement of cigarette excise rate increase.

3. RESEARCH METHOD

3.1 Types And Data Sources

Type of data used in this research is quantitative data, which is expressed in the form of numbers. Quantitative data used are stock price at close price, Composite Stock Price Index (JCI), and stock trading volume. In this study uses secondary data for the data source. Secondary data refers to information collected from a previously existing source. According to Indriantoro & Supomo (2014), secondary data is research data obtained by researchers indirectly through intermediary media. This research data was obtained and processed through the Website of Indonesia Stock Exchange and Investment Gallery of Universitas Ma Chung Malang

3.2 Research Samples

Samples from this study are all cigarette companies that have gone public and registered the Indonesia Stock Exchange in 2019. There are 4 companies that included to the sub-cigarette sector with the following table

Table. 1 Research Samples

No	Stock Code	Stock Name
1	RMBA	Pt. Bentoel International Investama Tbk
2	WIIM	Pt. Tsmilak Inti Makmur bk
3	GGRM	PT Gudang Garam Tbk
4	HMSP	PT HM Sampoerna Tbk

Source: Processed Data,2020

3.3 Data Collection Techniques

In this study, the data was obtained by using documentation methods. Documentation method is a data collection technique in the form of records of events that have occurred in the past. The data uses in this study ware take from www.idx.co.id, www.investing.com, www.finance.yahoo.com, and from Investment Gallery of Universitas Ma Chung Malang.

3.4 Data Analysis Techniques

The announcement of the increase in cigarette excise rates occurred on September 13, 2019. Window period for nine days, consisting of four before the announcement of the increase in cigarette excise rates, one day when the announcement of the imposition of cigarette excise rates and four after the announcement of the increase in cigarette excise rates. Market reaction testing measures using Abnormal return are as follows (Suganda,2018).

1. Determine return realization.

$$R_{it} = \frac{P_{it} - P_{it-1}}{P_{it-1}} \qquad (1)$$

2. Determine the return of expectations by using the market adjusted model, with the formula as follows.

$$E(R_{i,t})=\frac{(IHSG_t-IHSG_{t-1})}{IHSG_{t-1}} \qquad (2)$$

3. Determine abnormal return, with the following formula.

$$AR=R_{it}-E(R_{i,t}) \qquad (3)$$

4. Determine the Average Abnormal Return value, with the following formula.

$$AAR_t = \frac{\sum_{i=1}^{k} AR_{it}}{k} \qquad (4)$$

After obtained the Average Abnormal Return (AAR), then the test is done by statistical test One-Sample t-Test. If p-value is greater than α, then the hypothesis is rejected, and vice versa if p-value is smaller than α, then the hypothesis is accepted.

The steps taken to test market reactions using stock trading volume activity are as follows (Suganda, 2018).

Calculate the trading volume activity of each stock by using the following formula.

$$TVA = \frac{volume\ of\ shares\ (i)\ traded\ at\ the\ time\ (t)}{volume\ of\ shares\ (i)\ circulating\ at\ the\ time\ (t)} \qquad (5)$$

Calculating Average Trading Volume Activity (ATVA), with the following formula.

$$ATVA = \frac{\sum TV\ Ai}{\sum i} \qquad (6)$$

After obtained the average trading volume activity, then it can be test by normality test. Data can be said to be normal if the value is Sig. <0.05 or 5% and vice versa if the value is Sig. > 0.05 then the data is abnormal. If distributed data is normal, then the next static test is Paired Sample T-Test. However, if the data is not distributed normally, then the hypothesis test is carried out using a non-parametric test, namely that the Wilcoxon test. If a static Paired Sample T-Test has been performed and obtained an Asmyp value. Sig less than 0.05, then the hypothesis will be accepted. On the contrary when Asymp value. Sig more than 0.05 then the hypothesis will be rejected.

4. RESULTS AND DISCUSSION

This study was conducted to analyze whether the increase in cigarette excise rates can cause the capital market to react or not. The reaction of the capital market can be seen from AR and TVA around the event that is four days before the announcement of the increase in cigarette excise rates until four days after the announcement of the increase in cigarette excise rates.

The first hypothesis was tested using abnormal return indicators using market adjusted models.

Abnormal return calculations are used to test whether or not the content of information is causing the market more than normal circumstances. The market reaction will be reflected in abnormal returns from companies during the research period of the announcement of cigarette excise increase. Hypothesis 1 is accepted if the value of abnormal return is not equal or different from 0 and is expressed significantly if the value of Sig. (2-tailed) is less than 0.05 and vice versa if the value is Sig. (2-tailed) more than 0.05 then it is said to be insignificant. The results of abnormal return calculations are shown in the following table.

Table 2. One Sample t-Test

Day	t-count	AAR	CAAR	Sig. (2-tailed)	Description
t-4	**4,467**	**0,0191**	**0,0191**	**0,021**	**Significant**
t-3	-1,566	-0,0210	-0,0019	0,215	Insignificant
t-2	1,091	0,0130	-0,0080	0,355	Insignificant
t-1	1,905	0,0108	0,0238	0,153	Insignificant
t0	-1,104	-0,0082	0,0026	0,350	Insignificant
t+1	-1,779	-0,0907	-0,0989	0,173	Insignificant
t+2	1,012	0,0042	-0,0864	0,386	Insignificant
t+3	**3,605**	**0,0166**	**0,0208**	**0,037**	**Significant**
t+4	-0,047	-0,0003	0,0163	0,965	Insignificant

Source: Processed data, 2020

Table 2 shows that the abnormal return that occurs during the period of the announcement of an increase in cigarette excise rates. At t-4 there was a significant abnormal return due to the sig value. (2 tailed) less than 0.05. Then at t-3 to t+2 no significant abnormal return was found due to the sig value. (2 tailed) greater than 0.05. This indicates that from September 10 to September 1, 2019, the market has not reacted to the announcement of increase in cigarette excise rates. However, on September 18, 2019 or t+3 the market has reacted to the event because there is a significant abnormal return with sig value. (2 tailed) which is less than 0.05. Then at t+4 no significant abnormal return was found. Based on this explanation, hypothesis 1 is accepted.
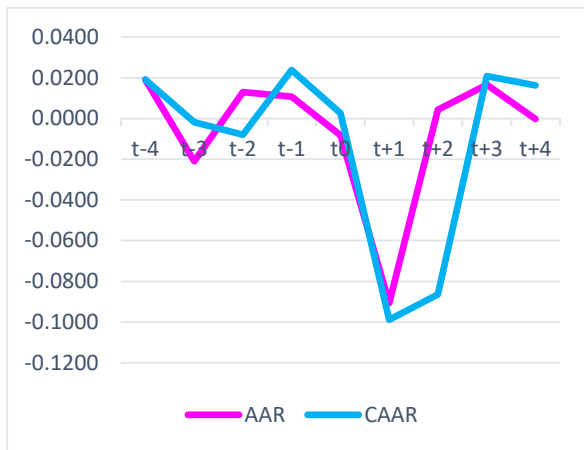
Chart 1 Average Abnormal Return (AAR) and Cumulative Average Abnormal Return (CAAR)

Chart 1 shows there are two charts namely AAR and CAAR. The AAR and CAAR in this study fluctuating, both at the lowest point occurred at t_{+1}, at the opening of Indonesia capital market trading after the announcement of cigarette excise increase, this indicates that the announcement of cigarette excise increase is reacted positively by the market.

The second hypothesis was tested using TVA calculations in the period before and after the announcement of the increase in cigarette excise rates. Testing this hypothesis is done by comparing ATVA before the announcement of the increase in cigarette excise rates and ATVA after the increase in cigarette excise rates. The first step that must be done is to use the normality test first, the normality test will be normally distributed if the value of asymp. Sig (2-tailed) is greater than 0.05. if the value is asymp. Sig (2-tailed) less than 0.05 then the data is abnormal. The results of the normality test showed in table 3.

Table 3. One Sample Kolmogorov-Smirnov Test

Day	ATVA Before	Day	ATVA After
t-4	0,0008	t+4	0,0008
t-3	0,0005	t+3	0,0019
t-2	0,0004	t+2	0,0015
t-1	0,0022	t+1	0,004
Mean	0,000975		0,00205
Std Deviation	0,0083417		0,0013772
Asymp. Sig. (2-tailed)	0,767		0,881

Source: Data processed,2020

Table 3 One-Sample Kolmogrov-Smirnov Test is the result of normality test of ATVA. Test results on ATVA showed that the ATVA before and after the increase in cigarette excise rates was normally distributed with asymp results. Sig (2-tailed) is 0.767 and 0.881 which is greater than 0.05.

After the normality test, if normally distributed it can be continued by using t-paired sample t-test to see if the market reaction before and after the event of increasing cigarette excise rate as reflected from TVA.

Table 4. Paired Sample t-Test

	ATVA After- ATVA Before
Std. Deviation	0,0007719
Sig. (2-tailed)	0,69

Source: Processed Data, 2019

Table 4 shows there is no difference in TVA before and TVA after the announcement of the increase in cigarette excise rates due to the value of Sig.(2-tailed) by 0.69 (> 0.05), so Hypothesis 2 was rejected.
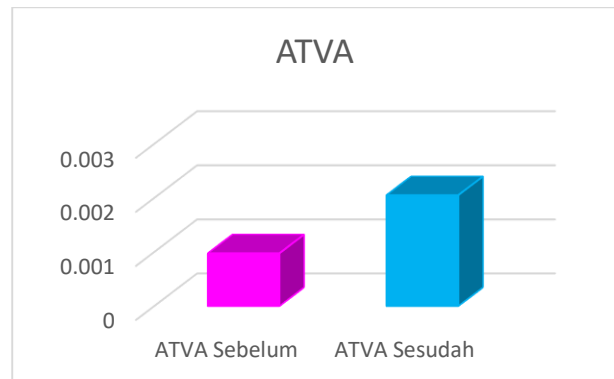

Chart 2 Average Trading Volume Activity (ATVA)

The chart above shows the comparison of ATVA before and after the increase in cigarette excise rate. At the time before the announcement of the increase in cigarette excise rates, the average trading volume of activity generated was 0.000975, while after the announcement of the increase in cigarette excise rates, the average trading volume of activity generated was 0.00205. This indicates that the ATVA after the event is greater than the ATVA before. This means that trading volumes increased but no significant market reaction was found.

5. CONCLUSIONS

Reaction of the Indonesia capital market to the announcement of an increase in cigarette excise rates can be seen from indicators of AR and TVA. The results of the test showed that the announcement of cigarette excise increase reflected in abnormal return indicators gave a significant response, namely on t-4 and t+3. However, different results were found in the trading indicator of volume activity i.e. the market did not give a significant reaction due to the value of Sig.(2-tailed) by 0.69 (> 0.05)

In practical terms, it is expected that this research can be used as input especially for investors. This research is expected to give an overview of the announcement of the increase in cigarette excise rates to the capital market and is expected to be a tool in their decision making.

Limitations in this study is only testing one sub-sector, namely the cigarette sub-sector, of which there are only 4 companies. Then in the use of windows period only from 4 days before the exchange and 4 days exchange after the announcement of cigarette excise increase. In addition, the samples used in this study are still minimal, because they only use 4 companies in the cigarette sub-sector.

Advice for further research to add windows period and analyze whether there are other sectors that also influence the announcement of cigarette excise increase and can analyze through other events related to or impact on the capital market. For investors, it is expected to help decision-making in buying shares in the cigarette sub-sector.

REFERENCES

[1]. Ayuningtyas, (2019). Cukai Rokok Naik 23%, Asing Obral Saham HMSP & GGRM Cs (Online), (http://www.cnbcindonesia.com/market/20190916093206-17-99630/cukai-rokok-naik-23-asing-obral-saham-hmsp-ggrm-cs,diakses pada 25 November 2019).

[2]. Brigham & Houston. 2014. Dasar-Dasar Manajemen Keuangan. Jakarta: Salemba Empat.

[3]. CNN, (2019). Cukai Naik,Saham Emiten Rokok Berguguran (Online), (http://www.cnnindonesia.com/ekonomi/20190916094547-92-430769/cukai-naik-saham-emiten-rokok-berguguran,diakses pada 2 Oktober 2019)

[4].Fama,E.(1970), Efficient Market: A Review of Theory and Empirical Work, Journal of Finance.

[5]. Finance,Yahoo.Jakarta Composite Index (^JKSE) (Online). (https://finance.yahoo.com/quote/%5EJKSE/history?period1=1536426000&period2=1569344400&interval=1d&filter=history&frequency=1d, diakses pada 25 November 2019).

[6]. Finance,Yahoo.PT Bentoel Internasional Tbk (RMBA.JK) (Online). (https://finance.yahoo.com/quote/RMBA.JK/history?period1=1536426000&period2=1568912400&interval=1d&filter=history&frequency=1d, diakses pada 25 November 2019)

[7]. Finance,Yahoo.PT Gudang Garam Tbk (GGRM.JK) (Online). (https://finance.yahoo.com/quote/GGRM.JK/history?period1=1536426000&period2=1568912400&interval=1d&filter=history&frequency=1d, diakses pada 25 November 2019)

[8]. Finance,Yahoo.PT Hanjaya Mandala Sampoerna Tbk (HMSP.JK) (Online). (https://finance.yahoo.com/quote/HMSP.JK/history?period1=1536426000&period2=1568912400&interval=1d&filter=history&frequency=1d, diakses pada 25 November 2019)

[9]. Finance,Yahoo.PT Wismilak Inti Makmur Tbk (WIIM.JK) (Online). (https://finance.yahoo.com/quote/WIIM.JK/history?period1=1536426000&period2=1568912400&interval=1d&filter=history&frequency=1d, diakses pada 25 November 2019)

[10]. Hartono, J. (2017). Teori Portofolio dan Analisis Investasi. Edisi 11. Yogyakarta: BPFE

[11]. IDX.Ringkasan Saham (Online), (https://idx.co.id/data-pasar/ringkasan-perdagangan/ringkasan-saham/, diakses pada 25 November 2019)

[12]. Indriantoro, Nur and Bambang Supomo. 2014. Metodologi Penelitian Bisnis Untuk Akuntansi & Manajemen. Edisi 1. Cetakan ke-12. Yogyakarta: BPFE.

[13]. Maghfira, (2019). Saham HMSP dan GGRM sempat terhempas lebih dari 20%, ini rekomendasi asli (Online), (http://investasi.kontan.co.id/news/saham-hmsp-dan-ggrm-sempat-terhempas-lebih-dari-20-ini-rekomendasi-analis,diakses pada 25 November 2019).

[14]. Putri, (2019). Sri Mulyani Buka-bukaan kenapa cukai harus naik 23% (Online), (http://www.cnbcindonesia.com/news/20190916194459-4-99854/sri-mulyani-buka-bukaan-

kenapa-cukai-harus-naik-,diakses   pada   25 November 2019)

[15]. Scott,   William R. 2012. Financial Accounting Theory, 6th editions. Toronto, Pearson Education Canada Inc. Ontario:

[16]. Suganda,T.R. (2018).Event Study, Teori dan pembahasan Reaksi Pasar Modal Indonesia. Malang: CV Seribu Bintang.

[17]. Tandelilin, (2017). Pasar Manajemen Portofolio & Investasi. Depok: PT Kanisius.