

# Impacts of Indonesia Raw Minerals Export Ban on Abnormal Return and Trading Volume: An Event Study on Stocks of Metals and Minerals Mining Subsector in IDX

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**ABSTRACT**— *Implementation of the Indonesia raw minerals export ban and the obligation to build a smelter in Indonesia which applied by the Indonesian government through the Government Regulation No 1 Year 2014 allegedly had an impact on stock returns and trading volumes, especially stocks of metals and minerals mining subsector in Indonesia Stock Exchange (IDX). This study uses an event study to analyse if there are significant differences in the abnormal return and trading volume at the time of Government Regulation No 1 Year 2014 officially enforced and in the event of smelter investment project announcement by the issuers. The results showed that there are significant differences on abnormal return when Indonesia raw minerals export ban officially enforced, but the volume of trade does not significantly different. The same results also occurred in the event of smelter investment project announcement by the issuers.*

**Keywords**— Event study, Abnormal return, Trading volume, Mining, IDX

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## 1. INTRODUCTION

Indonesia is a rich country in natural resources especially in mining products such as bauxite, coal, nickel, petroleum and natural gas (USGS, 2015). Indonesia's CBS data over the last five years shows the contribution of the mining and quarrying sector is consistent as the fourth largest contributor to Indonesia GDP (CBS, 2015). Indonesia as a rich country in mining products, currently only able to act as a manufacturer and exporter of raw product (raw material/ore) than mining processed products that have more value, it is due to lack of technology and infrastructure owned by Indonesian mining industry.

Realizing these problems, Indonesia government began to revise existing legislation in order to increase the value of Indonesia mining products. Indonesia government began to set a ban on exports of raw metals and minerals by the issuance of Government Regulation (PP) No 1 Year 2014. This regulation officially starting implemented on January 12, 2014 (Indonesia Ministry of Law and Human Rights, 2014). Through the Government Regulation No 1 Year 2014 mining companies are required to build a mineral ore purification plant (smelter) to process raw materials in Indonesia, so the final purpose to increase value of Indonesia mining products can be achieved.

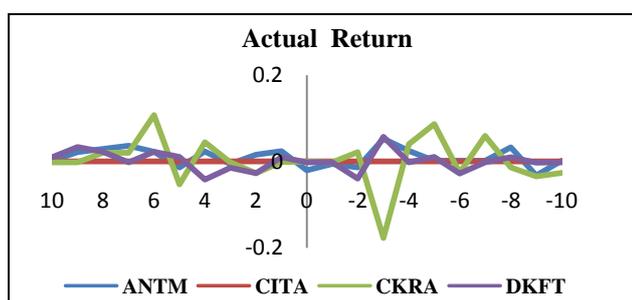
Implementation of Government Regulation No 1 Year 2014 has an impact on the capital market in particular issuers of metals and minerals mining subsector in the Indonesia Stock Exchange (IDX). This is because the raw minerals export ban and the obligations of smelter construction is intended for metal and mineral mining companies. Currently there are eight companies listed in the metals and minerals mining subsector. Table 1 provide list of issuers that are listed in the metals and minerals mining subsector in Indonesia Stock Exchange.

**Table 1.** List of metals and minerals mining subsector issuer in IDX

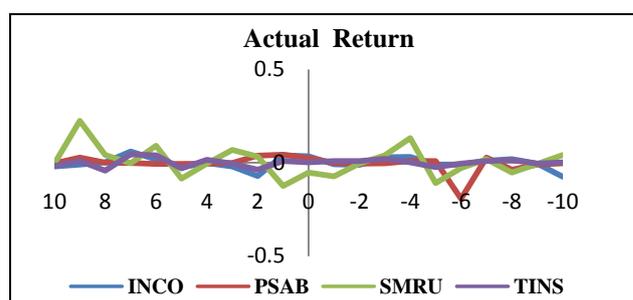
No	Code	Issuers	IPO Date	Shares Outstanding
1	ANTM	PT Aneka Tambang (Persero) Tbk	27 November 1997	9.538.459.750
2	CITA	PT Cita Mineral Investindo Tbk	20 March 2002	3.370.734.900
3	CKRA	PT Cakra Mineral Tbk	19 May 1999	5.106.021.090
4	DKFT	PT Central Omega Resources Tbk	21 November 1997	5.638.246.600
5	INCO	PT Vale Indonesia Tbk	16 May 1990	9.936.338.720
6	PSAB	PT J. Resources Asia Pacifik Tbk	01 December 2007	5.292.000.000
7	SMRU	PT SMR Utama Tbk	10 October 2011	12.003.000.000
8	TINS	PT Timah (Persero) Tbk	19 October 1995	7.447.753.454

Source: IDX, 2015

The impact of the implementation of this new regulation will affect the decision of investors to invest their funds in metals and minerals mining subsector. The investors will see this as information that must be reckoning. The market response to the new regulations can be seen from the actual return of this subsector shares at the time of the implementation of the regulations on January 12, 2014 as shown in Figures 1 and 2.

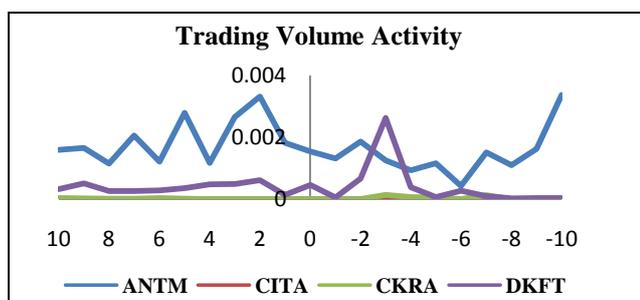


**Figure 1.** Actual Return of ANTM, CITA, CKRA, and DKFT during H-10 until H + 10 of the Regulation Implementation

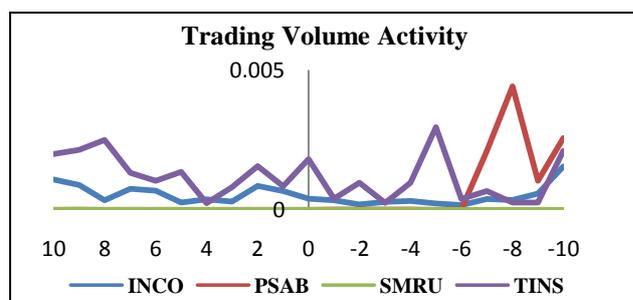


**Figure 2.** Actual Return of INCO, PSAB, SMRU, and TINS during H-10 until H + 10 of the Regulation Implementation

Issuers that listed in the mining of metals and minerals subsector as shown in Figures 1 and 2 show a decrease in the actual return after the raw minerals export ban through the Government Regulation No 1 Year 2014 officially applied. Actual returns that difference with the expected return of the market cause an abnormal return (Bodie, et al., 2009). Other indicators that can be used as a reference in response to the the impact of this regulation in stock market is Trading Volume Activity (TVA) as shown in Figure 3 and 4.



**Figure 3.** TVA of ANTM, CITA, CKRA, and DKFT during H-10 until H + 10 of the Regulation Implementation



**Figure 4.** TVA of INCO, PSAB, SMRU, and TINS during H-10 until H + 10 of the Regulation Implementation

Trading volume activity (TVA) shows the trading activity to reflect how active and liquid stocks are traded on the capital market (Jones, 1997). Figures 3 and 4 shows that volume activity before and after the regulation implementation keep fluctuating. To see if there is a significant difference of abnormal return and trading volume activity after this regulation implementation there should be further analysis to be conducted in this study.

Furthermore, the implementation of the new regulations about raw minerals export ban there are variety of responses given by industry players in the mining sector. According to data from the Indonesia Ministry of Energy and Mineral Resources (2015) there were 66 serious companies to invest in building a smelter in Indonesia and only 16 companies that have made Environment Impact Assessment (EIA). Among the 66 companies that there are five mining company listed on the Stock Exchange, PT Aneka Tambang Tbk (ANTM), PT Cita Mineral Investido Tbk (CITA), PT Cakra Minerals Tbk (CKRA), PT Central Omega Resources Tbk (DKFT) and PT Vale Indonesia Tbk.

The company's announcement to build a smelter is also an important point in the capital market related information that can be used as a reference for investors. The company's commitment to build a smelter is response with various feedback in the stock market. The response of the markets after the announcement of the company's investment plan in the smelter construction would be an interesting thing to be analyse, to see how the the stock market efficiency in this subsector.

Fama (1970) defines the efficiency of the market as a market in which all available information could be fully reflected in the prices of its shares. The link between the stock market and the concept of efficient markets is how information is processed by the stock market towards a new equilibrium condition (Jogiyanto, 1998). Furthermore, Fama (1970) hypothesis of market efficiency can be divided into three types, namely the weak-form efficiency, semistrong-form efficiency and strong-form efficiency. Weak-form efficiency that occurs when a set of information includes only the price history or its return. Semi-strong form efficiency occurs when a set of information includes all information known by the participants of the stock market (public information), while the strong-form efficiency occurs when a set of relevant information regarding the pricing structure can only be accessed by several market participants (private information).

Amenc and Le Sourd (2003) state that occurs when the fuel-efficient stock market trends in the stock market is unpredictable. Brown and Reilly (2009) says that one study to examine the semi-strong form of market efficiency is the event study method to examine how quickly the stock price to adjust to the economic event significantly. Event study describes the empirical research technique that allows financial analysts to assess the impact of certain events of the company's stock price (Bodie et al, 2009). MacKinlay (1997) defines event study as one of the methodology of research that uses financial market data to measure the impact of an event that is specific to the company's value, usually reflected in the share price and volume of transactions. The key assumption of the event study method is the market to be efficient. On an efficient market, the effects of an event will be reflected directly in the company's stock price (Campbell et al, 1997). This will allow to see the influence of an event in a relatively short time.

Previous studies regarding the event study to look at the abnormal return on an event or events related to the occurrence of an announcement that the stock market and regulation have been carried out, as is done by Sharma (2009) which analyzes the impact of the announcement of the open offer shareholders the Indian Stock Market. The results showed there were no abnormal return during the announcement of the open offer shareholders, so the market is not efficient concluded in the semi-strong form. Prevoo and Weel (2010) also used the event study to examine the impact of changes in market regulation in 5000 corporate news announcements in Amsterdam Stock Market. The results showed that the value of information on the Amsterdam stock market announcement on the Stock Market did not difference significantly after the new regulations.

Nagm and Kautz (2008) examine the presence of abnormal return on 217 companies investment announcement of Information Technology (IT) on the Australian Stock Exchange in 1996-2006. The results showed that all samples announcements IT investments are statistically significant positive abnormal returns. This applies to the announcement day and two event window. Setiawan et al (2011) using the method of event study to examine the impact of the announcement of Chief Executive Officer (CEO) turnover with trading volume approach. The results showed trading volume before and after the CEO turnover significantly different. According to the background description, the problem identification need to answered in this study are: whether there is a significant difference of abnormal return and trading volume activity when the announcement of the Government Regulation No. 1 Year 2014 officially implemented and whether there is a significant difference of abnormal return and trading volume activity during the companies announcement in the investment commitment to build a smelter.

Furthermore, the objectives of this research are: First, to analyze whether there is a significant difference in abnormal return and trading volume when the announcement of the Government Regulation No. 1 Year 2014 officially implemented. Second, to analyze whether there is a significant difference in abnormal return and trading volume activity during the companies announcement in the investment commitment to build a smelter. This study uses event study to see whether there is a significant difference of abnormal return and trading volume activity before and after the announcement of the Government Regulation No 1 Year 2014 and during the companies announcement in the investment commitment to build a smelter

## **2. RESEARCH METHODS**

The data used in this study is the shares daily closing price data of each issuer in metals and minerals mining subsector listed on the Indonesia Stock Exchange (IDX). Data processing and analysis techniques using event study method steps. The first step is to determine the event date as the day on which the event occurs is denoted as  $t = 0$ .

Event date in this study is the date when Government Regulation No 1 Year 2014 officially implemented on January 12, 2014 and the date when the companies officially announced plans for the construction of the smelter as one

of the obligations for the mining companies during the Government Regulation No. 1 Year 2014. The event date are: 1) February 8, 2013 announcement of the groundbreaking start for the expansion project smelter PT Aneka Tambang (Persero) Tbk in Pomalaa, North Sulawesi 2) June 12, 2014 the signing of the MoU on the construction of the smelter Nickel Pig Iron Minerals Tbk PT Cakra Mineral (CKRA) in North Morowali 3) January 27, 2015 announcement of the grand plan development and green field smelter PT Vale Indonesia Tbk in Sorowako and Pomalaa.

Event window is the period where it will be made an observation of abnormal return. In studies that used that event window (-5, + 5), (-10, + 10), (-20, + 20) and (-30, + 30). Estimation period as a period to estimate in this study used estimation period of 120 days before the event smelter construction announcement by the issuer (-150, -31). The period chosen for consideration where the price of the stocks are still not affected by the event.

Determination the period of the event window and estimation window is based on research Sharma (2009), Prevoo and Weel (2010) that found no significant difference in abnormal return and trading volume activity with the event window (-1, + 1) and (-5, +5) and estimation window for 30 days before the event. Determination of the period is also based on research Nagm and Kautz (2008), Setiawan et al. (2011) and MacKinlay (1997) who found significant difference in the abnormal return and trading volume activity with the event window (-5, + 5), (-10, + 10) and (-20, + 20) with the estimation window between 40 up to 205 days before the event. Imelda et al (2014) claim that if the event window and the estimation window lengthened, the opportunity of getting a difference abnormal return and trading volume activity is also getting bigger.

Calculating the actual return for individual stocks according Husnan (1998) can be calculated using the formula:

$$R_{it} = \frac{P_t - P_{t-1}}{P_{t-1}}$$

**Description:**

- Rit = actual return of stock i in period t
- Pit = stock price i in period t
- Pt-1 = stock price i in period t-1

The expected return is measured by market model is an Ordinary Least Square (OLS). The OLS formula used by Brown and Warner (1985) are as follow:

$$E(R_t) = \alpha + \beta_i R_{m,t} + u_t$$

**Description:**

- E (Rt) : expected return of stock i in period t
- $\alpha_i$  : intercept of the stock i
- $\beta_i$  : beta of the stock i
- Rmt : market index return in period t
- ut : error term

The formula used to calculate the abnormal return (Brown and Warner, 1985) are as follows:

$$AR_{it} = R_{it} - E(R_{it})$$

**Description:**

- ARit = abnormal stock return i in period t
- Rit = actual stock returns i in period t
- E (Rit) = expected return of stock i in period t

Average abnormal return (AAR) is calculated during the event period with the following formula (Asri, 1996):

$$AAR_t = \frac{1}{N} \sum_{i=1}^N AR_{it}$$

**Description:**

- AAR<sub>t</sub> : average abnormal return
- $\sum_{i=1}^N AR_{it}$  : number of abnormal returns during the event period
- N : number of event

Cumulative Abnormal Return mathematically expressed as:

$$CAAR_{i,t} = \sum AAR_{i,t}$$

**Description:**

CAAR<sub>i,t</sub>: cumulative average abnormal return of stock i in period t  
AAR<sub>i, t</sub>: average abnormal return of stock i in period t

As for the calculation of the trading volume activity using the following equation (Jones 1997):

$$TVA = \frac{\textit{The number of shares i traded on the day t}}{\textit{The Number of i shares outstanding}}$$

**Description:**

TVA : Trading volume activity  
i : The issuer to 1,2,3, ..., 8  
t : The period of observation to 1,2,3, ..., 30

The hypothesis used to examine that there are significant differences in average abnormal return and trading volume activity before and after the event. The hypothesis used the sample paired t-test with a significance level of 5%. The Hypothesis as follow

**Hypothesis 1**

H0: There is no significant difference of average abnormal returns before and after Implementation of Government Regulation No 1 Year 2014

H1: There is a significant difference in average abnormal returns before and after Implementation of Government Regulation No 1 Year 2014

**Hypothesis 2**

H0: There is no significant difference in the volume trading activity before and after Implementation of Government Regulation No 1 Year 2014

H1: There is a significant difference in the volume trading activity before and after Implementation of Government Regulation No 1 Year 2014

**Hypothesis 3**

H0: There is no significant difference in average abnormal returns before and after smelter construction announcement by the issuer

H1: There is a significant difference in average abnormal stock returns before and after smelter construction announcement by the issuer

**Hypothesis 4**

H0: There is no significant difference in the volume trading activity before and after smelter construction announcement by the issuer

H1: There is a significant difference in the volume trading activity before and after smelter construction announcement by the issuer

### 3. RESULT AND DISCUSSION

Implementation of the raw minerals export ban regarding to the Government Regulation No. 1 Year 2014 which officially applied on January 12 2014 had a significant impact on the issuers of metals and minerals mining subsector in Indonesia Stock Exchange (IDX). The impact of the regulation implementation can be examine with the result of paired t-test for average abnormal return and trading volume activity before and after the implementation of Government Regulation No. 1 Year 2014 through the issuer listed in metals and minerals mining subsector in IDX (Tables 2 and 3).

**Table 2.** The results of paired t-test for average abnormal return before and after the implementation of Government Regulation No 1 Year 2014

Issuers	Event Window			
	-5,+5	-10,+10	-20,+20	-30,+30
ANTM	No	-	-	-
CITA	-	-	-	-
CKRA	No	-	-	-
DKFT	No	No	-	-
INCO	No	No	No	-
PSAB	-	No	No	No
SMRU	+	No	No	+
TINS	No	No	+	+

**Description:**

Sign (+) shows the significant differences before and after, in the form of positive sentiment

Sign (-) shows the significant differences before and after, in the form of negative sentiment

No showed that there is no significant differences before and after

The results of paired t-test for average abnormal return before and after the Government Regulation No. 1 Year 2014 as shown in Table 2 indicate that the application of the raw minerals export ban give the impact in the form of negative sentiment for average abnormal return of metals and minerals mining sector. Negative sentiment shows that the market respond negatively to the implementation of the raw minerals export ban. The negative respond could be caused of the investors expectation for the domino effect of the application of this regulation.

The results of paired t-test (Table 2) shows that only PT SMR Utama Tbk and PT Timah (Persero) Tbk, which indicates the impact in the form of positive sentiment. This is because the company already applied integrated of the mining production process, so their product is not in the form of raw minerals anymore but in the form of end product such as manganese (PT SMR Utama Tbk) and tin (PT Timah Persero Tbk).

Trading volume activity also can be used as an indicator of the stock market response due to this regulation. The paired t-test with the same event window and the estimation window with abnormal returns test used in the examining of the trading volume activity difference. The results of paired t-test for the trading volume activity before and after the Government Regulation No. 1 Year 2014 can be seen in Table 3.

**Table 3.** The results of paired t-test for trading volume activity before and after the implementation of Government Regulation No 1 Year 2014

Issuers	Event Window			
	-5,+5	-10,+10	-20,+20	-30,+30
ANTM	No	No	No	No
CITA	No	No	No	No
CKRA	No	No	No	No
DKFT	No	No	No	No
INCO	No	No	No	No
PSAB	No	No	-	-
SMRU	No	No	No	No
TINS	No	No	No	+

**Description:**

Same as Table 2

The results of the paired t-test for trading volume activity before and after the application of Government Regulation No. 1 Year 2014 (Table 3) shows that majority there is no significant difference trading volume activity before and after the implementation the raw minerals export ban regulation. This is indicates that the market is not respond quickly with trading activity that increased or decreased. The significant difference in the volume trading activity in the form of positive sentiment occurs only on PT Timah (Persero) Tbk in the event window (-30, + 30). It is caused by PT Timah (Persero) Tbk is one of the largest integrated tin mining company in the world, so that the application of the raw minerals export ban will not have a negative impact on the company. The company's production activities not only mine but have been integrated to the final stage of the process and does not produce raw minerals.

The significant difference in the trading volume activity in the form of negative sentiment are only on PT J Resources Asia Pacific Tbk in the event window (-20, + 20) and (-30, + 30). This is caused PT J Resources Asia Pacific Tbk is the only issuer that focuses only on the field of gold mining. The negative sentiment on the activity of trading volume is due to other factors beyond the application of Government Regulation No. 1 Year 2014. The declining in the world gold prices during the period of the event window causes actual differences in the trading volume activity in the

form of negative sentiment. In early 2014 the price of gold on the market decreased approximately 11% compared to the year 2013, this makes the company suffered a net loss of USD 26.3 million at the end of 2013 (PSAB, 2014).

The impact of the smelter project investment announcements by issuers can also be seen by the movement of average abnormal return before and after the announcement. Average abnormal return describes the differences of the actual return earned by investors with the expectations of returns. Average abnormal return movement of the three issuers in the event of the announcement of the smelter investment project can be seen in figure 5, 6, and 7.

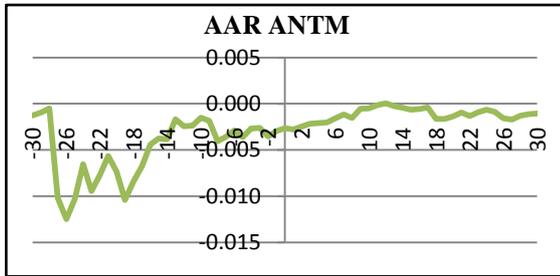


Figure 5. AAR for ANTM during H-30 until H + 30 of Smelter Construction Announcement

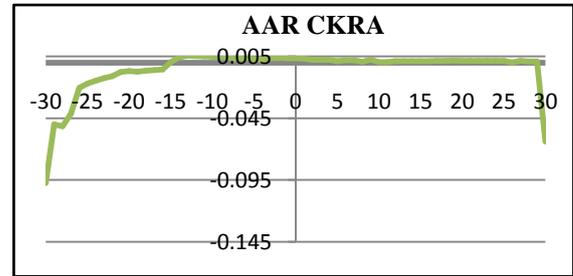


Figure 6. AAR for CKRA during H-30 until H + 30 of Smelter Construction Announcement

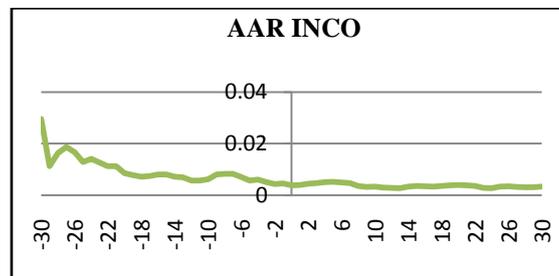


Figure 7. AAR for INCO during H-30 until H + 30 of Smelter Construction Announcement

Furthermore, to answer the hypothesis 3 and 4, the event study analysis with the same event window and estimation window is also carried out. The announcement of the smelter groundbreaking construction for the expansion project smelter PT Antam (Persero) Tbk Pomalaa, North Sulawesi (February 8, 2013), the signing of the MoU on the construction of the smelter Nickel Pig Iron Minerals Tbk PT Cakra (CKRA) in North Morowali (June 12, 2014) and the announcement of grand plan development and green field smelter PT Vale Indonesia Tbk in Sorowako and Pomalaa (January 27, 2015). The impact of the smelter construction announcement can be seen from the results of paired t-test for average abnormal return before and after the announcement (Table 4).

Table 4. The results of paired t-test for average abnormal return before and after the smelter construction announcement

Issuers	Event Window			
	-5,+5	-10,+10	-20,+20	-30,+30
ANTM	-	-	-	-
CKRA	No	+	No	No
TINS	No	+	+	+

**Description:**

Same as Table 2

The results of paired t-test for average abnormal return before and after the announcement of the groundbreaking smelter expansion project PT Antam (Persero) Tbk in Pomalaa, North Sulawesi shows the negative sentiment. This indicates that the market reaction to the announcement of the groundbreaking smelter expansion project did not give a positive sentiment in the stock market. These results are not in accordance with previous Nagm and Kautz (2008) studies, in which the abnormal return is positive when the announcement of the investment project. This may be due to other factors that affect stock returns include nickel price which continued to weaken since 2012 and continued throughout 2013. The decline in the price of nickel is causing the decline in revenue for the company (ANTM, 2013) that responded by the market sentiment negative.

Table 4 shows the significant difference AAR before and after the signing of the MoU on the construction of smelter Nickel Pig Iron Minerals Tbk PT Cakra (CKRA) in North Morowali in the event window (-10, + 10). The significant difference in the form of positive sentiment after the announcement of the project showed that NPI smelters

provide significant abnormal returns in the event window (-10, + 10) for investors. In the event that the other window there is no actual difference. It indicates the presence of a smelter project there is no difference in expected return with actual return earned by investors.

Event study analysis during the announcement grand plan development and green field smelter PT Vale Indonesia Tbk in Sorowako and Pomalaa (Table 4) shows that there are actual difference in the event window (-10, + 10), (- 20 + 20) and (-30, + 30) in the form of positive sentiment. These results are consistent with the results of research Nagm and Kautz (2008) in which the abnormal return is positive when the announcement of the investment project. AAR significant differences indicate that the announcement of the construction of the smelter project responded by the market with actual returns higher than expected return forecast by investors. This indicates the existence of this project makes a positive move stock prices and provide benefits for investors.

Besides abnormal return, Trading Volume Activity (TVA) can also be used as indicators of the impact of information or events on the stock market. Changes in the volume of trading activities illustrate how the investor sentiment towards the existence of an important information on the stock market. Image 5,6, and 7 show the movement for the trading volume activity during H-30 until H + 30 of smelter construction announcement by ANTM, CKRA and INCO

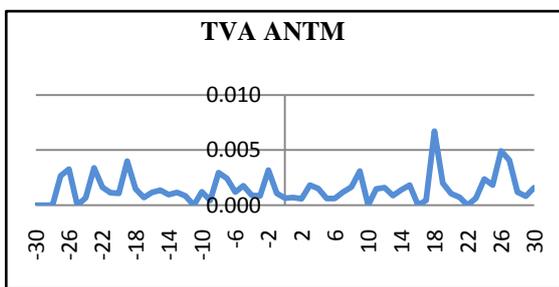


Figure 8. TVA for ANTM during H-30 until H + 30 of Smelter Construction Announcement

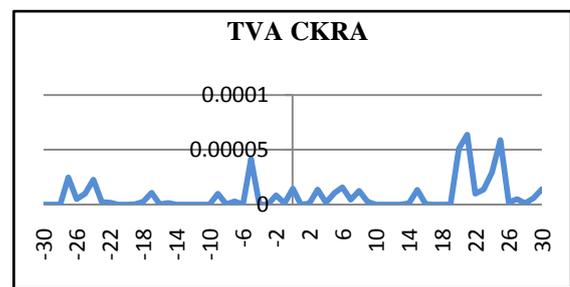


Figure 9. TVA for CKRA during H-30 until H + 30 of Smelter Construction Announcement

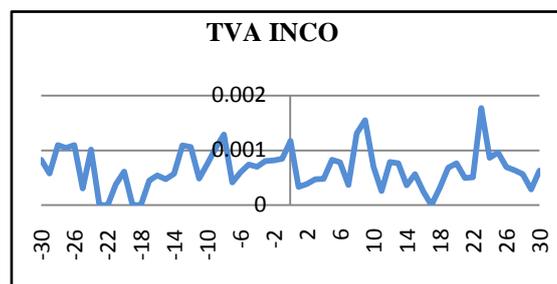


Figure 10. TVA for INCO during H-30 until H + 30 of Smelter Construction Announcement

Figure 8, 9, and 10 show the movement of the trading volume activities of the issuers are likely to continue fluctuating in the period before and after the announcement of the smelter project development investment. Further analysis is needed to answer the hypothesis 4 whether there is significant difference in the trading volume activity before and after the official announcement event smelter construction by the issuer. The paired t-test with a significance level of 5% are also applied in the analysis. The results of paired t-test for trading volume activity before and after the smelter construction announcement can be seen in Table 5.

Table 5. The results of paired t-test for trading volume activity before and after the smelter construction announcement

Issuers	Event Window			
	-5,+5	-10,+10	-20,+20	-30,+30
ANTM	No	No	No	No
CKRA	No	No	No	No
TINS	No	No	No	No

Description:  
Same as Table 2

The result of paired t-test for the trading volume activity (Table 5) shows the same thing at the fourth event that there is no significant difference before and after the smelter construction announcement. This shows that the market did not immediately respond to the announcement of the smelter construction project. These results are not in accordance with the initial hypothesis which states that there is significant difference of AAR before and after the announcement or

reject H1. This indicates that investors do not give feedback in the form of stock trading activity that increased or decreased by the announcement of this project.

The absence of significant difference before and after the announcement indicating investors still wait and see on the sustainability of the smelter project and the implementation of the raw minerals export ban policy. Construction of the smelter project are require very expensive and a fairly long time, so it requires the commitment of the company and external oversight for smelter facility project completion. It also takes an active role of the government to facilitate the construction of a smelter in Indonesia so that the final purpose of the application of Government Regulation No 1 Year 2014 to increase the value-added of mining products can be realized.

#### **4. CONCLUSIONS AND RECOMMENDATIONS**

Event study analysis results indicate that the application of Government Regulation No. 1 Year 2014 had an impact in the form of negative sentiment for abnormal return of metals and minerals mining subsector. Negative sentiment indicates that the market responded negatively to the implementation of raw minerals export ban. The results of the paired t-test for trading volume activity before and after the application of Government Regulation No. 1 Year 2014 shows that there is no significant difference trading volume activity before and after the implementation of this regulation. This indicates that the market is not immediately responds with the trading activity that increased or decreased.

Furthermore, the event study analysis also shows that the announcement of the smelter construction are responded by actual differences in the average abnormal return. Announcement of the smelter construction by PT Cakra Minerals Tbk and PT Vale Indonesia Tbk provide positive sentiment in the stock market, it shows potential investors to benefit from the difference in expected return with actual return of the stock. Instead announcement smelter investment projects undertaken by PT Antam (Persero) Tbk not give a positive sentiment in the stock market.

The result of paired t-test for the activity of trading volume shows there is no significant difference before and after the smelter construction announcement. This indicates that investors do not give feedback in the form of stock trading activity increased or decreased by the announcement of this project. The absence of significant differences before and after the announcement indicating investors still wait and see on the sustainability of the smelter project and the implementation of a ban on the export of raw mineral policy

Results of an event study analysis showed that the stock market responds to the announcement of the construction of a smelter project with the differences in average abnormal return, it indicates that the announcement of the construction of a smelter providing significant differences of AAR and gived the potential advantages for the investors. Besides that the results also indicate that investors give a hope for this smelter project completion according to plan so that the company can do export activities again. Therefore, the Indonesian government should have consistency in the implementation of the Government Regulation No 1 Year 2014 and other policies that support for the mining end product. Indonesian government also must have legal certainty for investment, so that more investors are willing to invest in the construction of a smelter in Indonesia. In addition the government is expected to provide facilities and incentives to companies that have committed to build a smelter in Indonesia.

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