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# Capital Market Reaction of Trade Wars (Event Study on the South Korean and Indonesia Stock Exchanges)

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#### **Info Article**

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#### **Abstract**

The purpose of this research is to find out whether there are differences in average abnormal returns, average trading volume activity and average security return variability between before and after the Chinese trade war events by the United States in Indonesia and South Korea. The purposive sampling method was used to determine the sample size of 2 countries, namely Indonesia and South Korea. The study period was limited to t-7 before the event and t + 7 after the event. Data analysis method used to answer hypotheses used data normality and Wilcoxon Sign Rank Test difference test. The results showed that all research variables were not normally distributed. Therefore, hypothesis testing is performed using the Wilcoxon Sign Test. The results obtained from the Wilcoxon Sign Test are that there is no significant difference in average abnormal return and average security return varibality both before and after the Chinese Trade War Event by the United States in Indonesia. While there are significant differences in average trading volume activity before and after the Tiongkok-United States Trade War events in Indonesia and South Korea. The conclusion from the research shows that H1 and H3 are rejected, which means there is no difference in average abnormal return and average security return varibality before and after trade war events. H2 was accepted which showed that there were differences in average trading volume activity before and after the Chinese trade war by the United States.

#### INTRODUCTION

Capital market as one of the economic instruments have a major role for the economy of a country because of the stock market run two functions, economic functions and financial functions. The capital market is said to have an economic function as capital markets provide facilities or the vehicle that brings the two interests, namely those who have excess funds or the party will invest funds (investors) and those who need the funds (issuer). Investor is the owner of shares issued by a company, so the company has the right to property and the right to know the information that occurs in the company (Fakhruddin, 2008).

The existence of capital markets, investors can invest in the hope of obtaining a certain le-

vel of profit (return), while the issuer may use the funds for investment purposes. The capital market is said to have a financial function, because the capital markets can provide an opportunity to earn rewards (returns) for investors in accordance with the characteristics of the selected investments (Fakhruddin, 2008). Srianingsih and Khoiruddin (2015) Investors in making investment decisions sometimes consider the information provided by the market. This information can come from anywhere, one of which is social media.

Social networks provide an opportunity for investors to expand information (Wahyono, Khoiruddin & Wijayanto, 2017). Information provided by the same market but will be responded to differently by investors (Wahyu & Rahayu, 2017). In addition, building a portfolio is very important

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when investing in the stock market because it will affect the risks and returns that could be obtained (Partono, Widiyanto, Yulianto & Vidayanto, 2017). Portfolio is a collection of investments that formed untukmemenuhi a common target of investment. The goal of an investment portfolio sangatbergantung on each individual investor (Witiastuti, 2012). Capital markets will not escape the various environmental influences, both of environmental economic and non-economic environment. Micro-economic environmental influences such as the performance of the company, changes in corporate strategy, the announcement of financial statements or dividend companies always get feedback from market participants on the capital market. In addition, changes in the macroeconomic environment that occur as changes in interest rates on savings and time deposits, foreign exchange rates, inflation, and various regulatory and economic deregulation issued by the government, also affect the price and trading volume fluctuations in the stock market (Nurhaeni, 2009). A rational investor should have used all rational information in the decision making, the decision to sell or buy shares (Murwatiningsih, Yulianto, Abiprayu, & Wijayanto, 2018).

The events that have the power of information (information content) for investors greatly affect the capital market. Increasingly important role of capital markets for the economy of a country, the more sensitive the capital markets to events or important events around them, whether related or not directly related to economic issues (Suryawijaya & Setiawan, 1998).

The latest information that triggered the world's capital market securities that trade war announcement made by Donald Trump as President of the United States. As a result of the announcement of the stock index dropped dramatically in some countries. The weakening of the stock price index at the opening of trading on the world's capital markets mainly caused by investors' concerns will be policies to be applied Donald Trump.

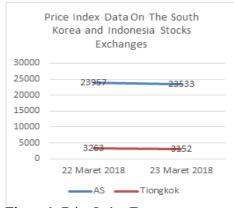


Figure 1. Price Index Data



**Figure 2.** Trading Volume Index Data Source: investing.com, processed for research, 2019

The graph shown in figure 1. explain that after the announcement of the Chinese trade war by the United States on March 23, 2018, the stock price has declined and trading volume increased. Setyawan (2006) explain unless the information is good news then the stock price will rise, otherwise if the information is bad news then the stock price will go down. Figure 2, according to Nurhaeni (2009) if there is an increase in the volume of stock trading, the information indicates that resulted in bad news investors sold shares held as capital market situation is uncertain. Based on the table, the announcement of the Chinese trade war by the United States can be categorized as bad news by investors.

One event that is about to test the strength of the information (information content) to the activities of the stock exchange is a trade war Tingkok announcement by the United States that occurred on March 22, 2018 (www.voaindonesia.com, 2018). Policies implemented by the President of the United States Donald Trump is imposing tariffs of 25% for imported goods Tingkok worth \$ 34 billion, including machinery, construction equipment, and electronics, which are then repaid by Tingkok with similar fare of 25% of the products of the United States (including pieces aluminum, aircraft, automobile, pork and soy products) and 15% for fruits, nuts and steel pipes. Donald Trump impose tariffs to protect national security and the US intellectual property and to help reduce the US trade deficit with Tingkok (www.bbc.com, 2018).

When global trade under threat, then the economies of both countries will be particularly vulnerable. Exports, which became one of the driving force of economic growth in Indonesia is expected to decline. Because the United States and Tiongkok are

two countries share Indonesia's main export. With the introduction of import tariffs by the United States and Tiongkok to export products of each country, there is the possibility of producing countries of goods by tariff they find new markets. However, do not rule out the possibility of a trade war a positive impact to Indonesia. Therefore, with the introduction of import tariffs will ease costs for products made in Chinese factories (<a href="https://www.money.kompas.com">www.money.kompas.com</a>, 2018).

Impact of US-Tiongkok trade war made the South Korean government revised its economic growth forecast for 2018 because of concerns about protectionist measures the United States which triggered a global trade war. Selatana Korea's GDP, adjusted for inflation, is expected to grow 2.9% in 2018, down from an estimate ekspandi 3%. Exports are expected to rise 5.3% percent in 2018, much lower than the 15.8% expansion last year. To boost consumer spending, the South Korean government will cut the consumption tax for the purchase of new cars from 5 to 3.5% at the end of the year (www.medcom.id, 2018)



**Figure 3.** Price Index Data on South Korea and Indonesia



**Figure 4.** Trade Volume on South Korea (KOS-PI) -Indonesia (JKSE)

Based on figure 2 and figure 3 can be seen the movement of stock prices and trading volume after the president of the United States Donald Trump announced a trade war to Tiongkok decreased, as appropriate to that described by Setyawan (2006) then the stock price should decline and trade volume has increased because of the trading activity. The results of the graph shows that the index of South Korea and Indonesia after the announcement of the US trade war to the Chinese on March 23, 2018 does not correspond to that described previously by Setyawan (2006) and Nurhaeni (2009) because it does not identify such information is bad news such as the facts that emerged a gap in the incident

Another factor is the policy research conducted Doland Trump president of the United States can not be separated from the reaction of world capital markets had feared would destabilize the world economy. This is consistent with several studies that use indexes as a barometer of the economic health of a country and be the basis for statistical analysis on recent market conditions (Halim, 2005),

Based on the background described above, the purpose of this study was to determine whether there are differences in average abnormal return, average trading volume activity and average security return variability before and after the Chinese trade war by the United States President Donald Trump.

### Hypotheses Development Trade Wars Events and Abnormal Return

Hartono (2016) explain if testing the content of the information used to see the reaction of an event. The information published as an announcement will provide a signal for investors in making investment decisions. Policies issued by a head of state is an event that can be categorized as national and international scale. If an announcement contains information, it is expected that the market will react when the announcement was welcomed by the market. The market reaction indicated by the change in the price of the securities concerned.

Yusoff, Salleh, Ahmad and Idris (2015) Information obtained from the market reaction to an announcement may create abnormal returns return to shareholders which could lead to negative or positive reactions. If the information gives a positive signal that the market reaction will show a rise in stock prices. Conversely, if the information gives a negative signal then the stock price will not change or be decreased.

To gauge the reaction of investors to the information indicated by the stock price changes as measured by abnormal return (Hartono, 2016). If used abnormal return, it can be said that an announcement that has information content gives the abnormal return to the market. Conversely, if it does not contain ingredients that do not provide information about abnormal return to the market. This is in line with the principle of signaling which states that "action Convey information" where every action contains the information so that the announcement can be considered positive or negative by investors (Atmaja, 2008).

This theory is consistent with studies conducted by Nurhaeni (2009), Yusoff, Salleh, Ahmad and Idris (2015), Shen (2017) which explains the differences significant average abnormal return before and after the event study. This result is contrary to the research conducted by Rohmiyati (2017) and Sari, et al (2017) which found no significant difference in the average abnormal return before and after the event study.

H1: There are differences in average abnormal return before and after the Chinese trade war by the United States President Donald Trump in Indonesia and South Korea.

## Trade War Events and Trading Volume Activity

Share trading volume data is useful for measuring general market conditions and trends. Increase or decrease in the stock price usually associated with the same change in the volume of trade (Trisnawati, 2011). Nurhaeni (2009) explain trading volume activity as an instrument used to look at the capital market reaction to information through the parameters of the trading volume activity.

According to Liogu and Saerang (2015) trading volume growth reflects the strength between supply and demand is a reflection of the behavior of investors. Trading volume activity can be used to see whether individual investors assess information from an event as positive or negative signal to make stock trading decisions. If investors interpreted as a positive signal to the aforementioned information, the demand for stocks will be higher than pewaran stock so that the trade volume will increase. Conversely, when there is a negative signal to the aforementioned information, the level of demand for stocks that happen to be lower than the level of the stock offering so that the volume of stock trading will experience menurunan (Hutami & Ardiyanto, 2015).

Research conducted by Mahajan and Singh (2009) supports the proposition that trade volume provides information padaa accuracy and dispersion than the information signal is used as a proxy for the information signal itself. Kim and Verrecchia (1991) argued if public information and induce change trader trust them to get involved in a new trade turnover. Assuming the trader has a diversity of information and precision differences their previous information, therefore they will be different response to an announcement and it refers to a positive volume.

This theory is consistent with studies conducted by Mahajan and Singh (2009), Nurhaeni (2009) and Mcgowan (2014) which found no significant difference in average trading volume activity before and after the event study. While it is contrary to the research conducted by Ardiansari and Saputra (2015), Rohmiyati (2017) which found no significant difference in average trading volume activity before and after the event study.

H2: There are differences in average trading volume activity before and after the Chinese trade war by the United States President Donald Trump in Indonesia and South Korea.

## Trade War Events and Security Return Variability

In a capital market investment demands for disclosure of information scattered in public is very important for investors. The information that is publicly available information published freely by the issuer and can be known by the whole community Tastaftiani and Khoiruddin (2015). Such information may be a signal that one of them affect the stock price either positively or negatively on the stock market (Junizar & Septiani, 2013), Ratnawati, Sumiati and Triyuwono (2009) found to see the reaction of the stock price of an event can be analyzed by observing the security return variability, which is calculated from the abnormal returns of a company divided variant abnormal returns. If abnormal return averaged, there is the possibility of positive and negative values cancel each other out. While the indicator security return variability, all the value to be positive. Thus the heterogeneity of information can be eliminated. The impact of heterogeneous information that can be detected by security return variability, although the direction of the movement can not be seen.

This theory is consistent with studies conducted by Gantyowati and Sulistiyani (2008), Muzab (2017) which found significant differen-

ces in the security return variability between before and after the event study. While it is contrary to the research conducted by Ardiansari and Saputra (2015), Tiswiyanti and Asrini (2015) which found no significant difference in the security return variability between before and after the event study. H3: There are differences in average security return variability before and after the Chinese trade war by the United States President Donald Trump in Indonesia and South Korea.

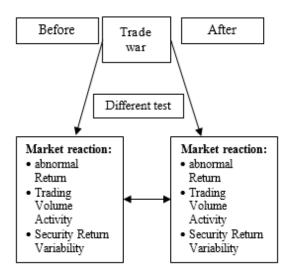


Figure 5. Research Model

### **METHOD**

This study uses a study of events (event study) to investigate the effect of a certain incident at a certain period. According to Purwaningsih and Khoiruddin (2016). Study of events investigated the market response to the information content of an announcement or publication of certain events. If an announcement contains information, then when the market is efficient will show a reaction to changes in the price of securities of the company concerned (Junizar & Septiani, 2013).

The population consists of objects or subjects with a certain quantity and characteristics defined by the researchers to learn and then be deduced (Sanusi, 2011), In this study, the population of which is made the object of research is the affected countries of the Tiongkok-US Trade War US.

Samples are selected elements that have been selected with the hope to reflect all the characteristics of an existing (Sanusi, 2011). Samples from this study is that there are stock indexes in the member countries of APEC (Asia Pacific Economic Cooperation)

Table 1. Sample Research Criteria

Criteria Sample	total
APEC Member State	21
Having sampled the required researchers	(7)
There is a gap phenomenon	(10)
Having supporting data	2
total sample	2

## Research Variable Abnormal Return

According to Hartono (2014) explained that the abnormal return or excess return is the excess of the return to normal. Return to normal is the expected return (expected return). Thus abnormal returns (abnormal returns) is the difference between actual returns that occurred with the expected return. The stage for the calculation of abnormal return can be determined with the following stages:

Calculating Actual Return

$$R_{i,t} = P_{i,t} - P_{i,t-1} / P_{i,t-1}$$

#### Information:

Rit: Return the realization of the i-th stock at day Pit: The stock price of i on day t Pit-1: The stock price of i on day t-1 Calculating Expected Return

$$E(R_{i,t}) = \sum_{i=t1}^{t2} R_{i,i} / T$$

#### Information,

$$\begin{split} E(R_{_{i,t}}) &: \text{Return expectations of securities i-th at events all t} \\ R_{_{i,j}} &: \textit{Return realization of securities i-th at events all t} \\ T &: \text{The length of the estimation period, namely from t1 to t2} \end{split}$$

Counting Abnormal Return

$$RTN_{it} = R_{it} - E[R_{it}]$$

### Information:

 $RTN_{it}$ : Abnormal return in the period to t  $R_{it}$ : Actual returns in the period to t  $E[R_{it}]$ : Expected return on a period to t

#### **Trading Volume Activity**

According to Fatimatuzzahra and Herlambang (2014) viewed from TVA is the ratio between the number of shares traded at any given time by the number of shares outstanding during a particular period. Trading volume activity shows how

much trading on the exchanges carried out visits of realized trading volume (Khoiruddin & Faizati 2014).

 $TVA = (\sum Shares\ Trading)/(\sum Shares\ Circulating)$ 

Purwaningsih and Khoiruddin (2016), To calculate the average trading volume activity (ATVA) is as follows:

$$ATVA_{i,t} = \sum_{i=t}^{n} TVA_{i,t}/n$$

Information,

 $\begin{array}{cc} \text{ATVA}_{it} & : \text{The average volume of stock trading} \\ \sum_{i=t}^n \text{TVA}_{i,t} : \text{Total volume of stock trading company } i \text{ at time t all} \end{array}$ 

n : Total Company

#### **Security Return Variability**

Ratnawati, Sumiati, and Triyuwono (2009) found to see the reaction of the stock price of an event can be analyzed by observing the security return variability, which is calculated from the abnormal return of a company divided by variant abnormal return. If abnormal return averaged, there is the possibility of positive and negative values cancel each other out. While the indicator security return variability, all the value to be positive. Thus the heterogeneity of information can be eliminated. The impact of heterogeneous information that can be detected by security return variability, although the direction of the movement can not be seen.

The use of security return variability who do not see the direction of price movement has the advantage that in fact we often have difficulty determining whether a message is interpreted as good or bad news (Tastaftiani & Khoiruddin, 2015). Calculation of security return variability can be done with the following calculation (Dhamastuti, 2014),

$$SRV_{i,t} = AR_{i,t}^2/V(AR_{i,t})$$

Information,

 $AR_{i,t}^{\ \ 2}$  : Abnormal return securities of i on day t

 $V(AR_{_{i,t}}) \hspace{0.5cm} : Variants \textit{ abnormal return } securities \textit{ of } i \textit{ on } day \textit{ } t$ 

To calculate the average of security return variability as follows (Ardiansari & Saputra 2015),

$$ASRV_{it} = \sum_{i=t}^{n} SRV_{i,t}/n$$

Information,

 $\label{eq:asymptotic} \mathsf{ASRV}_{_{i}} \quad : \text{Average rate variability stock} \\ \mathsf{gains}$ 

 $\sum_{i=t}^{n} SRV_{i,t} : The number of shares the company gains a degree of variability in time to t$  n : The number of companies

#### RESULTS AND DISCUSSIONS

The study looked at all member countries of APEC consists of 21 member states. Determination of the object in this research is done by using purposive sampling. Based on the object selection criteria that have been established, there are two countries included in the study criteria, namely Indonesia and South Korea in which each country has 14 research samples are t-7 prior to the announcement and t + 7 after the date of the announcement.

Previous data have been collected and then processed and analyzed gradually by performing statistical test for normality using the Kolmogorov-Smirnov test. Further testing the hypothesis partially to each variable research using analysis test Paired Sample T-Test if the data were normally distributed, in addition to parametric statistical tests used in this study, non-parametric statistical tests are also used in this study. Statistic test used nonparametric reason is that data distribution is not normal and a small sample of observations. The statistical test used was Wilcoxon Signed Rank Test (Ningsih & Cahyaningdyah, 2014).

Based on table 2 can be seen when the data average abnormal return before the events tested (N) amounts to 14 data. The smallest value (min) in the table of -0.004620, while the greatest value (max) is approximately 0.020018. Total value (sum) of the data 14 at 0.027834 to the average value (mean) of 0.001988 and a standard deviation which is owned by 0.007512. The data on average abnormal return after the events tested (N) amounts to 14 Data smallest value (min) in the table of -0.015491, while the greatest value (max) is approximately 0.004201. Total value (sum) of the data 14 for -0.012092 with average values (mean) of -0.000864 and standard deviation which is owned by 0.005446.

For Security Average Return Variability before the events of the smallest value (min) of 0.000410 while the greatest value (max) is approximately 4.996457. Total value (sum) of the data 14 at 9.337617 to the average value (mean) of 0.666973 and a standard deviation which is owned by 1.506907. Average Security Return Variability after the events of the smal-

Table 2. Descriptive Statistics Variable Test Results

Variable	Minimum	Maximum	Mean	Std. dev
AAR_Before	-0.004620	0.020018	0.001988	0.007512
AAR_After	-0.015491	0.004201	-0.000864	0.005446
ATVA_Before	145.75	4620	2186.094	2084.790
ATVA_After	153.45	3775	1707.468	1578.060
ASRV_Before	0.000410	4.996457	0.666973	1.506907
ASRV_After	0.001704	2.614314	0.316368	0.675566

Source: Output Eviews, processed in 2019

lest value (min) of 0.001704 while the greatest value (max) is approximately 2.614314. Total value (sum) of the data 14 at 4.429155 to the average value (mean) of 0.316368 and a standard deviation which is owned by 0.675566.

On Average Trading Volume Activity before the event, the smallest value (min) of 145.7500 while the greatest value (max) amounted to 4620,000. Total value (sum) of the data 14 at 30605.32 with the average value (mean) of 2186,094 and standard deviation which is owned by 2084,790. Average Trading Volume Activity after the incident, the smallest value (min) of 153.4500 while the greatest value (max) amounted to 3775,000. Total value (sum) of the data 14 at 23904.55 with the average value (mean) of 1707,468

trade war with normal distribution, then the test equipment used is a statistical analysis parametriks Paired Sample T-test. If the data before and after event of a trade war are not normally distributed then the test equipment used is descriptive non-parametric statistical analysis Wilcoxon Signed Rank Test. Data AAR before the event of a trade war are not normally distributed, AAR after event of a trade war are normally distributed. The next stage of hypothesis testing tools used in data abnormal return before and after mergers and acquisitions using test Wilcoxon signed rank test.

Data ATVA and ASRV before the event of a trade war are not normally distributed, ATVA and ASRV after event of a trade war are not normally distributed. The next stage of hypothesis testing tools used in data abnormal return before

Table 3. Stationary Test Data

Variables	ADF Test Statistic	Critical Value	Information
AAR Before Event	-4.851249	-4.12199	stationary
AAR After Event	-6.349823	-4.20056	stationary
ATVA Before Event	-3.328211	-3.14492	stationary
ATVA After the Event	-4.116274	-3.14492	stationary
ASRV Before Event	-5.008635	-4.12199	stationary
ASRV After the Event	-2.682080	-1.98234	stationary

Source: Output Eviews, processed in 2019

and standard deviation which is owned by 1578,060.

Based on the results of table 3 can be seen average abnormal return of variable data, average trading volume activity and average return variability has a stationary security where the value of ADF Test Statistic < Value Critical Value.

Based on table 4 normality test results, it can be determined hypothesis testing tool will be used. If the data before and after event of a and after mergers and acquisitions using test Wilcoxon signed rank test.

#### Hypothesis testing

Based on table 5 above AAR before the announcement of the Tiongkok-US trade war States in Indonesia and South Korea, which shows the results obtained Z value of -0.169 with p value (Asymp. Sig. 2-tailed) of 0.866 or 86.6%. & with a significance level of 5% (0.05), the p value (As-

Table 4. The results of Kolmogorov-Smirnov Normality Test

Variables	Sig.	Information	
AAR_Before Event	0.003	Distributed Not Normal	
AAR_After Event	0.078	Distributed Normal	
ATVA_Before Event	0.000	Distributed Not Normal	
ATVA_After Event	0.000	Distributed Not Normal	
ASRV_Before Event	0.000	Distributed Not Normal	
ASRV_After Event	0.000	Distributed Not Normal	

Source: Data processed, 2019

ymp. Sig. 2-tailed) of 0.866> 0.05. The statistical results showed that p value greater than the value of significance. The conclusion of the statistical test results prove that there is no significant difference AAR before the announcement of the Tiongkok-US trade war States in Indonesia and South Korea.

AAR after the announcement of the Tiongkok-US trade war States in Indonesia and South Korea, which shows the results obtained Z value of -0.338 with p value (Asymp. Sig. 2-tailed) of 0.735 or 73.5%. With this level of significance  $\alpha$ =5% (0.05), the p value (Asymp. Sig. 2-tailed) of 0.735> 0.05. The statistical results showed that p value greater than the value of significance. The conclusion of the statistical test results prove that there is no significant difference AAR after the announcement of the Tiongkok-US trade war States in Indonesia and South Korea, then H1 rejected.

ATVA before the announcement of the Tiongkok-US trade war States in Indonesia and South Korea, obtained results show the value of Z at -2366 with p value (Asymp. Sig. 2-tailed) of 0.018 or 1.8%. With this level of significance

 $\alpha$ =5% (0.05), the p value (Asymp. Sig. 2-tailed) of 0.018 <0.05. The statistical results showed that p value less than the value of significance. The conclusion of the statistical test results prove that there are significant differences ATVA before the announcement of the Tiongkok-US trade war States in Indonesia and South Korea.

ATVA after the announcement of the Tiongkok-US trade war States in Indonesia and South Korea, obtained results show the value of Z at -2366 with p value (Asymp. Sig. 2-tailed) of 0.018 or 1.8%. With this level of significance  $\alpha$ =5% (0.05), the p value (Asymp. Sig. 2-tailed) of 0.018 <0.05. The statistical results showed that p value less than the value of significance. The conclusion of the statistical test results prove that there are significant differences ATVA after the announcement of the Tiongkok-US trade war States in Indonesia and South Korea, the H2 accepted.

ASRV before the announcement of the Tiongkok-US trade war States in Indonesia and South Korea, which shows the results obtained Z value of -1.69 with p value (Asymp. Sig. 2-tailed) of 0.091 or 9.1%. With this level of significance

**Table 5.** Hypothesis Test Results using the Wilcoxon Signed Rank Test

Variables	Asymp. Sig.2-tailed	E x - plain	Result
AAR_Before in Indonesia and South Korea	0.866	> 5%	There is no Differences
AAR_After in Indonesia and South Korea	0.735	> 5%	There is no Differences
ATVA_Before in Indonesia and South Korea	0.018	<5%	There is a difference
ATVA_After in Indonesian and South Korean	0.018	<5%	There is a difference
ASRV_Before in Indonesia and South Korea	0.091	> 5%	There is no Differences
ASRV_After in Indonesia and South Korea	0.310	> 5%	There is no Differences

Source: Data processed, 2019

 $\alpha$ =5% (0.05), the p value (Asymp. Sig. 2-tailed) of 0.091> 0.05. The statistical results showed that p value greater than the value of significance. The conclusion of the statistical test results prove that there is no significant difference ASRV before the announcement of the Tiongkok-US trade war States in Indonesia and South Korea.

ASRV after the announcement of the Tiongkok-US trade war States in Indonesia and South Korea, obtained results show the value of Z at -1014 with p value (Asymp. Sig. 2-tailed) of 0.310 or 31%. With this level of significance  $\alpha$ =5% (0.05), the p value (Asymp. Sig. 2-tailed) of 0.310> 0.05. The statistical results showed that p value greater than the value of significance. The conclusion of the statistical test results prove that there is no significant difference ASRV after the announcement of the Tiongkok-US trade war States in Indonesia and South Korea, the H3 rejected.

## Difference Average Abnormal Return between Before and After events War Tiongkok-US Trade

An event that has the abnormal return will provide information to the market, otherwise if the event does not contain information then there is no abnormal return (Sari, Permatasari, Purnamawati & Herawati, 2017). Tiongkok trade war event announcement by the President of the United States Donald Trump is one event that has the opportunity to affect capital market activity. The information contained in these events become a consideration for investors to make investment decisions. Shen, Hua, Bui dan Lin (2017) said the market reaction to information that occurs is indicated by changes in stocks, measured by abnormal return.

The lack of difference between the average abnormal return before and after event of a trade war Chinese announcement by the President of the United States Donald Trump because the policy update is rated as bad news for investors because the investors prefer to put yourself in the position of "waiting". This means that investors await further direction where these policies, whether the future will redound to the benefit or otherwise adversely impact investors. This indicates that investors consider the policy announcement does not contain the information, so it does not affect the rate of investment and investment decisions of investors that will affect the abnormal return.

The results support the results of research conducted by Trisnawati (2011), Khan et al., (2017) and Muzab (2017) said that there are no significant differences in average abnormal return

before and after the event announcement. But does not support previous research carried out by Ardiansari and Saputra, (2015), Soejono (2017) which shows that there are significant differences in the average abnormal return before and after the event announcement.

## Difference Average Trading Volume Activity between Before and After events War Tiongkok-US Trade

Trading volume activity is a parameter of volume of shares traded and the number of shares already in circulation that can be used to test the market response to an information (Hernoyo, 2013). Mcgowan (2014) the relationship between price and volume can be defined as a relationship if the price changes in trading volume changes are related. The use of variable average trading volume activity in the study aims to determine whether there is a significant difference of market reaction before and after the events of the Chinese trade war by the United States.

The results show that there are differences in average trading volume activity significantly between before and after the announcement of Tiongkok's announcement of a trade war by the United States in Indonesia and South Korea. This indicates that the market reacted to the announcement of Tiongkok trade war by the United States which means that the announcement contains any information that may influence the investment decisions of investors. Their sudden announcement that trading is done responsive to investors in response to the information that appears.

This study is consistent with the results of research conducted by the Fatimatuzzahra and Herlambang (2014), Mcgowan (2014) and Muzab (2017) which states that there are differences in abnormal trading volume activity (ATVA) before and after the announcement during the observation period. But does not support research conducted by Ardiansari and Saputra (2015), Liogu and Saerang (2015), Syaputra (2016) which shows that the trading volume activity (TVA) in all periods of announcements both on before, during, and after the announcement was not a significant difference.

## Difference Average Security Return Variability between Before and After events War Tiongkok-US Trade

The market reaction in this study also measured using a security return variability. Security return variability is an indicator to see if the aggregate market assess whether the information resulted in changes in the distribution of stock

returns during the event period (Gantyowati & Sulistiyani 2008),

Fifth and sixth hypothesis in this research is there are different security average return variability before and after event of a trade war Chinese announcement by the President of the United States Donald Trump. The test results are shown in table 5, which shows the significance values obtained at 0.091 and 0.310. These results exceed a predetermined level of significance that is equal to  $\alpha = 0.05$ , so the hypothesis that there are differences in average security return variability before and after event of a trade war Chinese announcement by the President of the United States Donald Trump is rejected and not truth.

Based on the results of hypothesis testing can be concluded that the Tiongkok trade war events announcement by the President of the United States Donald Trump does not have an impact on investors' profits variation in the period of observation. This happens because of the possibility of a trade war Chinese event announcement by the President of the United States Donald Trump does not have information content that causes changes in stock returns.

The results support the research conducted by Ardiansari and Saputra (2015) and Tiswiyanti and Asrini (2015) stating that there is no difference in security return variability before and after event study during the observation period. But does not support research conducted by Gantyowati and Sulistiyani (2008), Muzab (2017) which states that there are different security return variability before and after event study during the observation period.

#### CONCLUSIONS AND RECOMMENDATIONS

This study aims to determine the market's reaction to events announcement Trade War Tiongkok by the United States Based on test results and discussion that has been presented, the variable average abnormal return and average security retun variability indicates that there is no significant difference between before and after the event announcement Trade War Tingkok-USA in Indonesia and South Korea. While the average trading volume activity there are significant differences between before and after the event announcement Trade War Tingkok-USA in Indonesia and South Korea

Limitations of this study is the source of reading or news about events in the country of a trade war, especially South Korea are still very few and limited.

For further research, the results of this study can be a reference in the study with a similar theme and are expected to add to the literature and reference is the reference in another study by taking into account the limitations in this study. The author can then use the event study or other events that could be used for a subject of research.

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