

# Impact of 2014 and 2019 Indonesian Presidential Elections on ETFs Abnormal Returns and Abnormal Volumes

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**Abstract:** Exchange-Traded Fund is one of the investment products that traded in Indonesia Stocks Exchange. ETFs are a hybrid product of stock and mutual fund, which trade real-time like stock and diverse like a mutual fund. Political events such as presidential elections can influence investors to make investment decisions in capital market. This is because the presidential election contains relevant information that affects the market. The objective of this study is to examine abnormal returns and abnormal volumes on Indonesian ETFs and foreign ETFs in 2014 and 2019 Indonesian presidential elections. This research used event study method. Data used are Indonesian ETFs and Foreign ETFs that had Indonesian underlying assets and actively traded in presidential elections that consist of 90 days of estimation and 10 days on event windows. There is evidence of abnormal return and abnormal volume on both ETFs. The result shows that ETFs can get significant positive abnormal return on day one after the election and in day two abnormal return drop at its lowest point significantly. Investor may take advantage of that day. Abnormal volume shows Indonesian ETFs traded below market expectations and tend not to trade during the 2019 presidential election. Analysis concludes that foreign ETFs have better performance than Indonesian ETFs.

**Keywords:** abnormal return, abnormal volume, exchange-traded funds (ETFs), event study, presidential election

## 1. Introduction

The Indonesia Stock Exchange not only trades certain company shares as investment products but also mutual funds that are managed professionally by investment managers. Mutual funds are one of the right investment products for investors who have limited time and expertise in investment risk. Funds invested in mutual funds are automatically diversified and professionally managed. The variants offered by mutual funds to investors are so many ranging from conventional mutual funds such as equity funds, fixed income, money markets and mixed mutual funds to structured mutual funds such as capital protected funds, guaranteed funds, and index funds with their characteristics or uniqueness. Research by Bando et al. [7] shows that 99% of respondents who invest in mutual funds, 71.43% of investors have never experienced a loss in investing in mutual fund products. Total NAV of Indonesian mutual funds in 2014 was Rp. 215 billion and in five years grew by 228% to Rp. 489 billion in 2018 [3]. ETFs (Exchange-Traded Fund) is one of the mutual funds that experience positive NAV developments in past five years. ETFs is a hybrid investment product with features such as mutual funds and stocks that refer to certain indexes. An interesting feature offered is trading that can be done in real-time such as stocks and each lot traded can contain several assets such as stocks, bonds, commodities, and foreign currencies that have been created by the investment manager so its more cost-efficient.

Number of ETFs that refer to the global portfolio has the largest market share of 29% or 1414 products from a total of 4786 ETFs in market, followed by European and Asian portfolios. However, when viewed from its net assets, North American portfolio dominates the net asset, which is 57% of the total market [16]. ETFs growth rapidly within eight years (2010-2017) the assets grew by 254% from \$ 1259.9

billion to \$ 4464.1 billion [29]. ETFs in Indonesia within five years experienced positive growth in total NAV, wherein 2014 with Rp. 2 billion total NAV continues to increase to Rp. 10 billion until 2018. Although the percentage of ETFs total NAV is relatively small, however in real terms there has been an increase in the number of products traded from 2007 with two ETFs products now growing to 28 types of products that refer to various indexes [1]. This reflects an increase in market demand for ETFs products in Indonesia. ETFs works by following the reference index, for example R-LQ45X which refers to LQ45 index. The performance of the R-LQ45X fluctuates with the movement of the LQ45 index, and as the years go ETFs performance improves from the previous year. The total value of returns accumulation at the end of 2018 shows that the R-LQ45X can beat the LQ45 index performance at 4.56% where the R-LQ45X is 36.91% and the LQ45 index is 32.35%. Performance of Indonesian ETFs (XIIT, XIIC, R-LQ45X, and XIJI) in Razzaq [19] has a good potential, which has a better average return or outperformed the reference index and obtains a greater average return than the IHSG market return and risk-free assets on a weekly, monthly or quarterly basis.

Micro and macroeconomic environments that related to company performance or changes in interest rates and deposits can affect price fluctuations and trading volumes on the capital market. The non-economic environment is not directly related to the dynamics of the capital market, but its role cannot be separated from the activity of the stock market. Issues regarding the environment, human rights, and political events are often the main factors triggering fluctuations in stock prices on stock exchanges around the world. Relevant information and issues can help predict future uncertainties. Pantzalis et al. [10] revealed that there is a relationship between stock market performance with political and economic issues in the world.

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Political events such as presidential elections greatly affect the prices and trading volumes on the stock market. Pantzalis et al. [10] revealed that there is a link between markets and political and economic issues in the world. National economic stability is closely related to political events. This condition occurs because of changes in policies determined by both the legislative and executive. In addition, politics can also influence the investor trust, so that if there are political events that threaten the stability of the country, responses will tend to be negative [14]. Indonesia's presidential elections in the past four periods from the Susilo Bambang Yudhoyono-Jusuf Kalla and Megawati Soekarnoputri-Hasyim Muzadi era in 2004 to Joko Widodo-Ma'aruf Amin with Prabowo Subianto-Sandiaga Uno era in 2019 had different characters and were full of uncertainties. Political events such as presidential elections have information that can be easily absorbed by investors and used as a reference for profit taking or minimizing loss [6]. Even though ETFs are diversified, they need to be evaluated whether they can beat the market during that event as an investment decision.

ETFs market in Indonesia is in an expansion stage where information and studies related to this product are still very limited, and it is not yet known whether it is an abnormal return and abnormal volume during Indonesian presidential elections. The purpose of this study is to analyze the abnormal return and abnormal volume of Indonesian ETFs during the 2014 and 2019 presidential elections.

## 2. Literature Review

Semi-strong market efficiency can be analyzed by the event study method, where the rate of price changes due to a particular event is observed [23]. Event studies can be implemented on a variety of events, ranging from economic events to non-economic events such as political events. Economic events such as Brexit become one of the issues that have been examined by Dadurkevicius and Janssonaite [27] and Alkhatib and Harasheh [4]. Dadurkevicius and Janssonaite [27] in their research that examines stocks in the FTSE index and the 2016 MSCI World ex UK index, they found abnormal returns that significantly negative on the industrial sector, consumer goods, consumer services, finance, technology, oil, and gas. While the international sales orientation sector has a positive abnormal return. ETFs performance in Alkhatib and Harasheh [4] on Brexit referendum shows that World equity ETFs has a significant negative abnormal return on days -5 and -4, but when on day 0 and +1 it experienced significant positive. The S&P 500, gold, and oil ETFs does not react to the Brexit referendum. European, emerging and private ETFs were significantly positive on the day +1 Brexit referendum day. US T-Bond ETFs was significantly positive on day 0. Emerging ETFs markets have proven to be a good investment choice because at an actual return of 3% they are able to enjoy a significantly positive 11.5% abnormal return. In other economic events such as the announcement of the federal fund rate and the BI rate that observed by Putri et al. [32], they found a negative response in the infrastructure, utilities and transportation sectors compared to other sectors. The agriculture sector does not respond at all to the Federal rate and the BI rate.

Non-economic events such as environmental issues have been investigated by Wallace and McIver [13] who observed US green policy announcements effect on environmental-themed ETFs. Announcement of green policies that lead to a decrease in the pollution of gases and toxins to enter air and water has a varied effect on price creation, where pollutants and green companies relatively have the same number of significant positive and negative abnormal returns. It was concluded that environmental issues were partially effective in distributing information to industries that were sensitive to environmental news.

The relationship between the capital market and political event has been done with varied results. Dopke and Pierdzioch [21] who observed developed country elections especially in Germany, where there was no election cycle in market returns, which indicated that the presidential election did not affect the movement of the German stock market. Floros [8], which examined the Greek stock market during the 1996 to 2002 elections, which show in the two months before the election the average index performance had improved and daily fluctuations decreased. But one month in pre-election, index performance declined and the average fluctuation increased and changes in the daily exchange rate increased. The results of the dummy regression analysis showed that there were negative effects of political elections on ASE but were not significant. In developing countries, political events have a different response character from developed countries. Emiten that have political relations in Malaysia are reported to be able to get abnormal returns after major political events such as political elections and regulatory changes, because of the privilege of information and the ability to influence government decision making [42]. Murekachiro [12] examined the effect of the 2013 Zimbabwean elections finding abnormal returns before and after events, and the volume margins that were exhibited were very low when approaching the event date. The influence of the US election on the Taiwan stock market has also been investigated by Hung [25]. The results show that the monthly return of the Taiwan Stock Market is not affected by the US election, but evidence found in the second year after the presidential election the average monthly return is at the lowest point. Cumulative abnormal return (CAR) analysis at the 11-day event window shows that three of five elections period significant negatives, which indicate the Taiwan stock market does not have a consistent reaction to the USA election results. However, the CARs in 2000 and 2004 have a consistent and significant sign which is evidence that the Taiwan stock market is sensitive to USA-China-Taiwan relations. Developed countries are relatively unaffected by political events, especially during the presidential election. Pantzalis et al. [10] in his research showed the greatest abnormal return occurred in the highest uncertainty conditions, specifically in countries with low economic, political and freedom levels, and incumbents who failed to be elected again. Jandl [35] explains in more detail where the stock prices of developing countries tend to have a positive effect on national election events compared to developed countries in the OECD which tend to have a negative effect seen from the CAR. Developed countries are not sensitive to political changes and uncertainties compared to developing countries which give a positive reaction to the market.

The Indonesian market generally reacts to political events. Nurhayatie et al. [38] conducted a study on the announcement of a change of leadership of Suharto to the stock price reaction on the JSX (now IDX). After the announcement of the change of leadership of Suharto Average abnormal return is different from 0, which means investors get an abnormal return. The downfall of the President of the Republic of Indonesia Abdurrahman Wahid and replaced by Megawati Sukarnoputri on 23 July 2001 did not reveal any difference in abnormal returns before and after the event [40]. Meidawati and Harimawan [31] in their research found significant differences in the average value of stock trading volumes in the period before and after the 2004 Legislative Election. There was an increase in average stock trading volume and there were significant effect in the average abnormal return (AAR) before and after the 2004 Legislative election. Pronayuda [39] research on an analysis of market reactions to the announcement of the Kabinet Indonesia Bersatu Cabinet shows that there are differences in average trading volume activity before and after announcements for companies that have large market capitalization but are no effect on small market capitalization companies. Presidential Elections in 2004, 2009 and 2014 effect on Indonesian stock market were examined by Imelda et al. [20]. The results show that the Indonesian stock market is inefficient where positive and negative abnormal return are found in the presidential election. There are differences in average abnormal returns on sectoral stock indexes before and after the presidential election, especially in the mining sector. Trading volume activity of sectoral stock indexes before and after the presidential election found no significant effect. The lawsuit of 2014 Presidential election has no effect on sectoral indexes except on the financial sector and the basic industrial and chemical sectors. The results of the analysis conclude that the trade, services, and investment sectors are the most stable sectors, while the mining sector is the most unstable. Indonesian ETFs have good potential but its characteristics have not been examined especially on presidential election.

### 3. Research Method

Data used in this study are closing prices and daily volumes of each Indonesian ETFs (R-LQ45X, XIIT, XIJI and XIIC), foreign ETFs (IDX and EIDO) which have Indonesian underlying assets and IHSG that are actively traded or traded on the Indonesia Stock Exchange during the 2014 and 2019 presidential election period. Daily ETFs data are obtained from Yahoo Finance, Investing.com and Cogencis Ltd. The events used in this study were presidential elections on 9 July 2014 and 17 April 2019. Window event was set for 10 days (t-5 to t+5) and the estimated period was set for 90 days outside the event window before the presidential election.

Event study method was used to measure the effects of events that cannot anticipate by market. Abnormal return (AR) describes the market reaction to new information which is calculated by subtracting actual return when the event occurs and the expected return. Actual returns are calculated using the natural logarithmic approach used by Wallace and McIver [13] in their research.

$$R_{i,t} = \ln \left( \frac{P_{i,t}}{P_{i,t-1}} \right) \quad (1)$$

Explanation:

$R_{i,t}$  = actual return of ETFs i on day t

$P_{i,t}$  = ETFs price i on day t

$P_{i,t-1}$  = ETFs price i on day t-1

Expected returns are measured using the Ordinary Least Square (OLS) model that regresses the IHSG market returns and ETFs indexes in the estimation period using following formula [36]:

$$E(R_{i,t}) = \alpha_i + \beta_i(R_{m,t}) + \varepsilon_t \quad (2)$$

Explanation:

$E(R_{i,t})$  = expected return of ETFs i on day t

$\alpha_i$  = intercept of ETFs i

$\varepsilon_t$  = error term

$\beta_i$  = beta ETF i

$R_{m,t}$  = market return on day t

Abnormal returns are measured using the following formula [36]:

$$AR_{i,t} = R_{i,t} - E(R_{i,t}) \quad (3)$$

Explanation:

$AR_{i,t}$  = abnormal return ETFs i on day t

$R_{i,t}$  = actual return ETFs i on day t

$E(R_{i,t})$  = expected return ETFs ke i on day t

Abnormal return testing is not carried out for each security, but in aggregate with the following formula [18, 30]:

$$AAR_t = \frac{1}{N} \sum_{i=1}^N AR_{i,t} \quad (4)$$

Explanation:

$AAR_t$  = average abnormal return

$\frac{1}{N} \sum_{i=1}^N AR_{i,t}$  = sum of abnormal return during event period

$N$  = number of events

Cumulative average abnormal return is the sum of the AAR on the t day with the previous days during the event window [18].

$$CAAR = \sum_{t=-5}^{t+5} AAR \quad (5)$$

explanation:

CAAR = commulative average abnormal return

AAR = average abnormal return

The expectation model for trading volume in measuring abnormal trading volume or excess volume is not supported by a certain theoretical basis so that it adopts the approach used by Bamber, Ziebart and Bhabra et al. [26, 15, 17] as follows:

$$RVOL_{i,t} = \alpha_i + \beta_i(RVOL_{m,t}) + \varepsilon_{i,t} \quad (6)$$

Explanation:

$RVOL_{i,t}$  = relative volume ETFs i on day t

$\alpha_i$  = intercept volume ETFs i

$\beta_i$  = beta volume ETFs i

$RVOL_{m,t}$  = relative volume IHSG on day t (trading volume on day t/ volume outstanding on day t)

$\varepsilon_t$  = error term

Measurement of abnormal trading volume or excess volume adopts the approach used by Bamber, Ziebart and Bhabra et al. [26, 15, 17] as follows:

$$AV_{i,t} = RVOL_{i,t} - (\hat{\alpha}_i + \hat{\beta}_i(RVOL_{m,t})) \quad (7)$$

Explanation:

$AV_{i,t}$  = abnormal/ excess volume ETFs i on day t  
 $RVOL_{i,t}$  = relative volume ETF i on day t (trading volume on day t/ volume outstanding on day t)  
 $\alpha_i$  = intercept ETFs i  
 $\beta_i$  = beta ETFs i  
 $RVOL_{m,t}$  = relative volume IHSG on day t  
 Testing the average abnormal return abnormal trading volume or excess volume adopts the approach used by Jogiyanto [18]:

$$AAV_t = \frac{1}{N} \sum_{i=1}^N AV_{it} \quad (8)$$

Explanation:

$AAV_t$  = average abnormal volume  
 $\sum_{i=1}^N AV_{it}$  = number of abnormal volumeduring event period  
 $N$  = number of events  
 T-test was conducted to determine the significance of proposed hypothesis. The degrees of trust used were 0.001, 0.05 and 0.01 to explain the relationship of the regression results. The hypothesis of this research is as follows:

$H_0$ : AAR=0

$H_1$ : AAR≠0

Hypothesis in abnormal volume is also carried out as follows:

$H_0$ : AAV=0

$H_1$ : AAV≠0

## 4. Result and Discussions

### 4.1 Presidential Election 9 July 2014

Unlike the previous period, the 2014 presidential election only carried two presidential and vice-presidential candidates. The pair of presidential and vice-presidential candidates being promoted are Prabowo Subianto-Hatta Rajasa and Joko Widodo-Jusuf Kalla (Jokowi-JK). Political events can be a source of information that enters the stock market, where the sentiments that are formed will be reflected in the performance of the stocks. Jokowi's decision to become an Indonesian presidential candidate was welcomed positively by the strengthening of the IHSG after the nomination. The 2014 presidential election was won by Joko widodo-Jusuf Kalla.

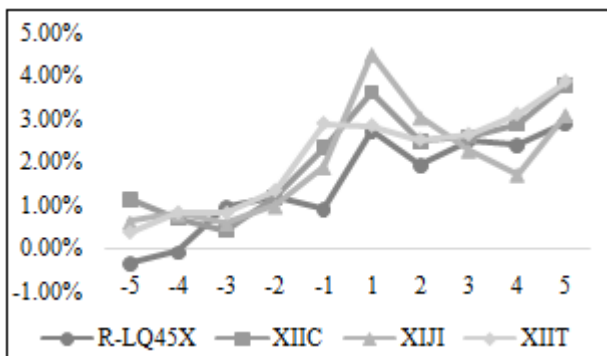


Figure 1: Cumulative abnormal return (CAR) Indonesian ETFs during 2014 presidential election.

Cumulative abnormal return (CAR) is used to conclude an event so that it can be observed how the development of abnormal returns in a series of events [22]. Overall, CAR movements have a bullish pattern before the presidential election and tend to be bearish after the presidential election. Indonesian ETFs experience price fluctuations that affect returns during the presidential election period. Figure 1 shows a positive or bullish trend before the 2014 presidential election. One day after the 2014 presidential election was the peak of the highest accumulated returns and the trend began to decline thereafter. The next day until the end of the event window return starts returning to its equilibrium point. XIJI which refers to the JII sharia index has the highest abnormal return compared to other Indonesian ETFs. Foreign ETFs that traded on the New York Stock Exchange namely IDX and EIDO are composed by Indonesian underlying assets which traded on the Indonesian stock exchange. In the 2014 presidential election, CAR of foreign ETFs experienced an increase or had a bullish trend to its peak on the day of the presidential election. Post-election day the trend began to decline and fluctuate back to equilibrium. Contrast to the Indonesian stock exchange, foreign ETFs trading activities on the day of the presidential election continued to take place. Both of foreign ETFs, IDX and EIDO have not many different patterns. Abnormal return of foreign ETFs is higher than Indonesian ETFs on average. Generally, ETFs in the 2014 presidential election showed a positive reaction to the event. Schweitzer [33] stated that the pattern of return before the election event tends to increase and decrease after the event.

Table 1: AAR of Indonesian ETFs on 2014 presidential election

t	R <sub>m</sub> %	R <sub>ETFs</sub> %	ER %	AAR %
-5	0,48	0,77	0,33	0,44
-4	-0,40	-0,11	-0,22	0,11
-3	0,35	0,38	0,24	0,14
-2	1,68	1,56	1,08	0,48
-1	0,71	1,31	0,47	0,83*
1	1,45	2,35	0,93	1,42**
2	-1,29	-1,72	-0,78	-0,93**
3	-0,23	-0,10	-0,12	0,02
4	0,99	0,66	0,64	0,02
5	0,85	1,45	0,56	0,89**

explanation:

\* : significant at 10% level

\*\* : significant at 5% level

\*\*\* : significant at 1% level

Table 2: AAV of Indonesian ETFs on 2014 presidential election

t	V <sub>m</sub> %	V <sub>ETFs</sub> %	EV %	AAV %
-5	0,09	0,00	0,23	-0,23***
-4	0,10	0,00	0,25	-0,24***
-3	0,13	0,00	0,27	-0,27***
-2	0,18	0,00	0,33	-0,33***
-1	0,20	0,03	0,36	-0,33***
1	0,26	0,04	0,44	-0,40***
2	0,12	0,01	0,26	-0,26***
3	0,11	0,00	0,25	-0,25***
4	0,13	0,00	0,28	-0,27***
5	0,18	0,00	0,34	-0,34***

Explanation: similar to the explanation on Table 1

Table 1 show the movement of Indonesian ETFs abnormal returns during the 2014 presidential elections. Market reactions marked by changes in prices and volumes during election which indicate that the event contains information. AAR results show that at t-5 to t+1 and t+3 to t+5 have positive AR. Significant AAR at t-1 indicates that the day before the event was held there was information about the victory of one of the presidential candidates pass to the public. The highest abnormal return is obtained at t+1 of 1.42% and the lowest at t+2 of -0.98% or in other words down by 2.35%. Jandl's research [35] shows that developing countries have a reaction that tends to be positive towards economic events. Sharpe [41] and Jensen [28] in their research showed an abnormal return in mutual funds, but the value was not excessive. If the mutual fund can get excess returns then the mutual fund manager is likely to get private information that is not published [18]. No occurrence of significance during the event indicates that the market did not react to those days. 8 out of 12 survey institutions declared victory over Jokowi-JK on quick count [24]. The quick count results are thought to influence investors in determining actions [5].

Trading volume is one indicator that can be used to observed how investors sentiment in the stock market during the presidential election. Volume can interpret the liquidity of an stock too. The data shows when there is an increase in abnormal return on Indonesian ETFs followed by an increase in trading volume, however the abnormal volume data has a reverse pattern. The analysis (table 2) shows that during the 2014 presidential election significant negative abnormal volume was found throughout the entire presidential election period. This is caused by Indonesian ETFs trading under market expectations that are currently high and not as active as foreign ETFs trading activities. The most traded volume was on the first day after the presidential election took place at 0.04%. Movement of abnormal volume by information content can provide a surprise effect and consensus effect [15].

**Table 3:** AAR of foreign ETFs on 2014 presidential election

t	R <sub>m</sub> %	R <sub>ETFs</sub> %	ER %	AAR %
-5	0,48	1,50	0,42	0,70
-4	-0,40	-0,42	0,48	-0,21
-3	0,35	-0,36	-0,06	-0,20
-2	1,68	-0,92	-0,54	3,00**
-1	0,71	-1,79	0,69	0,50
0	1,45	4,30	0,04	4,26***
1	-1,29	0,86	0,36	-2,48**
2	-0,23	3,79	0,80	-0,38
3	0,99	0,00	0,20	-0,29
4	0,85	-0,34	-0,14	-0,90
5	0,48	0,96	0,26	1,08

Explanation: similar to the explanation on Table 1.

**Table 4:** AAV of foreign ETFs on 2014 presidential election

t	V <sub>m</sub> %	V <sub>ETFs</sub> %	EV %	AAV %
-5	0,09	5,83	0,11	5,72*
-4	0,10	2,58	0,11	2,46
-3	0,13	0,00	0,11	-0,11
-2	0,18	4,13	0,11	4,02
-1	0,20	4,85	0,11	4,74*
0	0,00	7,43	0,11	7,32*
1	0,26	8,49	0,11	8,38**

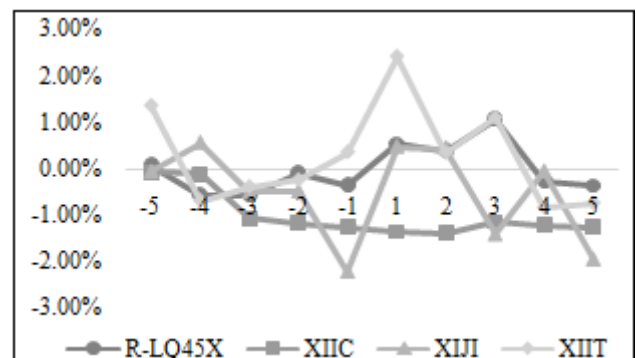
2	0,12	2,85	0,11	2,74
3	0,11	1,45	0,11	1,34
4	0,13	2,55	0,11	2,44
5	0,18	2,99	0,11	2,88

Explanation: similar to the explanation on Table 1.

Foreign ETFs also reacted in the 2014 presidential election and had similar pattern of abnormal returns to Indonesian ETFs which was bullish in the pre-presidential elections and bearish afterward. A bearish pattern is found from t-5 to the peak at t+1. The highest abnormal return was obtained on the day of the presidential election at 4.26% and the lowest at t+1 at -2.48% or decreased by 6.74%. Husnan [34] state that AR with a negative value can be interpreted as an increase in prices that has reached its peak and shows that the efficiency of stock market information in the form of half strong has not been fulfilled. The volume of foreign ETFs was traded higher than market expectations marked by abnormal positive volumes during the 2014 presidential election period. Investor interest in ETFs with Indonesian underlying assets on the NYSE is allegedly greater in the 2014 presidential election compared to ETFs traded in Indonesia.

#### 4.2 Presidential Election 17 April 2019

The 2019 Presidential Election reunited the presidential candidate Joko Widodo-Ma'aruf Amin and Prabowo Subianto-Sandiaga Uno. This event was also able to influence the Indonesian stock market because it caused uncertainty regarding the policies that applied for the next five years. Identity politics that occurred during this event was able to form expectations of incumbent defeat. Expectations of incumbent defeat in elections in presidential elections can create greater uncertainty than if incumbents were re-elected [10]. The presidential election was won again by the incumbent, Joko Widodo-Ma'aruf Amin. The re-election of incumbents or the victory of competitors who did not support unsustainable economic policies with previous economic policies during the campaign were able to create uncertainty [37]. Data analysis that has been done shows that there is still a positive abnormal return in the 2019 presidential election.



**Figure 2:** Cumulative abnormal Indonesian ETFs during 2019 presidential election.

In 2019 precisely on presidential election Indonesian ETFs individually (R-LQ45X, XIIC, XIJI, and XIIT) has a fluctuating trend (figure 1) unlike in the 2014 presidential election which clearly shows a definite pattern. XIIC

appears to be in a negative cumulative return during the event compared to other Indonesian ETFs. Among the four ETFs, XIIT has the highest cumulative abnormal return peak of 2.41% and the lowest point on XIJI at t-1 of -2.22%. Cumulative abnormal return pattern of foreign ETFs is not much different from 2014 but its value is lower. IDX and EIDO have semiliar cumulative abnormal return pattern which tends to be bullish until the day of the presidential election and tends to be bearish until day 5. Allegedly in 2019, the stock market is not as attractive as 2014 because of the many negative news that spread.

**Table 5:** AAR of Indonesia ETFs on 2019 pressidential election

t	R <sub>m</sub> %	R <sub>ETFs</sub> %	ER %	AAR %
-5	-0,09	0,37	0,05	0,33
-4	-1,06	-0,72	-0,19	-0,53
-3	-0,07	-0,37	0,05	-0,43
-2	0,46	0,31	0,18	0,13
-1	0,72	-0,12	0,25	-0,37
1	0,40	1,55	0,17	1,38*
2	-1,43	-0,85	-0,28	-0,57
3	0,75	0,21	0,25	-0,05
4	-0,23	-0,48	0,01	-0,50*
5	-1,17	-0,70	-0,22	-0,49

Explanation: similar to the explanation on Table 1.

Abnormal return in the 2019 presidential election has the same pattern as the previous period. Results show that only at t-5 and t+1 Indonesian ETFs experienced positive AAR. At t+1 the abnormal return is 1.38% as the highest point and t+2 is -0.57% as the lowest point during the presidential election. Relevant information that might affect investors in trading presidential elections is information about quick counts. The winner of the presidential election will determine Indonesiaan economic policy for the next five years so that the assumption of the winner in a quick count can be a reference. But rational investors tend to ignore information circulating in the public [43].

**Table 6:** AAV of Indonesia ETFs on 2019 pressidential election

t	V <sub>m</sub> %	V <sub>ETFs</sub> %	EV %	AAV %
-5	0,00	0,00	0,00	0,00*
-4	0,00	0,00	0,00	0,00**
-3	0,00	0,00	0,00	0,00*
-2	0,00	0,00	0,00	0,00*
-1	0,00	0,00	0,00	0,00
1	0,00	0,00	0,00	0,00
2	0,00	0,00	0,00	0,00*
3	0,00	0,05	0,00	0,05*
4	0,00	0,00	0,00	0,00*
5	0,00	0,00	0,00	0,00

Explanation: similar to the explanation on Table 1.

The 2019 presidential election has a slightly different trading volume activity pattern from the previous period. There was almost no trading activity in pre-presidential election events found but in t+3 there was a movement in trading volume. The abnormal volume of Indonesian ETFs is still far below foreign ETFs. However, when compared to the previous period, there was an increase in abnormal volume of Indonesian ETFs. Low transaction activity in Indonesian ETFs occurs because of investor

anticipation [11]. In the 2019 presidential election, Indonesian ETFs were able to trade above the IHSG or market average.

**Table 7:** AAR of foreign ETFs on 2019 presidential election

t	R <sub>m</sub> %	R <sub>ETFs</sub> %	ER %	AAR %
-5	-0,09	-1,61	0,02	0,05
-4	-1,06	-1,82	0,07	-2,16**
-3	-0,07	1,23	0,12	0,24
-2	0,46	-1,88	0,01	0,58
-1	0,72	-0,82	0,10	1,20
0	0,00	2,02	0,10	1,92**
1	0,40	1,31	0,11	-0,92
2	-1,43	0,68	0,10	-1,89**
3	0,75	0,31	0,08	1,12
4	-0,23	-2,13	0,03	-1,88**
5	-1,17	0,13	0,08	-1,63*

Explanation: similar to the explanation on Table 1.

Abnormal return patterns of foreign ETFs in the 2019 elections tended to be bullish in the pre-election to a peak on the day of the presidential election of 1.92%. After the presidential election foreign ETFs abnormal return tends to be bearish. A positive foreign ETFs market reaction around during the day of the 2019 presidential election indicates positive information content on the event. Nugraha and Suroto's research [11] shows that there is a significant positive average abnormal return in t+3 of the 2019 presidential election due to positive investor responses from the good news that spread in public.

**Table 8:** AAV of foreign ETFs on 2019 presidential election

t	V <sub>m</sub> %	V <sub>ETFs</sub> %	EV %	AAV %
-5	0,00	5,83	0,11	1,42
-4	0,00	2,58	0,11	2,51**
-3	0,00	0,00	0,11	1,77
-2	0,00	4,13	0,11	2,22**
-1	0,00	4,85	0,11	2,09
0	0,00	7,43	0,11	4,87***
1	0,00	8,49	0,11	2,24
2	0,00	2,85	0,11	1,70
3	0,00	1,45	0,11	1,79
4	0,00	2,55	0,11	2,35
5	0,00	2,99	0,11	2,85*

Explanation: similar to the explanation on Table 1.

Trading volume can reflect fluctuations in investor expectations or sentiment, while trading volume provides information about investors' misconceptions about future earnings. The irrational behavior of investors formed during events causes an increase or decrease in trading volume and illustrates irrational expectations at a certain level [9]. Abnormal volumes tend to follow the pattern of abnormal returns during the 2019 presidential election. When compared with the previous period, foreign ETFs experienced a decrease in abnormal returns and abnormal volume by half. This might have been caused by a trade war that reduced investor trading enthusiasm in the US market [2].

## 5. Conclusions

This study attempts to examine the reaction of Indonesian ETFs on Indonesian presidential elections in 2014 and 2019.

The Indonesian stock market is inefficient with the discovery of positive or negative abnormal returns due to the events of the 2014 and 2019 presidential elections. Significant average abnormal returns of Indonesian ETFs indicate that ETFs react with presidential election in 2014 and 2019. Especially at  $t + 1$  after the presidential election takes place, the average abnormal return reaches a peak of significant positive abnormal returns and falls significantly negative at  $t + 2$ . Observations result could mean that ETFs investment managers can beat the market during the Indonesian presidential election. Investors can invest in ETFs to diversify the portfolios or avoid loss losses, especially in presidential election cases.

Abnormal negative volumes dominate the 2014 presidential election events, but in 2019 presidential election is dominated by positive abnormal volumes because the markets tend to trade below ETFs volumes. ETFs has good potential, but awareness and product knowledge in Indonesia is still relatively low in terms of the volume traded. It is better for investment managers to set aside income for market education. Investor interest can also be encouraged by policies that can support ETFs performance as a form of increasing ETFs supply and demand in the Indonesian capital market.

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