


## Comparative Analysis Stock Price Volatility and Abnormal Return Before and After One Round Election (Event Study on the Composite Stock Price Index)

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ARTICLE INFO	ABSTRACT
<p><b>Article history:</b> Received April 15, 2024 Revised April 22, 2024 Accepted May 15 2024</p> <p><b>Keywords:</b> Stock Price Volatility, Abnormal Return, IHSB on the Stock Exchange market, Event studies.</p>	<p>This research aims to test and analyze the average of abnormal return and stock price volatility before and after the implementation of one round of elections. The method used in this research is event study (event study). The data period used in this research is 14 trading days, each of which is 7 days before and 7 days after the election. The focus of this research is on the IHSB on the Stock Exchange market. Data were analyzed using descriptive statistical techniques and statistical difference tests. Meanwhile, hypothesis testing uses test some sample t test and test paried sample t test. Test results one sample t test shows there is abnormal return which is significant after the announcement of one round of election events, meanwhile the results of average test abnormal return those that have been tested have obtained significant differences abnormal return (AAR) before and after the event, however, the market responded positively to the one-round election event in Indonesia. while the results from the cumulative test are average abnormal return (CAAR), which researchers have tested, found that there was no significant difference in the cumulative average abnormal return (CAAR) before and after the one-round election event in Indonesia.</p> <p><i>This is an open access article under the <a href="#">CC BY-NC</a> license.</i></p> 

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### 1. INTRODUCTION

The process of developing the world of politics in Indonesia proceeded rapidly after the implementation of amendments to the 1945 Constitution by the People's Consultative Assembly (MPR) in the period 1999-2002. One of the political dynamics occurring in Indonesia is marked by the strengthening of participatory democracy by the Indonesian people in an effort to achieve national leadership through the process of holding general elections for the President and Vice President which will be held directly (Arrsa, 2016). Elections are a performance carried out by a country characterized by a democratic state. The implementation of elections is regulated in the 1945 Constitution of the Republic of Indonesia (NRI), article 22 E paragraph (1), that general elections are held directly, publicly, freely, secretly, honestly and fairly every five years. In elections in Indonesia, there is an institution that is given the authority by the State to hold general elections, namely the General Election Commission (KPU). In accordance with the mandate of the 1945 Constitution of the Republic of Indonesia, hereinafter shortened to the 1945 NRI Constitution (Widodo et al., 2014).

One-round elections are an election process that is only carried out once because a winner has already been obtained. However, there are conditions that must be met by the presidential and vice presidential candidates to win the one-round election. The presidential and vice presidential candidates must get more than 50 percent of the vote, provided they win in 20 provinces spread across Indonesia. After the recapitulation is carried out and these conditions are met, the election is held in one round (Solihah, 2018). It can be seen from the election events in 2024 that apart from referring to political competition, this also has a big influence on share price movements or the rise and fall of share prices in a company. Historically, the performance of the Composite Stock Price Index has continued to trend positively during elections in recent periods. Where the previous four election periods produced elected presidents who were generally accepted by the market (Iverson & Dervan, n.d.).

The Composite Stock Price Index (IHSG) is an index of all types of shares on the Stock Exchange. IHSG can also be defined as a description of all share price movements on the Stock Exchange (Rismawati & Sugiman, 2022). So IHSG is an index that reflects price movements on the Stock Exchange market as a whole. The formula used to calculate the IHSG can be adjusted to the partial stock index formula, however the basic value and capitalization used are based on the number of issuers on the Exchange in a given period (Lumbantoruan et al., 2021). The increase in the JCI does not mean that all types of shares experienced an increase in prices, but only some shares experienced an increase and others experienced a decrease. If one type of share experiences an increase in price when the IHSG rises, then that share becomes positive towards the IHSG. Vice versa, if one type of share experiences a price decline when the IHSG rises, then that share becomes negative for the IHSG (Permata, 2020).

The market response to this event can be seen and measured by abnormal return. Where abnormal return is the difference from return expected with return that has been obtained. Difference of return this will be positive when return that has been obtained is greater than return expected, then the opposite is the difference return will be negative when return obtained is smaller than return which are expected. Abnormal return will occur because there are certain events such as an uncertain political atmosphere, national holidays, the beginning of the month, the beginning of the year, initial stock offerings, and stock split and extraordinary events (Viera Valencia & Garcia Giraldo, 2019). Volatility Share prices can also be used to measure the risk of a share which the share is experiencing. Volatility can experience price changes at any time so this is difficult to predict (Rosyida et al., 2020).

Signaling theory or what is commonly known as signal theory is a theory related to investment announcements (investment announcement) which gives a positive signal by management to the public because the company has good prospects in the future. These signals can take various forms, whether they are observed directly or require more in-depth study to understand them. In whatever form the signals issued are intended to imply something so that the market or external parties are willing to change their assessment of the Company. So it can be interpreted that the signal that has been selected must contain information power (information content) in order to change the assessment from external parties of the Company.

In this study, researchers attempt to see stock performance by looking at the market response to investment announcements (investment announcements) on events before and after one round of elections which refers to the theory of market efficiency in order to test the information content of one round of elections with indicators volatility share price and average of abnormal return.

### **Objective**

The objectives to be achieved in this research are to find out and analyze the difference in average stock price volatility before and after one round of elections on the Composite Stock Price Index, to find out and analyze the difference in average Abnormal Return before and after one round of elections for the Composite Stock Price Index. and Knowing the difference in the analysis of the cumulative average Abnormal Return on the Composite Stock Price Index.

## 2. RESEARCH METHODS

The type of research taken by this researcher is included in the research event study, Where this research aims to test the information content of an event or announcement. If an event contains information, the market will react when the announcement is received by the market. Application of research event study This research is widely used in research in the field of finance (also accounting) with a very wide variety of events based on the type and analysis of data used. This research is included in quantitative research because it refers to calculating data in the form of numbers (Setyawasih, 2007). The population in this study is all companies that officially operate and are listed on the Stock Exchange (cooper dan emory, 1997). Meanwhile, the sample used in this research is all companies listed on the Stock Exchange from various sectors which can be seen from the average IHSG (Ningtyas, 2014).

### Data Collection Techniques

The method used by researchers to collect data in this research is by downloading the data available on website official Yahoo Finance and the Indonesian Stock Exchange (BEI). The data needed by researchers in this research is the Composite Stock Price Index (IHSG) on the Indonesian Stock Exchange which is the reference for return market. Research from event study This is individual in nature, where each date for each issuer is different, adjusted to the information circulating.

## 3. RESULTS AND DISCUSSION

### Data Analysis Results

In this study, researchers will discuss the results of data analysis that has been processed using SPSS 29 through descriptive statistical tests, normality tests, and Paired Samples Test.

### Descriptive statistics

This descriptive statistical analysis includes the average value, minimum value, maximum value and standard deviation value for each research sample. The variables used in this research are average abnormal return, cumulative average abnormal return, and stock price volatility.

**Table 1.** Descriptive Statistics of AAR, CAAR, and HVS

	N	Minimum	Maximum	Mean	Std. Deviation
AAR Before	7	-.005550651	.013875317	.00284052300	.006425498593
AAR After	7	-.014126382	.007798046	-.00076283686	.007863601657
CAAR Before	7	.992300025	1.027081197	1.01038619714	.013455646409
CAAR After	7	.998884881	1.027353462	1.01398955700	.009018040474
VHS Before	7	.994449349	1.013875317	1.00284052300	.006425498593
VHS After	7	.985873618	1.007798046	.99923716314	.007863601657

Source: Data processed, 2024

In table 1, it can be seen that from the results of descriptive statistics we can generally conclude that from the IHSG all the companies that the researchers used as samples, during the window period average abnormal return shares before the one-round election event produced the lowest return of -0.005550651, while the highest return was 0.013875317, while the average value was 0.00284052300, and the standard deviation value was 0.006425498593. then the return value after the event produces the lowest value of -0.014126382, while the highest return is 0.007798046, while the average value is -0.00076283686, and the standard deviation value is 0.007863601657.

The value of the window period cumulative average abnormal return before the event occurred, it obtained the lowest value of 0.992300025, while the highest value was from cumulative average abnormal return amounting to 1.027081197, while the average value is 1.01038619714, and the standard deviation value is 0.013455646409. then the value of cumulative average abnormal return after an event occurs which produces the lowest value of 0.998884881, while the highest value is 0.998884881 cumulative average abnormal return amounting to 1.027353462, while the average value is 1.01398955700, and the standard deviation value is 0.009018040474.

The value of the window period stock price volatility before the event occurred, it obtained the lowest value of 0.994449349, while the highest value was from cumulative average abnormal

return amounting to 1.013875317, while the average value is 1.00284052300, and the standard deviation value is 0.006425498593. then the value of cumulative average abnormal return after the event occurred which produced the lowest value of 0.985873618, while the highest value was 0.985873618 cumulative average abnormal return amounting to 1.007798046, while the average value is 0.99923716314, and the standard deviation value is 0.007863601657.

### Data Normality Test

The normality test carried out in this study aims to find out whether the data in this study is normal or abnormal so that it can be used for parametric statistics. If the data being tested produces normally distributed results, then the next test can use a parametric statistical test, namely the Paired Sample T-test, and if the data being tested is not normally distributed then the next test will use a test Wilcoxon signed rank test. Wilcoxon signed rank test is a non-parametric test which is usually used to analyze paired data due to the presence of two different treatments. The normality test used in this research is the test one sample Kolmogorov-Smirnov.

**Table 2 Data Normality Test**  
One-Sample Kolmogorov-Smirnov Test

Variable	Asymp. Sig. (2-tailed)
AAR Before	.200*
AAR After	.200*
AAR Before	.200*
AAR After	.200*
VHS Before	.200*
VHS After	.200*

Source: processed data, 2024

The type of test used in this research is test one sample kolmogorov-smirnov test where this test has a high level of measurement or tolerance standard to determine the same data size. If the significance value (asyp. Sig) is  $>0.05$  then the data can be declared to be normally distributed, whereas if the value (asyp. Sig) is  $<0.05$  then the data can be declared not to be normally distributed.

Based on test results one sample kolmogorov-smirnov test found in table 4. 2, data average abnormal return before and after obtaining asyp. Sig (2-tailed) is 0.200 and 0.200 higher than asyp. Sig  $<0.05$  means the data is declared to be normally distributed. Then data cumulative average abnormal return before and after obtaining asyp. Sig (2-tailed) is 0.200 and 0.200 higher than asyp. Sig  $<0.05$  means the data is declared to be normally distributed. Whereas share price volatility before and after the events of one round of elections obtain asyp. Sig (2-tailed) is 0.200 and 0.200 higher than asyp. Sig  $<0.05$  means the data is declared to be normally distributed. Thus, for further testing the researcher used parametric statistics, namely Paired Samples Test where this test is used to test hypotheses in research.

**Hypothesis Test 1**

**Table 3. Paired Sample t Test AAR Test Results  
Paired Samples Test**

		Paired Differences					t	df	Say. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	AAR Before - AAR after	.003603359857	.014024842006	.005300892018	-.009367455643	.016574175357	3,680	6	.022

Source: Data processed, 2024

Based on different test results Paired Sample t Test In table 3, it is known that the Sig value. (2-tailed) Average abnormal return (AAR) of 0.022 is smaller than 0.05, it can be concluded that there is a significant difference between the variables Average abnormal return (AAR) before and after one round of election events.

**Table 4. Conclusion of Hypothesis Test Results (H<sub>1</sub>)**

Hypothesis	Statement	Mark	Information
		Say. (2-tailed)	
H <sub>1</sub>	there are differences in averages abnormal return 7 days before and 7 days after the one round election event.	.022	H <sub>1</sub> Accepted

**Hypothesis Test 2**

**Table 5. Paired Sample t Test CAAR Test Results  
Paired Samples Test**

		Paired Differences					t	df	Say. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	CAAR before - CAAR after	-.003603359857	.014024842015	.005300892021	-.016574175366	.009367455652	-.680	6	.522

Source: Data processed, 2024

Based on the results of the different test values on Paired Samples T-Test In table 5, it is known that the Sig value. (2-tailed) cumulative average abnormal return of 0.522 is greater than 0.05, so it can be concluded that there is no significant difference between the variables Cumulative average abnormal return (CAAR) before and after one round of election events.

**Table 6.** Conclusion of Hypothesis Test Results (H<sub>2</sub>)

Hypothesis	Statement	Mark		Information
		Say. (2-tailed)		
H <sub>2</sub>	There is a cumulative average difference abnormal return 7 days before and 7 days after the one round election event.	.522		H <sub>2</sub> Rejected

**Hypothesis Test 3****Table 7.** Paired Sample T Test VHS Test Results  
**Paired Samples Test**

Pair 1	VHS before - VHS after	Paired Differences					t	df	Say. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
		.0036 03359 857	.0140 24842 006	.0053 00892 018	- .0093 67455 643	.016574 175357	4,780	6	.010

Source: Data processed, 2024

Based on different test results Paired Sample t Test In table 7, it is known that the Sig value. (2-tailed) Stock Price Volatility (VHS) of 0.010 is smaller than 0.05, it can be concluded that there is a significant difference between the variables Stock Price Volatility (VHS) before and after one round of election events.

**Table 8.** Conclusion of Hypothesis Test Results (H<sub>3</sub>)

Hypothesis	Statement	Mark		Information
		Say. (2-tailed)		
H <sub>3</sub>	There are differences in averages volatility stock prices 7 days before and 7 days after the one-round election event.	.010		H <sub>3</sub> Accepted

**4. CONCLUSIONS**

Based on analysis of the IHSG listed on the Indonesia Stock Exchange in 2024, this research aims to examine the events of the one round election that occurred by analyzing the average of abnormal return and stock price volatility before or after the event. In this research the researcher used the event study method (event study). The period used in this research is 14 trading days, each of which is 7 days before and 7 days after the event occurs. From all the test results that the researchers have tested, the following conclusions can be drawn: The market response to the single round election event in Indonesia can be seen from the average abnormal return shares before and after the single round election event in Indonesia. Results from the average test abnormal return which the researchers have tested, the results show that there are significant differences abnormal return (AAR) before and after the event, however, the market responded positively to the one-round election event in Indonesia. Meanwhile, the results of the cumulative average abnormal return (CAAR) test that researchers have tested show that there is no significant difference in the cumulative average abnormal return (CAAR) before and after the one-round election event in Indonesia. Meanwhile, the events of the one-round election in Indonesia have proven to have caused market reactions for variables stock price volatility (VSH). Where this is shown by the difference in averages stock price volatility in the period before and after the one-round election event in Indonesia. These results show the perception of investors who responded positively to the events of this one-round election as seen from the increase in the IHSG on the Stock Exchange market.

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