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Stock Market Reaction to the Announcement of the 2015 Indonesian Government Economic Policy Package in the Indonesia Stock Exchange

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Abstract

This research examines the stock-market reaction to the announcement of the Indonesian government's economic policy packages, which consist of four volumes in the Indonesia Stock Market. Variables used in this research are average abnormal return (AAR) and cumulative average abnormal return (CAAR) that are then tested using a statistical test one-sample *t*-test. In this research, economic policy package volume 1 contains three important policies – improving industry competitiveness, accelerating national strategic projects and encouraging investment in property sector. Economic policy package volume 2 focuses more on simplifying the investment licensing and securing the export foreign exchange. Economic policy package volume 3 is mainly focused on providing incentives for business players, and economic policy package volume 4 regulates the labor payroll system in Indonesia. This research uses the event study model which with different study periods. The results indicate that the market reacts positively during the announcement of the economic policy package volume 1 and 2, but reacts otherwise during the announcement of the economic policy package volume 3 and 4.

Keywords: government's economic policy package, AAR, CAAR, stock market reaction

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1. Introduction

Stock investment is one of the capital market investment options that will give benefits in the form of dividend and capital gain. Stock investment is highly influenced by internal and external factors. The internal factors are related to the company itself, while the external factors are related to the macroeconomic factors, social politics and others. One of the external factors that will affect investors' reaction is the global economic slowdown phenomenon.

The Jakarta Stock Exchange Composite Index (JKSE) hit the lowest record on Thursday, August 20^{th}, 2015, as all Asian stocks were pressured by the anticipation of a

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Chinese economic slowdown. The Jakarta Stock Exchange Composite Index (JKSE) was closed and was weakened by 0.94 percent to the level of 4.441,91, the lowest level since the trade closure of February 7^{th}, 2014. Kontan.co.id (19/8) reports that stock market analysts think that investors' declining trust in corporate fundamentals led to the selling of their shares, affecting the JKSE to take a significant correction in the last few days. With the less favorable global and domestic economic situation, on September 9^{th}, 2015, the government announced volume1 of the economic policy package which focused on policy deregulation with the purpose to improve the domestic business climate through licensing convenience and rules simplification. A few weeks later, the government released volume 2 of the economic policy package on September 29^{th}, 2015, which was more to encourage the increasing in investment in the Indonesia capital market. Later, on October 7^{th}, 2015, the government released volume 3 of the economic policy package which contained a discount package. Volume 4 of the economic policy package, which regulates the payroll system in Indonesia, was released on October 15^{th}, 2015. Umam (2014) undertook research about the relation between the announcement of the electricity tariff increase and the abnormal return and stock trading volume. The research reports that the announcement of the electricity tariff was significantly correlated to the average abnormal return and the trade volume. Suarjana (2011) researched about the effect of government policy in lowering the oil price in response to the stock market reaction. The research shows that the announcement of the government policy in lowering the oil price was significantly negative to the average abnormal return.

Based on the introduction, the research question would be, was there any stock market reaction to the announcement of the economic policy package on September 9^{th}, 2015 (1st volume), September $29^{th,}$ 2015 (2nd volume), October 7^{th}, 2015 (3rd volume), and October 15^{th} 2015 (4th volume)?

2. Theoretical Background and Hypothesis

2.1. Capital market and stock investment

The capital market is a market to trade long-term financial instruments, either in the form of debt or capital. The capital market helps corporates to raise external funds by issuing shares or obligations and can also be an alternative platform for investment. Investors invest their funds in productive assets for a certain period and expect a certain amount of return from their investment. Productive asset investments vary in the form of real assets, such as housing, land or gold, or in the form of securities, such as obligation and stock (Jogiyanto, 2013:7). Generally, there are two forms of investments, real sector investment and financial sector investment. Investing in tangible assets, such as housing, land, or building a factory are an example of real sector investment, while financial sector investment is investing in securities, such as buying stocks to gain return on the investment that has been made. There are two types of return that the investor will get from their investment, dividend and/or capital gain.

2.2. Stock earnings

Stock earnings is a return rate that is gained by the investor. Investors have a specific purpose on buying stock, that is to gain revenues over the investment, either in the form of dividend or capital gain. Dividend is a cash inflow received by the investor periodically and derived from the company profit sharing, while capital gain is the difference between current stock price and in a previous period. Investors will receive capital gain when the current stock price is higher than the previous period.

Stock earnings are divided into three, that are realized return, expected return and abnormal return. Realized return is the real income, while expected return is the income expected by the investor in the future. Abnormal return is the difference between realized return and expected return.

1. Realized return

   Realized return, also known as actual return, is the return that is actually gained and which can be measured by historical data. In this research, realized return is the difference of stock prices in a period relative to the stock price from the previous period, formulized as follows:

$$R_{i,t} = \frac{P_{i,t} - P_{i,\,(t-1)}}{P_{i,\,(t-1)}} \tag{1}$$

   Where:

   Ri, *t* = return gained from stock i during period *t*

   Pi, *t* = stock price i during period *t*

   Pi, (*t*–1) = stock price i during period *t*-1

   If current price stock price (Pi, *t*) is higher than stock price from the last period (Pi,(*t* – 1)), there is a capital gain. On the other hand, if current price stock price (Pi, *t*) is lower than stock price from the last period (Pi,(*t* – 1)), there is a capital loss.

2. Expected return

   Expected return is the return expected to be gained from an investment. Suad-Husnan (2005) states that expected return is the return that will be gained by the investor from their investment in a company in the future and is dependent on the prospects of the company in the future. Measuring the expected return can be done by using mean-adjusted model, market model and market adjusted model. In this research, market-adjusted model is used because it is considered as the best estimator of a return from an investment. In other words, the estimated return of a security is the same as market index, which is:

$$E[R_{i,t}] = R_{M,t} \tag{2}$$

   Where:

   E[Ri, *t*] = expected return of security I during period *t*

   RM, *t* = market return period during period *t*, measured by:

$$R_{M,t} = \frac{JKSE_t - JKSE_{t-1}}{JKSE_{t-1}} \tag{3}$$

   Where:

   RM,*t* = market return during period t

   JKSEt = Jakarta Stock Exchange Composite Index during period *t*

   JKSE(*t* – 1) = Jakarta Stock Exchange Composite Index during period (*t* – 1)

3. Abnormal return

   Abnormal return is the difference between actual return and expected return, formulized as follows:

$$AR_{i,t} = R_{i,t} - E(R_{i,t}) \tag{4}$$

   Where:

   ARi,*t* = abnormal return of stock i during period *t*

   Ri,*t* = realized return of stock I during period *t*

   E(Ri,*t*) = expected return stock i during period *t*

   Determining abnormal return is not based on every security but it is done in aggregate level by analyzing the average abnormal return and cumulative average abnormal return of all securities daily.

   Average abnormal return (*AAR*) can be formulized as follows:

$$AAR_t = \frac{1}{n}\sum_{i=1}^{n} AR_{i,t}. \tag{5}$$

Where:

AARt = *average abnormal return* during period *t*

n = number of stocks as sample

ARi,*t* = *abnormal return* stock i during period *t*

This research not only analyzes AAR, but also *cumulative average abnormal return* (*CAAR*), which is the accumulation of *AAR* of all samples, to determine if there is a cumulative abnormal return during the period of research. Cumulative average abnormal return can be formulized as follows:

$$CAAR_t = \sum_{t=1}^{T} AAR_t \tag{6}$$

Keterangan:

CAARt = *cumulative average abnormal return* during period *t*

AARt = *average abnormal return* during period *t*

t = period of research

2.3. Capital market efficiency

Capital market is considered efficient when the security price reflects the relevant information. Investment decision is a reaction made by the shareholder based on the information they have received. The faster the price can reflect recent information, the more efficient the stock market is. Security price that adjusts immediately to recent information will not give the investor the ability to gain abnormal return because immediate price adjustment leads to the creation of a new stock price equilibrium. Fama (1970 cited in Jogiyanto, 2013:548) divides capital market efficiency into three main types based on the information types, which are past information, published information and private information.

1. Weak-form efficiency

   Weak-form efficiency occurs when the security price fully reflects the past information of a company. This means that all the available information happens in the past. This type of efficiency is related to the random-walk theory which states that past information is not related to a present value. Past value cannot be used to predict the price for a present time. As a result, investors cannot use the past information to gain abnormal return.

2. Semi-strong-form efficiency

   Semi-strong-form efficiency occurs when the security price fully reflects all publicly available information, including all the information in the annual reports of the company. As a result, no investor could use the published information to gain the abnormal return in a long-term period. The aim of this research is to test market efficiency with semi-strong form using the event study method, to know whether the market players will respond to the published information or not.

3. Strong-form efficiency

   This form of efficiency is the highest level of market efficiency. Strong-form efficiency occurs when security price fully reflects all the information including the private information. As a result, neither individual investor nor a group of investors, even with a superior ability, could gain abnormal return using all the relevant information, whether it is historical, published, or not published.

Based on the semi-strong-form market efficiency, the research hypothesis is as follows:

H1: There is a stock market reaction to the announcement of the government's economic policy package.

3. Research Methodology

Event study can be used to test the market reaction to announcement of information and information content of an announcement and can also be used to test the semi-strong market efficiency (Jogiyanto, 2003). Information content test and market efficiency test, with a semi-strong form, are two different kinds of tests. Jogiyanto (2003) states that information content test is used to check the reaction of an announcement. If the announcement has an information content, then the market is expected to react over the announcement when it is received in the market. Market reaction is shown by the changing price of the related securities. The reaction is calculated by the abnormal return, that is average abnormal return (AAR) and cumulative average abnormal return (CAAR). To test the hypothesis, this research uses one sample *t*-test for average abnormal return (AAR) and cumulative average abnormal return (CAAR) to know the stock market reaction to the government's economic policy package.

3.1. Operational definition

In order to ease the understanding and to provide a better explanation of the variables used in this research, the following list is an operational definition of each variable along with the measurement:

1. Average abnormal return (AAR), is daily average abnormal return from the whole sample during the research period, measured by the equation (5)
2. Cumulative average abnormal return (CAAR), is the accumulation of all AAR for the whole sample to test whether there is a cumulative abnormal return during the research period, measured by equation (6)

3.2. Procedure in determining sample

Population used for this research is publicly listed company in the Indonesian Stock Market (BEI) in the year of 2015. Purposive sampling technique is used to determine the sample in this research, with the following criteria:

1. Corporate that is not undertaking corporate action during the research period
2. The corporate's stock is actively traded during the research period
3. All the data that are needed for the research are available

4. Result and Discussion

Table 1 describes all the variables used in this research.

Table 2 shows the analysis on stock market reaction to the announcement of economic policy package (Volume 1, 2, 3 and 4)

4.1. Stock market reaction to the announcement of the economic policy package Vol. 1

Analysis of the results in Table 2 shows that there is a significant positive AAR on $t-2$ and $t-1$ before the announcement date. This shows that the information about the announcement of economic policy package volume 1, which is considered as the effort of the government to save the Indonesian economy, has been known by the public before the actual date of the first announcement. Economic policy package

Table 1: Average actual return, expected return, average abnormal return and cumulative average abnormal return.

	Announcement of economic policy package Volume 1				Announcement of economic policy package Volume 2				Announcement of economic policy package Volume 3				Announcement of economic policy package Volume 4			
	AV Actual Return	Expected Return	AAR	CAAR	AV Actual Return	Expected Return	AAR	CAAR	AV Actual Return	Expected Return	AAR	CAAR	AV Actual Return	Expected Return	AAR	CAAR
$t-5$	−0.0017	−0.0025	0.0008	0.0008												
$t-4$	0.0116	0.0073	0.0043	0.0051												
$t-3$	−0.0045	−0.0041	−0.0004	0.0047	−0.0121	−0.0230	0.0110	0.0110								
$t-2$	−0.0174	−0.0258	0.0084	0.0132	−0.0022	−0.0082	0.0061	0.0170	0.0157	0.0323	−0.0167	−0.0167	−0.0171	−0.0320	0.0148	0.0148
$t-1$	0.0091	0.0040	0.0051	0.0183	−0.0133	−0.0211	0.0079	0.0249	0.0049	0.0235	−0.0186	−0.0353	0.0045	0.0054	−0.0008	0.0140
t	0.0075	0.0067	0.0008	0.0192	−0.0002	0.0141	−0.0143	0.0106	0.0142	0.0092	0.0050	−0.0303	−0.0026	0.0033	−0.0059	0.0081
$t+1$	−0.0034	−0.0009	−0.0025	0.0166	0.0093	0.0108	−0.0015	0.0091	−0.0001	0.0009	−0.0010	−0.0314	0.0044	0.0106	−0.0062	0.0019
$t+2$	0.0035	0.0039	−0.0004	0.0162	0.0053	0.0073	−0.0020	0.0071	0.0196	0.0218	−0.0023	−0.0336	0.0027	0.0035	−0.0008	0.0011
$t+3$	0.0023	0.0069	−0.0046	0.0117	−0.0015	−0.0110	0.0095	0.0166	0.0049	0.0092	−0.0043	−0.0379	0.0030	0.0041	−0.0012	−0.0001
$t+4$	−0.0037	−0.0098	0.0061	0.0178												
$t+5$	−0.0010	−0.0035	0.0025	0.0203												

Source: Yahoofinance.com (processed).

Table 2: Analysis AAR and CAAR.

	Event	Announcement of economic policy package Volume 1		Announcement of economic policy package Volume 2		Announcement of economic policy package Volume 3		Announcement of economic policy package Volume 4	
Day		*AAR*	*CAAR*	*AAR*	*CAAR*	*AAR*	*CAAR*	*AAR*	*CAAR*
$t-5$		0.0008	0.0008						
$t-4$		0.0043	0.0051						
$t-3$		−0.0004	0.0047	**0.0110***	**0.0110***				
$t-2$		**0.0084***	**0.0132***	**0.0061***	**0.0170***	**−0.0167***	**−0.0167***	**0.0148***	**0.0148***
$t-1$		**0.0051***	**0.0183***	**0.0079***	**0.0249***	**– 0.0186***	**−0.0353***	−0.0008	**0.0140***
t_0		0.0008	**0.0192***	**−0.0143***	**0.0106***	**0.0050***	**−0.0303***	**– 0.0059***	**0.0081***
$t+1$		−0.0025	**0.0166***	−0.0015	0.0091	−0.0010	**−0.0314***	**– 0.0062***	0.0019
$t+2$		−0.0004	**0.0162***	−0.002	0.0071	−0.0023	**– 0.0336***	−0.0008	0.0011
$t+3$		**– 0.0046***	**0.0117***	**0.0095***	**0.0166***	**– 0.0043***	**– 0.0379***	−0.0012	−0.0001
$t+4$		**0.0061***	**0.0178***						
$t+5$		0.0025	**0.0203***						
Note: *Significance level = 5%.									

volume 1 contains three important policies - improving the industry competitiveness, accelerating national strategic projects and encouraging investment in the property sector. Market reacts positively on $t+4$ of the announcement because there is massive media coverage about the benefits of the economic policy package volume 1 for the Indonesian economy. That gives a positive signal for the market players. The significant positive value for almost all the CAAR between $t-2$ and $t+5$ shows that market consistently gives positive reaction toward the announcement of the first economic policy package. Although there is negative AAR for three days after the announcement date (t_0), that does not make the CAAR become negative because, during the waiting period for the announcement, the CAAR is positive, and there are four days of positive AAR and one day of negative AAR. The high enthusiasm from the market players in expecting the announcement of economic policy packages causes the market to react positively.

4.2. Stock market reaction to the announcement of the economic policy package Vol. 2

Based on the analysis of the results in Table 2, the significant positive value of AAR between $t-3$ and $t-1$ shows that the information about the announcement has been known by the public before the actual announcement date. When the second announcement is made (t_0), the AAR is significant negative value. This shows that market gives negative reactions toward the information. The economic policy package volume 2 focuses more on simplifying the investment licensing and securing the export foreign exchange. However, the public feels unsure about the implementation of the economic policy package volume 2 because, in most cases, government makes good policy but bad implementation. On $t + 3$, the significant positive of AAR shows that market reacts positively toward the announcement of the economic policy package volume 2 because of the massive media coverage on in-depth discussion of the overall content of the second policy package. This educates people about the policy so that the market can better absorb the information content. The significant positive value in most of the CAAR shows that the market reacts positively on the announcement of the policy package. This is consistent with the content of the economic policy package volume 2 that focuses more on investment problems and market gives a pretty good reaction about the information, because the market players want certainty and easiness in domestic investment service to create an investor-friendly environment.

4.3. Stock market reaction to the announcement of the economic policy package Vol. 3

Analysis of the results in Table 2 shows that the significant negative value of AAR on $t - 2$ and $t - 1$ is caused by the public already knowing the government's plan to announce volume 3 of the economic policy package on October 7^{th}, 2015. The negative response is mainly caused by the public dissatisfaction with all the economic packages that have been released, all the impacts of which can only be seen in the medium-term. All of the economic policy packages have no direct effect on market players, especially industrial sector players who are in need of direct assistance from the government amid economic difficulties. On the announcement date of the economic policy package volume 3, the AAR is a significant positive. Market responds positively toward the information about the incentive that will be given to the business players in distress amid the economic slowdown. The policy package is mainly focused on providing incentives for business players, such as electricity, fuel, and gas tariff cut-offs. By providing the incentives, business players can reduce the cost of production, so that they can improve corporate competitiveness amid the economic slowdown occurring in the country. This can give a positive stimulus for the market players in responding to the announcement of the economic policy package. On $t + 3$ of the announcement, the AAR value is a significant negative, which is caused by the public starting to think that volume 3 of the economic policy has not yet addressed the weakening of people's purchasing power and the phenomenon of massive lay-offs occurring throughout Indonesia. This can endanger the business climate in Indonesia. All of the CAAR value during the research period is of significant negative value, which shows that the market is not yet satisfied with the content of the economic policy volume 3. The policy package has not taken up the massive lay-offs issue, which causes the market players to show concern about their business in the country.

4.4. Stock market reaction to the announcement of the economic policy package Vol. 4

The results in Table 2 shows that the AAR is a significant positive on t-2 and that this is caused by the public already knowing about the government's plan to announce economic policy package volume 4, which leads them to expect that this policy can solve the lay-offs problem. Market reacts positively before the announcement date of economic policy package volume 4. On $t_0$and $t + 1$, the AAR value is a significant negative value, which shows that the market gives a negative response to the information. This is caused by one of the contents of the policy package that regulates the payroll system in Indonesia. The labor union is against the regulation because they feel there is little involving an increase in the minimum salary. Also, the labor union thinks that the measurement used to calculate the minimum salary (that is regulated in the government regulation) is against the constitution. This rejection threatens the stability of the Indonesian economy. The massive media coverage about the huge labor march against the economic policy package volume 4 causes an unfavorable situation in economic, social, and political fields. This leads the market players to react negatively on and after the announcement date of the economic policy package volume 4. CAAR value is a significant positive on $t - 2$, $t - 1$ and $t_{0.,}$ but the CAAR movements are decreasing continuously during the research period, which shows a consistent negative response from the market toward the announcement of the economic policy package volume 4. The negative response is caused by the massive rejections from the labor union concerning the establishment of the minimum salary measurement which is regulated in the economic policy package volume 4.

5. Conclusions

1. There is stock market reaction at around the announcement date of the economic policy package volume 1 on September 9^{th}, 2015; most of the AAR and CAAR are significant positive, which shows that the information content is considered good news in that market gives a positive response.

2. There is stock market reaction to the announcement date of the economic policy package volume 2 on September 29^{th}, 2015; most of the AAR and CAAR are significant positive, which shows that the information content is considered good news in that market gives a positive response.

3. There is stock market reaction to the announcement date of the economic policy package volume 3 on October 7^{th}, 2015; most of the AAR and CAAR are significant negative, which shows that the information content is considered bad news in that the market gives a negative response.

4. There is stock market reaction to the announcement of the economic policy package volume 4 on October 15^{th}, 2015; most of the AAR is significant negative and all of the CAAR is significant positive. However, the CAAR value is decreasing which shows that the information content is considered bad news in that the market gives a negative response.

References

[1] Hidayat, A. (29 September 2015). Ini Isi Lengkap Paket Kebijakan Ekonomi Jokowi Tahap Dua. Retrieved from Tempo.co (accessed 19 October 2015).

[2] Ang, R. (1997). *Buku Pintar Pasar Modal Indonesia*. Jakarta: Mediasoft Indonesia.

[3] Bursa Efek Indonesia. (27 August 2015). *BEI Mengajak Pelaku Pasaruntuk Tetap Optimis*. Jakarta: PT. Bursa Efek Indonesia

[4] Darmadji, T. and Fakhruddin, H. M. (2001). *Pasar Modal Indonesia*. Jakarta: Salemba Empat.

[5] Supratiwi, F. (9 September, 2015). *Presiden Jokowi Umumkan Paket Kebijakan Ekonomi*. Retrieved from Antaranews.com (accessed 19 October 2015).

[6] Simbolon, F. (19 August 2015). *Fundamental emiten negatif dorong aksi jual saham*. Retrieved from Kontan.co.id (accessed 19 October 2015).

[7] Hall, S. G. and Kenjegaliev, A. (2009). *Effect of oil price changes on the price of Russian and Chinese oil shares*. University of Leicester, UK. Retrieved from https://lra.le.ac.uk/handle/2381/7605

[8] Jogiyanto, H. (2008). *Teori Portofoliodan AnalisisInvestasi* (Edisi Kesembilan). Yogyakarta: BPFE Yogyakarta.

[9] Kantor Staff President. (2015). *Paket Kebijakan Ekonomi Jilid IV Tingkatkan Kesejahteraan Pekerja*. Jakarta: Kantor Staff President.

[10] Kristina, I. S. S. (2005). Reaksi Pasar Modal terhadap Peristiwa Pemilu Legislatif dan Peristiwa Pemilu Presidendan Wakil Presiden tahun 2004. *Jurnal Akuntansi dan Bisnis,* vol. 5, no. 2, pp. 122–136.

[11] Sinaga, M. (8 October 2015). *Ini Rincian Paket Kebijakan Ekonomi Jilid III*. Retrieved from Kompas.com (accessed 19 October 2015).

[12] Noviansyah, A. (2005). *Reaks iPasar Modal Indonesia Terhadap Politik Dalam Negeri (Event Study Peristiwa Pemilihan Presiden RI Putaran II Tahun 2004)*. Skripsi. Surabaya UPN "Veteran" Jawa Timur.

[13] Prasojo, H. S. U. (2012). *Reaksi Pasar Sahamterhadap Penguuman Krisis Finansial Global*. Retrieved from http:/jimfeb.ub.ac.id/index.php/jimfeb/article/download/298/245 (accessed 10 November 2015).

[14] Pratama, I. G. B. d. (2015). *Reaksi Pasar Modal Indonesia Terhadap Peristiwa Politik (Event Study pada Peristiwa Pelantikan Joko Widodo Sebagai Presiden Republik Indonesia Ke-7)*. *e-Journal S1 Ak Universitas Pendidikan Ganesha*, vol. 3, no. 1.

[15] Perwitasari, P. (20 August 2015). *IHSG Turunke Level Terendah 2015*. Retrieved from Tempo.co (accessed 19 October 2015).

[16] Raja and Sudhahar. (2010). *An empirical test of indian stock market efficiency in respect of bonus announcement*. Retrieved from http://www.globip.com/pdf_pages/asiapacific-vol4-article1.pdf

[17] Sari, A. B. (2011). *Pengaruh Stock Split terhadap Abnormal Return dan Trading Volume Activity pada Perusahaan yang Terdaftar di Bursa EfekIndonesia*. Skripsi: Semarang Universitas Negeri Semarang

[18] Savita and Ramesh, A. (2015). Return volatility around national elections: Evidence from India. *Procedia - Social and Behavioral Sciences*, vol. 189, pp. 163–168.

[19] Suarjana, I. W. (2011). *Pengaruh Kebijakan Pemerintah dalam Menurunkan Harga Bahan Bakar Minyak terhadap Reaksi Pasar Saham di Bursa Efek Indonesia*. Thesis. Denpasar Fakultas Ekonomi dan Bisnis Universitas Udayana.

[20] Sundiyah, A. (2015). *Reaksi Pasar Saham Terhadap Peristiwa Politik Terkait Jokowi di BEI*. Skripsi: Surabaya Fakultas Ekonomi dan Bisnis Universitas Airlangga Surabaya

[21] Umam, K. (2014). *Pengaruh Pengumuman Kenaikan Tarif Tenaga Listrik terhadap Abnormal Return dan Volume Perdagangan Saham*. Skripsi: Yogyakarta Fakultas Syari'ah danHukum Universitas Islam Negeri Sunan Kalijaga.