

# Event Study of Obtaining Investment Grade in Indonesia

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**Abstract**—This research aims to analyze the market reaction to the announcement of the acquisition of share prices due to the announcement event Indonesia's debt rating of Investment Grade Indonesia. This study used comparative descriptive research design. The sample used in this study was 41 companies included in the LQ45 index group on the Indonesia Share Exchange. The analysis was conducted using the event study method with a window period of 11 days, i.e., five days before, one day, the date of the event, and five days after the fact. The data used in this study are the daily closing share price and the composite share price index. The expected return calculation in this study used the market model. The results showed that: (1) There was an abnormal return the day before the announcement of Indonesia's debt rating increase. (2) There was no significant difference in the average abnormal return both before and after the announcement of the acquisition of Investment Grade. Based on these results shows that the Indonesian capital market can be said to be efficient because economic events that occur do not cause turmoil on share prices.

**Keywords**—Event Study, Abnormal Return, Investment Grade, Debt Rating

## I. INTRODUCTION

Abnormal return is a condition that occurs due to information that affects capital market reactions [1]. Knowledge is an essential element for investors and business people for the survival of a company [2]. Investors will usually use the announcement of an event that contains information as a basis for making investment decisions [3]. One form of information that can affect the price of securities is debt-related announcements [4]. The event that will be used as a study event in this study is the announcement of Indonesia's debt rating. The decision was made by the rating agency Fitch Ratings which has praised Indonesia's sovereign debt rating from BB + / Positive to BBB- with outlook stable.

The announcement of a change in Indonesia's debt rating is predicted to cause a reaction to the market because with the reaction means the announcement is considered to contain information. The reaction of share prices is always indicated by changes in the share prices of the companies concerned [5]. The reaction of changes in share prices can be proxy by using share returns for the value of price changes or using abnormal returns [6].

Several researchers with different results have conducted research related to the study event. One researcher examines long-term share returns on changes in Moody's Rating rating. The results of his research concluded that there was no significant abnormal return to upgrades, but there was a

negative abnormal return after the downgrade announcement. Besides, they found that the adverse reaction occurred because of the underreaction of the downgrade announcement [7]. Other researchers examine the effect of changes in bond ratings on share returns. This research has considered the impact of upgrades and downgrades by classifying data into upgrade groups and downgrade groups. According to the results of his research it was concluded that there was no significant difference in abnormal return for pre-event date, event date, or post-event date[8].

The next researcher analyzes the capital market reaction to the general election. It turned out that the general election events did not cause any abnormal return differences either before or after the event [9] [10]. Other researchers analyzed the capital market reaction due to an announcement of an increase in fuel prices. The conclusion from the results of his study states that the increase in fuel prices did not cause a significant reaction to share prices. [11].

Meanwhile, other researchers analyzed the capital market's reaction to the bombing incident in Bali. The conclusion from the results of his research shows that at the time of the incident, a significant negative abnormal return occurred. The same effects on the different test of the average abnormal return before and after the event started, there were significant differences [12]. Other researchers with the same results stated that an event would cause an abnormal return on corporate events that received media attention [13], on Post-earnings announcement events [14], and dividend distribution announcement events [15].

Based on previous research, there are differences in research results from an event. This is interesting for researchers to conduct research on the announcement of the investment-grade achievement of Indonesia. This research is an event study that assesses the information content that is useful for potential investors, whether or not the capital market will respond. This study aims to analyze the reaction of share prices to the announcement of Indonesia's debt rating. The author uses a comparative descriptive study method from share price data before and after the announcement of Indonesia's debt rating.

## II. METHODS

The study uses a quantitative approach with comparative descriptive study methods. Observations were made on the object of research to be able to provide an overview of the hypothesis testing process. The object under study is the capital market reaction to the announcement of the Investment

Grade award in Indonesia. The data used in this study is the daily data of several issuers' shares that are actively traded during the event and the observation period.

Research on a particular event aims to test the market reaction, whether an abnormal return will occur or not. Testing needs to be done on the information content to see the reaction of an event. If an event contains information, it is expected that the market will react when the event is received by the market. The hypothesis test that will be used is the paired sample t-test.

**III. RESULTS AND DISCUSSION**

The purpose of this research is to find out and analyze the reaction caused by the incidences of Indonesia's debt rating increase included in the Investment Grade level of the share price on the Indonesia Share Exchange. Normality test is needed to find out the average abnormal return (AAR) data to be analyzed. Following are the results of the normality test calculations listed in Table 1.

TABLE I. NORMALITY TEST RESULTS

Variabel	Significance Value Kolmogorov-Smirnov	Information
AAR (t -5)	0,565	Normal
AAR (t -4)	0,545	Normal
AAR (t -3)	0,193	Normal
AAR (t -2)	0,792	Normal
AAR (t -1)	0,086	Normal
AAR (t)	0,962	Normal
AAR (t +1)	0,919	Normal
AAR (t +2)	0,666	Normal
AAR (t +3)	0,444	Normal
AAR (t +4)	0,697	Normal
AAR (t +5)	0,698	Normal

Based on Table 1 above, all data values above 0.05, which means that all AAR data that have been obtained are normally distributed so that they can be used directly for testing one-sample t-test. Next test the AAR period before and after the announcement of Indonesia's rating increase. Normality test results with SPSS 17.0 for these data can be seen in Table 2.

TABLE II. AAR DATA NORMALITY TEST RESULTS BEFORE AND AFTER EVENTS

Variable	Significance Value Kolmogorov-Smirnov	Information
AAR Before Event Rating Increase	0,860	Normal
AAR After Event Rating Increase	0,492	Normal

Based on Table 2 above, all significance values are above 0.05 which means the data is normally distributed. Therefore, the assumption of data normality has all been fulfilled so that it can be continued to do paired sample t-test.

After conducting the data normality test, it can be calculated whether there is a significant AAR value around the window period. This can be seen from the results of the one-sample t-test on the AAR value. One sample t-test was conducted in five days before the event, one day at the time of the event, and five days after the event took place.

Following are the results of one-sample t-test for AAR values in five days before the event, one day at the time of the

event, and five days after the event took place. Table 3 below is the result of testing one-sample t-test for each AAR value in each period. Significant AAR values were only found one day before the announcement (t -1). Significant AAR value indicates that the Investment Grade announcement event caused a reaction on the market. The existence of a significant AAR value means that the Investment Grade announcement has information content. The information announced has changed the value of the company in the form of an increase in share prices.

TABLE III. TEST RESULTS OF ONE-SAMPLE T-TEST AAR VALUES

Period	AAR Value	Sig. t	Informationn
(t -5)	0,00169	0,512	Not Significant
(t -4)	0,00163	0,464	Not Significant
(t -3)	0,00152	0,563	Not Significant
(t -2)	0,00258	0,486	Not Significant
(t -1)	0,01115	0,007	Significant
AAR (t)	0,00537	0,064	Not Significant
(t +1)	-0,00295	0,367	Not Significant
(t +2)	-0,00442	0,061	Not Significant
(t +3)	0,00335	0,258	Not Significant
(t +4)	0,00145	0,585	Not Significant
(t +5)	0,00227	0,331	Not Significant

AAR value in the period (t-2) and before, when the event (t), and after the event showed insignificant results. This implies that the Investment Grade announcement does not affect the capital market reaction. Some possibilities that cause investors to behave this way include waiting and see investors or late investors receiving information.

So far, the capital market has always hoped that Indonesia's rating rises to a level worthy of investment, thus narrowing the gap with BRIC countries (Brazil, Russia, India, and China). Fitch Ratings itself predicts that Indonesia's economic growth averages more than 6% per year. This growth was mainly supported by strong domestic consumption and reduced dependence on short-term funding from outside parties. For entrepreneurs, this rating increase certainly raises business prospects in the future because this reduces the risk and cost of loans, making it easier for them to raise funds.

**Hypothesis Test**

The hypothesis of this study suggests that AAR before the announcement of Indonesia's rating increase event has a significant difference from AAR after the fact. To test the premise of this study using a paired sample t-test on the number of AAR periods before and the number of AAR periods after the rating increase announcement. The following is a summary of the results of the paired sample t-test AAR before and after

TABLE IV. RESULTS OF PAIRED SAMPLE AAR T-TEST

Mean AAR	Sig. t	Information
Before	0,0037140	Not Significant
After	-0,0000600	

Based on table 4 above shows that the results of the hypothesis test states there is no difference in AAR both before and after the event occurred. This implies that the announcement of the acquisition of Investment Grade does not

contain information for investors. Investors consider the announcement of the acquisition of Investment Grade limited to ordinary news that does not affect any decisions in their investment.

The results of this study are in line with the results of previous studies which stated that there were no abnormal differences found in the period before the event and after the event [6]. The results of this study also support previous research which concluded that there was no abnormal return in the merger event. There is no market reaction to an event because of the result of economic conditions that are still unstable. Investors only wait and see in-share investment strategies.

Besides, the research results are also in accordance with previous studies regarding the comparison of abnormal returns before and after being suspended by the IDX. This event is a policy that must be taken by the government through the IDX authority that was anticipated earlier by capital market players in this case, investors [17]. Likewise, an increase in rating research where an event is a decision taken by a Fitch Ratings rating agency that was anticipated earlier by capital market players.

The results of this study are not following studies that have been conducted by other researchers [18]. Based on the results of previous research concluded that there is a significant difference between abnormal return before the event and after the event. The bombing incident in Bali has information content because it is related to the security situation of a country. The event is considered as bad news which will directly affect the investment decisions of investors. Investors do not want to take a big risk by losing the value of their investments due to the security conditions of their destination countries. Besides, The Investment Grade announcement is good news for investors who are still seeing changes going forward.

The results of this study also contradict the research conducted by other researchers [13] [14] [15] [19]. They stated that the results of testing the company's abnormal share returns before and after the event occurred showed a significant difference.

The results of this study also contradict the research conducted by other researchers who concluded that the announcement of an increase in fuel prices caused a market reaction [20]. The results of the research are not in line is likely due to previous researchers using a sample of LQ 45 manufacturing shares on the IDX. Manufacturing companies are very dependent on the fuel component which on average, consumes 5% of production operating costs. Therefore an increase in fuel prices can have an impact on the sustainability of the company's production, which if to cover losses by increasing product prices will make the company lose its competitiveness. Of course, this is very worrying for investors, so that the abnormal return is obtained by 38% to 60% after the announcement of the increase in fuel. This has led to a significant difference in abnormal returns in the period before and after the announcement of new fuel prices.

#### **Implications of Research Results**

The success in obtaining an Investment Grade means that Indonesia has entered the investment-grade level. Investors can interpret the predicate that government or company debt has a relatively low risk. Investors believe that Indonesia's

economic growth is strong enough, low debt ratios, strong external liquidity, and a prudent macro policy framework..

Based on the results of the study, it was found that the increment of Indonesia's debt rating to enter the Grade level was quite a surprise effect for the market. We can see this from the significant AAR value around the announcement of the rating increase, which is suspected of having caused information leakage.

The impact of this rating increase is not only felt by the state, but several companies also feel the benefits. There are groups of companies that directly benefit from the banking business group. They got a debt rating upgrade by the international rating agency Fitch Ratings. Also, other groups of companies that benefited were three telecommunications companies and three oil and gas companies. The debt rating upgrade is predicted to have a positive impact on Indonesia's economic growth.

#### **IV. CONCLUSION**

The announcement of the rating increase to the Investment Grade level by the rating agency Fitch Ratings lacks information for investors. This can be seen from the lack of response of investors in trading shares around the event. These events did not result in differences in abnormal returns both in the period before and after. Investors consider that the Investment Grade acquisition event is good news that does not really need to be considered. They tend to do a wait and see the strategy in responding to the incident..

#### **REFERENCES**

- [1]. Brav, A., Geczy, C., & Gompers, P. A. Is the abnormal return following equity issuances anomalous?. *Journal of financial economics*, (2000), 56(2), 209-249.
- [2]. Clarke, G., & Murray, L. W. Investor relations: perceptions of the annual statement. *Corporate Communications: An International Journal*, (2000), 5(3), 144-151.
- [3]. Muntermann, J. Towards ubiquitous information supply for individual investors: A decision support system design. *Decision Support Systems*, (2009), 47(2), 82-92.
- [4]. Ekapriyani, F. Analysis Of The Effect Of Bond rating Announcement Return To Share Company Share Exchange In Indonesia. *Jurnal Fakultas Ekonomi Universitas Gunadarma*. (2010), Hal, 1-15.
- [5]. Holthausen, R. W., & Leftwich, R. W. The effect of bond rating changes on common share prices. *Journal of Financial Economics*, (1986), 17(1), 57-89.
- [6]. Elton, E. J., Gruber, M. J., Brown, S. J., & Goetzmann, W. N. *Modern portfolio theory and investment analysis*. John Wiley & Sons, (2009).
- [7]. Dichev, I. D., & Piotroski, J. D. The long-run share returns following bond ratings changes. *The Journal of Finance*, (2001), 56(1), 173-203.
- [8]. Brooks, R., Faff, R. W., Hillier, D., & Hillier, J. The national market impact of sovereign rating changes. *Journal of banking & finance*, (2004), 28(1), 233-250..
- [9]. Sajid Nazir, M., Younus, H., Kaleem, A., & Anwar, Z. Impact of political events on share market returns: empirical evidence from Pakistan. *Journal of Economic and Administrative Sciences*, (2014), 30(1), 60-78..
- [10]. Li, J., & Born, J. A. Presidential election uncertainty and common share returns in the United States. *Journal of Financial Research*, (2006), 29(4), 609-622.
- [11]. Setyawan, S. T. A. *Analisis Reaksi Pasar Modal Terhadap Kenaikan Harga BBM (studi kasus: di bursa efek Jakarta untuk saham-saham LQ 45)* (Doctoral dissertation, Program Pasca Sarjana Universitas Diponegoro), (2006).
- [12]. Acquisti, A., Friedman, A., & Telang, R. Is there a cost to privacy breaches? An event study. *ICIS 2006 Proceedings*, (2006), 94.
- [13]. Yu-lei, R. A. O., Die-feng, P. E. N. G., & CHENG, D. C. Does media attention cause abnormal return?—Evidence from China's share market [J]. *Systems Engineering-Theory & Practice*, (2010), 2.

- [14]. Truong, C. Post-earnings announcement abnormal return in the Chinese equity market. *Journal of International Financial Markets, Institutions and Money*, (2011), 21(5), 637-661.
- [15]. Aamir, M., & Shah, S. Z. A. Dividend announcements and the abnormal share returns for the event firm and its rivals. *Australian Journal of Business and Management Research*, (2011), 1(8), 72-76.
- [16]. Nurussobakh, N. Perbedaan Actual Return, Abnormal Return, Trading Volume Activity Dan Security Return Variability Saham Sebelum Dan Setelah Merger. *Jurnal Keuangan dan Perbankan*, (2009), 13(1), 62-77.
- [17]. Munawarah, M. *Analisis Perbandingan Abnormal Return Dan Trading Volume Activity Sebelum Dan Setelah Suspend BEI (Studi Kasus Pada Saham LQ-45 Di BEI Periode 6-15 Oktober 2008)* (Doctoral dissertation, Program Pascasarjana Universitas Diponegoro), (2009).
- [18]. Iskandar, J. *Reaksi Pasar Modal Indonesia Terhadap Peristiwa Peledakan Bom Di Legian Bali (Studi Kasus Saham LQ 45 Di Bursa Efek Jakarta)* (Doctoral dissertation, Program Pascasarjana Universitas Diponegoro), (2003).
- [19]. Payamta, P., & Setiawan, D. Analisis Pengaruh Merger dan Akuisisi Terhadap Kinerja Perusahaan Publik di Indonesia. *The Indonesian Journal of Accounting Research*, (2004), 7(3).
- [20]. Agustini, N. *Pengaruh kenaikan harga bahan bakar minyak (BBM) terhadap expected return saham: Event study pada saham LQ-45 yang terdaftar di bursa efek Indonesia periode 2012-2013* (Doctoral dissertation, Universitas Islam Negeri Maulana Malik Ibrahim), (2014).