ANALYSIS OF ABNORMAL RETURN BEFORE AND AFTER THE ANNOUNCEMENT OF INVESTMENT GRADE INDONESIA

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ABSTRACT. This study aims to analyze the stock price reaction to the announcement of Indonesia won the Investment Grade. The method used is the event study. Sample there were 41 companies in Indonesia Stock Exchange. Analysis using the 11-day window period. The data used is the daily stock price and the stock price index. The calculation of the expected return using the market model. The results of the study (1) There is a significant abnormal return the day before the announcement of Investment Grade (2) There is no difference in average abnormal return before and after the announcement of Investment Grade.

KEYWORDS: abnormal return, investment grade, debt rating

INTRODUCTION

Investing in the stock market is closely associated with the rise and fall of stock prices. The development of the stock price is an important indicator for investors to know the behavior of the market. Market behavior occurs as a result of information received from the micro and macro economic environment. The investors will be trading in the stock market, usually they will base their decision on a wide range of information available in the public and private information. Information will have meaning or value to the investor if the existence of such information causes investors in the capital market transactions.

According to the banner Anoraga and Pakarti (2006) information is an important element for investors and businesses. Information which may affect market behavior can be either good news or bad news. According Fenny Ekapiyani (2010), one form of information that can affect the price of a security is associated with debt announcement. Information relating to such debt ratings of debt (bond rating), which could be one of the factors that determine the direction of investment. On December 15, 2011, Fitch Ratings upgraded the ratings of debt (sovereign) Indonesia from BB + / Positive to BBB- with a stable outlook. There are two important factors in the rating, the rating and outlook. The rating is the level of ability to pay the debt, while the outlook is the view of whether the rating company ratings will increase, decrease, or remain the next assessment period.

Amid the global economic situation conditions are difficult, there is an increase in Indonesia rank is a word that is regarded as good news for the investment sector in Indonesia. The increase in Indonesia’s debt rating to BBB-, implies that Indonesia predicate worth the investment (Investment Grade). The investors both from within and outside the country do
not have to worry again will fail credit. Acquisition of Investment Grade label is put Indonesia on equal footing with other developed countries. Fitch Ratings as one of the world's ratings agency has raised the rating of Indonesia, which suggests that the Indonesian economy is strong and resilient and low debt ratio Indonesia

Announcement of change in Indonesia's debt rating is expected to cause a reaction in the market due to the presence of significant reaction to the announcement was considered to have information content. Stock price reaction is indicated by a change in the stock price of the company concerned which can be measured by using stock returns as the value of changes in prices or by using abnormal return. Here the study of events used to test the information content of an event. Testing event study initially focused more on internal company events, but now the event study test application is not limited to corporate events, but also touched the macro economic and even political aspects to finance. Studies events generally related to how quickly an information coming into the market can be reflected in the stock price (Tandelilin, 2010).

Some research suggests that the market reaction to an event (event) is still sensitive, but some are considered normal. Dichev and Piotroski (2001) concluded that there is no significant abnormal returns for upgrades, but no reaction negative abnormal returns after the announcement of the downgrade. In addition, they concluded that the negative reaction is due to the underreaction to downgrade announcement.

Joni Iskandar (2003) to analyze the Indonesian capital market reaction to the bombing in Bali Legian. Research results showed no significant difference between the average abnormal return before the average abnormal return after the event. While other studies assume that the events that occurred there was no response from the market. Tri Adi Setiawan (2006) to analyze the stock market reaction to the rise in fuel prices. Based on the results of the study showed no difference in the average difference significant abnormal return. The same thing is done Karyani (2006) which concluded there was no significant difference in abnormal return for pre-event date, event date, and post event date, either to upgrade or downgrade announcement.

Other researchers also like Boediono Edi Setiawan (2009) and Vini Sundari (2009) concluded that the stock market does not react to an event. They conclude that there is no difference in the average abnormal return is significantly between before the event or after the event occurred.

Some of the above results indicate that the market there are some that do not react. Therefore, the authors are interested to further investigate whether there is a market reaction to Investment Grade.
LITERATURE REVIEW

Stock Return
According Ekapriyani Fanny (2010) stock return is the advantage enjoyed investors on stock investment does. Return has two components: current income and capital gains. Current Income in the form of profits obtained through periodic payments in the form of dividends as a result of the company's fundamental performance, while capital gains in the form of benefits received as the difference between the selling price and the purchase price of the stock. If we buy the stock, the dividend yield is indicated by the amount we earn. Meanwhile, capital gain (loss) as the second component of the return is the increase (decrease) in the price of securities (shares and debentures can be long-term), which can provide gains (losses) for investors. There are several types of return on the time we will calculate the return on the stock.

1) Actual Return
Return realization according Jogiyanto (2008) is the return that has occurred. Return realization is calculated based on historical data and is used as one measure of the performance of the company as a basic determinant of expected return and risk in the future. The formula to calculate the actual return as follows:

\[ R_{i, t} = \frac{P_{i, t} - P_{i, t-1}}{P_{i, t-1}} \]

where:
- \( R_{i, t} \) = actual return stock i on day t
- \( P_{i, t} \) = stock price on day t
- \( P_{i, t-1} \) = price of the stock on the day before

2) Expected Return
Stock expected returns a rate of return expected by the investors. According Tandelilin (2010: 105) return expectations is the return of investment in the future and so may different from the actual returns received. Sedangka by Suad Husnan (2005) expected return is income to be received by investors on investments in listed companies in the future and the rate of profit is strongly influenced by the prospect of the company in the future. According to Brown and Warner (1985) in Jogiyanto (2010), the expected return is estimated using a model mean-adjusted model, market model and market-adjusted model.

(a) Mean-adjusted Model
Stock expected returns a rate of return expected by the investors. Mean-adjusted model assumes that the expected returns a constant value equal to the average return realisasion earlier during the estimation period, as follows:

\[ E[R_{i, t}] = \frac{\sum_{i=1}^{T} R_{i, t}}{T} \]

where:
- \( E[R_{i, t}] \) = return expectations of securities to-i in period t all events
- \( R_{i, j} \) = return realization of securities to-i in period j-th estimate
- \( T \) = length of the estimation period, ie from t1 to t2

(b) Market Model
Calculation of return expectations with the market model is done by forming expectations
models to find the value of alpha and beta by using the data during the estimation period. Expectations models used are:

\[ E[R_{i,t}] = \alpha_i + \beta_i \times R_{m,t} \]

where:
- \( R_{i,j} \) = return realization of securities to-i in period j-th estimate
- \( \alpha_i \) = intercept for securities to-i
- \( \beta_i \) = slope coefficient which is the beta of the securities to-i
- \( R_{m,t} \) = return on the market index to estimate the period-t which can be calculated by the formula \((\text{IHSGt} - \text{IHSGt-1} / \text{IHSGt-1})\)

(c) Market-Adjusted Model

Market-Adjusted Model assumes that the best estimator to estimate the return of a security is the market index return at that time. By using this model, it is not necessary to use the estimation period to establish a model estimation, because the return of securities to be estimated is the same as the market index return.

3) Abnormal Return

According to Hartono (2003: 433) in Edi Boediono (2009), the abnormal return is the excess of the return actually happens to return to normal or also called excess return. Abnormal return occurs because investors returns obtained as expected. The difference happens to be a positive return if the return is obtained greater than the expected return or return is calculated. While the return will be negative if the return is obtained is smaller than the expected return or return is calculated. The formula for the abnormal return of stock i on day t use the following formula:

\[ AR_{it} = R_{it} - E(R_{it}) \]

where:
- \( AR_{it} \) = tingkat return tak normal sekuritas i pada waktu t
- \( R_{it} \) = return aktual sekuritas i pada waktu t
- \( E(R_{it}) \) = return harapan pada sekuritas i dalam periode t

4) Average Abnormal Return

Testing abnormal return is not done for each security, but it is done in the aggregate by examining the average abnormal return around the securities in cross-section for each day of the event period. Average abnormal return on day t can be calculated as follows:

\[ AAR_{t} = \frac{\sum_i AR_{it}}{N} \]

where:
- \( AAR_{t} \) = Average Abnormal Return on day t
- \( AR_{it} \) = Abnormal return to the securities to-i on day t
- \( N \) = The number of securities affected by the event

Factors Affecting Stock Return

Stock returns in the stock market is largely determined by the relevant share prices. Therefore, to predict returns will be accepted investors should know the factors that affect stock prices. According Arianto Efendi (2011), the stock return is very sensitive to fundamentals and expectations of investors. Various studies show that the capital market is...
influenced both by internal factors and external factors. The factors that affect stock returns
factors are as follows:

a. Internal factors include the quality and reputation management, reform of the board of
directors, debt structure, the level of profit achieved, the announcement of the company's
financial statements, financing, investments and others.

b. External factors include the impact of monetary and fiscal policies issued by the government,
chaos and warfare, information relating to debt, development of the industrial sector, changes
in interest rates, inflation and so on.

**Event Study**

According Jogiyanto (2010: 555) study of events (event study) is the study of market reaction
to an event (event) that information is published as an announcement. Jogiyanto also said that
the event study can be used to test the content of the information (information content) of an
announcement and can also be used to test the semi-strong form of market efficiency. The
same is conveyed by Elton, Gruber, Brown, Goetzmann (2007: 420) that “to examine
whether markets were efficient, in particular, how fast the information was incorporated in
share price”.

They also explained that the greatest amount of research in finance has been devoted to the
effect of the announcement on the share price. This study is known as an event study. If the
price of securities reflect all available information at this time, then the price change should
reflect the new information. Therefore, it seems we should be able to measure the importance
of an event of interest to examine the changes in prices during the period in which the event
occurred. Bodie, Kane, Marcus (2008: 366) explains that “An event study describes a
technique of empirical financial research that enables an observer to assess the impact of a
particular event on a firm’s stock price.

They explained that an event study is an empirical study of financial engineering that allows
the observer to assess the impact of certain events on the company's stock price. A stock
market analyst may want to study the impact of changes in dividend on stock prices, for
example. An event study will measure the relationship between changes in dividends and
stock returns. Mac Barnacles (1997) in Hasanuddin and the stockholders (2004) said that the
usefulness of the event study is to provide rationality in the market, that the effects of an
event will be quickly reflected in the price of securities in the capital markets.

**METHODOLOGY**

This study uses event study focused on testing the market reaction to the announcement of
events Investment Grade. Testing the content of the information intended to see the market
reaction to the incident. The population in this study are listed shares in LQ-45 in the period
August 2011 to January 2012. The measures taken in analyzing the data in this study are as
follows:
1. Determine the study observation period was divided into two periods of observation
   a. Estimated period, ie the time span used to predict the expected return on stocks studied.
   b. The window period is the time span that is used to determine the rate of return on the
      market before and after the event. In this study used 11 trading days and is divided into three
      periods namely:
      (1) Pre event period, during the 5 days prior to the event which was declared a day t-5 to t-1
      (2) Event day, expressed as days 0
      (3) Post period, for 5 days after the events expressed as day-to-day t + 1 to t + 5
2. Record the daily stock price company incorporated in the LQ-45 during the observation
   period.
3. Record the daily stock price JCI during the observation period.
4. Calculate the actual return of each stock, with
5. Calculate the market return is based on the stock price of JCI.
6. Calculate the value of alpha and beta of each stock during the estimation period. Alpha and
   beta is required to calculate the level of expected return of each stock using the market
   model.
7. Calculate the expected return by using a market model.
8. Calculate the abnormal return
9. Calculate the average abnormal return

   Hypothesis testing is done to determine whether there are differences in market
   reactions or changes in stock prices (proxied by the average abnormal return) significantly
   between periods before and after the announcement of the increase in Indonesia's rating.
   Mechanical testing was conducted by using a paired sample t-test.

RESULTS AND DISCUSSION

Prior to testing one sample t-test and paired sample t-test on the data of average abnormal
return that has been obtained, the assumption must be met before performing the calculation
of t-test is a test normality of data. In this study testing the normality of the data is done with
the Kolmogorov-Smirnov test. The results show that all the data are normally distributed.

Table 1. Results of Test One Sample t-test value of AAR

<table>
<thead>
<tr>
<th>Periode</th>
<th>Value AAR</th>
<th>Sig. t</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(t-5)</td>
<td>0.00169</td>
<td>0.512</td>
<td>not significant</td>
</tr>
<tr>
<td>(t-4)</td>
<td>0.00163</td>
<td>0.464</td>
<td>not significant</td>
</tr>
<tr>
<td>(t-3)</td>
<td>0.00152</td>
<td>0.563</td>
<td>not significant</td>
</tr>
<tr>
<td>(t-2)</td>
<td>0.00258</td>
<td>0.486</td>
<td>not significant</td>
</tr>
<tr>
<td>(t-1)</td>
<td>0.01115</td>
<td><strong>0.007</strong></td>
<td>significant</td>
</tr>
<tr>
<td>AAR ( t )</td>
<td>0.00537</td>
<td>0.064</td>
<td>not significant</td>
</tr>
<tr>
<td>(t+1)</td>
<td>-0.00295</td>
<td>0.367</td>
<td>not significant</td>
</tr>
<tr>
<td>(t+2)</td>
<td>-0.00442</td>
<td>0.061</td>
<td>not significant</td>
</tr>
<tr>
<td>(t+3)</td>
<td>0.00335</td>
<td>0.258</td>
<td>not significant</td>
</tr>
<tr>
<td>(t+4)</td>
<td>0.00145</td>
<td>0.585</td>
<td>not significant</td>
</tr>
<tr>
<td>(t+5)</td>
<td>0.00227</td>
<td>0.331</td>
<td>not significant</td>
</tr>
</tbody>
</table>
If seen in Table 1 the value of the significant average abnormal return is encountered 1 day prior to the announcement of the increase in Indonesia's rating occurred. This is probably due to some leakage of information received by some investors of the relevant parties so that the day before the announcement that we can say good news that happens, investors race to buy shares, causing the stock price to rise. The motive is none other investors because they want to take advantage of obtaining abnormal return over the emergence of the information which they consider to be the good news. The increase in stock prices was followed by a rise to abnormal stock returns.

Significant value is only found in one period, ie one day before the announcement occurs (t - 1), and at the time of the announcement occurs (t) we see its value is not significant. It shows that the event will not really affect the activity of investors in the capital market. This is due to the tendency to wait and see what is done by the investor or the increase in Indonesia's debt rating information is not conveyed well as delays in the receipt of information which led to delays in the market reaction to the announcement delivered. If the condition of the developing countries that still be possible occurrence of delays in the receipt of information. The technology is still limited to make the dissemination of information is uneven. Unlike developed countries, supported by appropriate technology and the availability of adequate internet access making it easier for them to get information and react to that information quickly.

Other factors may also influence such as erosion of market sentiment on the increase in the debt rating to negative market sentiment on the events concerning the global economy unresolved. As is known at the time the debt crisis in Europe is still ongoing and has not been established settlement, in addition to the public financing and financial reform in the US and Japan also overshadow the investors. Investment climate crisis struck this time also have an impact on the business sector trade Indonesia. As you know Europe is one of the country's largest export destination, the shadow of the crisis at the time resulted in a slowdown in trade value. Therefore movements of investors are still affected by the condition.

To more clearly see the development of AAR values during the window period are listed in Table 1 above, the following chart form it:

![Figure 1. Graph growing interest AAR](image)

Hypothesis testing is done by paired sample t-test AAR obtained the following results

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Based on the above table it is known that paired sample t-test produces sig.t or probability value of 0.115 which > 0.05. This means that the value is not significant. Thus H1 is rejected, so it was concluded that the Average Abnormal Return after event announcement of the increase Indonesia's debt rating does not have significant differences with the Average Abnormal Return preceding the announcement of the increase in Indonesia's debt rating. Judging from the mean (average), AAR after the event is less than the AAR before the announcement event. This indicates that there is a negative sentiment that led to the decline of the stock return.

Based on the test results of the hypothesis, this study failed to prove the existence of differences in average abnormal return in the period before and after the announcement of the increase in Indonesia's debt rating. The absence of a significant difference indicates that the market is not too affected by the events of the increase in Indonesia's rating. Indeed there is a significant response on the market, but there is only one day in the period (t-1) or one day prior to the announcement of increase in rating occur.

If you see more on average abnormal return on the value of the window period, there has been increased in the period before the events took place which indicates that these events would simply provide some shock to the market participants to increase their activity in the capital market. Did not find a difference as long as the market is already anticipating this increase in rating, even the Indonesian market has been considered so far is Investment Grade. In addition, no difference was also due to the discovery of the market being in the shadow of the world economic instability due to the crisis in Europe and America are yet to be resolved at that time, so that investors are still anxious about the conditions that will happen next. The tendency of investors who use a lot of wait and see strategy is also one of the causes of slow reactions seen in the graph so it can not cause a significant difference in the interval of five days after the announcement.

There are some who think the news rise Indonesia's debt rating does not contain the information, so that they do not pay attention to the news of this debt ratings rise, they only see the information rankings rise as additional news only and does not affect the decisions of investors in determining the pace of investment. Market participants are also not sure whether the news is promoted to the performance of companies in Indonesia will be the better, they still look-imformasi other information related to the performance of the company as the profits.
The results are consistent with Ekapriyani Fanny (2010), which failed to find any difference in the average abnormal return in the period before and after the announcement of the rating change. Fanny Ekapriyani said that investors generally do not anticipate the announcement of the change in bond rating because even though a bond has been analyzed have good prospects, not necessarily to provide the highest income to investors. In addition, investors are also predicted results announcement bond rating to see the development of the information or the economic events that occurred. This is similar to the results of this study in which investors still look at the development of other economic events that occurred so that investors are still using a strategy of wait and see and have not been able to decide what they would do on their investment.

These results are also in line with Nurussobakh (2009) that there is no difference in the average abnormal stock returns before and after the merger. Nurussobakh say that rationally be explained that this could happen due to the economic conditions of the research conducted is still not fully recovered so greatly affect the condition of the national economy and the life of the stock exchange. Many players shares (Investor) still wait and see in the stock transaction. Similarly, the results of this study are still overshadowed by the state of the economy has not recovered at the time of the announcement of the case so that the investors are still taking action to wait and see.

The results of this study are not consistent with research that has been done by Joni Alexander (2003). Research results suggest that there is a significant difference between the average abnormal return five days prior to the average abnormal return five days after the Bali bombing on October 12, 2002. For this result Joni said that the bombings in Bali Legian has a very different from other bombings in Indonesia because Bali is a security measure for Indonesia, so that with the bombing has been demonstrated to investors that the country's security conditions are very uncontrolled and secure from terrorist threats when conditions are controlled and guaranteed security is needed in investing good for investors foreign and domestic investors. Bombing is clearly very different from Indonesia, the increase in rating the economic events. The bombing is related to the condition of the country's security is very sensitive in investing. Moreover bombing is bad news that would normally be a direct effect on the investment decisions of investors. Obviously investors are not willing to take big risks losing the value of their investment due to the condition of the country's security investment objectives. While the increase in rating is good news that they anticipated future development by investors.

The results of this study also contrary to research conducted Payamta and Doddy Setiawan (2004), I Nyoman Wijana Asmara Son (2009) and Munawarah (2009). Payamta and Doddy Setiawan (2004) concludes that the abnormal stock returns before and after mergers and acquisitions. Abnormal return after mergers and acquisitions decreased (negative) than before the announcement of mergers and acquisitions. They say that this happens because investors consider mergers and acquisitions made by the company does not generate synergies for the company, even into reverse synergy. I Nyoman Wijana Asmara Son (2009) also resulted in a
difference of abnormal stock returns before and after the increase in fuel prices on 24 May 2008. Munawarah (2009) concluded that the suspend event BEI has information content (information content) which causes market participants reacted to the incident. He worked on the comparison of the abnormal return and trading volume activity before and after suspend IDX.

IMPLICATION TO RESEARCH AND PRACTICE

The increase in Indonesia's debt rating indicates that Indonesia has won the title of Investment Grade entry into investment grade level. International recognition is carried after Fitch Ratings upgraded the ratings of Indonesia to investment grade after 14 years of waiting. A ranking that shows government debt or companies that have a relatively low risk of default of opportunities, so has the level of trust that is sustainable in the long term. The rating upgrade reflects Indonesia's strong economic growth, the ratio of public debt is low and continues to decline, strengthening external liquidity, and macro policy framework carefully.

Based on the results obtained that the events of the increase in Indonesia's debt rating to get into Investment Grade level sufficient to give the effect of a shock to the market and increase their activity in the capital markets where we can see there is the value of a significant average abnormal return around the announcement of the increase in rating precisely on the the day before the announcement, suspected cause is a leak of information received several parties on a possible announcement of the increase Indonesia's rating. Fitch ratings themselves from a few months earlier had given instructions that the agency will review the Indonesia's debt rating and the likely position will increase see Indonesia's economy is fairly good in the current global conditions are messy due to the crisis in Europe and the United States. The impact of this increase in rating is not only felt by the country, but the big companies in Indonesia, too, feel the benefits are raising their rating of the company. International ratings agency Fitch Ratings also have raised the debt rating of eight banks in the country following the rise of Indonesia's debt rating. In addition, three telecommunications companies and three oil and gas companies also rose 'rank'. This increase allegedly by Fitch Ratings will give a positive impact on the growth of the Indonesian economy this year and next. It is also a blessing for Indonesian businesses that must be handled carefully with rules made a good investment and not corrupt. The impact will be felt great on the property business sector, especially for area developers. Certainly it would be a lot of foreign investors are vying to open a plant in Indonesia. Therefore, the government should give focus to the improvement of infrastructure in order to support the smooth running of the Indonesian industry sector and to optimize the gain this level of investment grade.

The results also show that this incident was not too big affect the market, seen from the results of this research hypothesis test that there is no significant difference between the average abnormal return before the announcement of the average abnormal return after the announcement occurred. Previously been considered Indonesian market has entered into Investment Grade level could be the cause. In addition, no difference was also due to the
discovery of the market being in the shadow of the world economic instability that has not been resolved at the time, so that investors are still anxious about the conditions that will happen next. The tendency of investors who use a lot of wait and see strategy is also one of the causes of slow reactions seen in the graph so it can not cause a significant difference in the interval of five days after the announcement.

Keep in mind that the debt rating is not the only factor that affects investors determine the direction of investment. They will definitely see other important factors such as the performance of the company, the profits and the company's prospects going forward. Therefore, to attract investors the company must manage internal company well maybe even better than the competitors. In this case the company's management was instrumental in implementing appropriate policies in the management of the company in order to create a good corporate reputation.

Most likely the effect of the increase in Indonesia's debt rating in the long term, and can be clearly seen after the third company in the world's largest rating agency raised Indonesia's rating into the investment grade level. It's just that this is all going to look good if the government can take advantage of this momentum wisely and carefully. If either condition is not used properly it is not impossible that things will get worse and downgrades Indonesia will happen again. As a result of hard work of the Indonesian nation has been to improve the economic position to be in very good condition as it is today would be futile.

CONCLUSION

Based on the analysis and hypothesis testing that has been done, it can be concluded that the increase in rating Indonesian announcement event to get into the level of investment grade by Fitch Ratings contains information. It is evident from the value of the significant average abnormal return that occurred on the day before the announcement of the increase in the debt rating occur. However, the results also show that these events are not too responded by the market, it can be seen from the results of testing the hypothesis that there is no significant difference between the average abnormal stock returns before and after the events of the announcement of the increase in Indonesia's rating. The absence of a difference because there is a tendency of investors to adopt a wait and see strategy. In addition, the global economic conditions that are less conducive still a shadow that caused investors are still hesitant to implement investment decisions.

FUTURE RESEARCH

In subsequent studies suggested to extend the study sample, for example, include all existing manufacturing shares in the Indonesia Stock Exchange or other sectors, with the addition of the sample analysis results are expected to be able to reflect the Indonesian capital market conditions. Then in order to influence the gain Investment Grade label can be seen clearly it is advisable to add the 100-day window period, for example, because of the possible impact
of the gain will be seen in the long term. Then can also be considered to use other models in calculating the mean adjusted return expectations as market adjusted model or models.

REFERENCES


