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Dampak Pengumuman Peringkat Obligasi Terhadap Return Saham Pada Perusahaan yang Terdaftar di Bursa Efek Indonesia Tahun 1999-2009

The Impact of Bond Rating Announcement on Companies Listed Stock Returns: Evidence from Indonesia

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Abstrak

Penelitian ini bertujuan untuk mengetahui apakah terdapat perbedaan antara return saham sebelum dan sesudah pengumuman baik peningkatan maupun penurunan peringkat obligasi. Penelitian ini tergolong penelitian studi peristiwa dengan periode pengamatan 5 hari sebelum dan 5 hari sesudah pengumuman peringkat obligasi. Populasi penelitian ini adalah seluruh perusahaan yang terdaftar di Bursa Efek Indonesia dan mengumumkan peringkat obligasi pada tahun 1999 sampai dengan tahun 2009 yang berjumlah 331 pengumuman peringkat obligasi pada 52 perusahaan. Sampel dipilih dengan menggunakan metode purposive sampling dan diperoleh 24 sampel untuk pengumuman peningkatan peringkat obligasi dan 18 sampel untuk pengumuman penurunan peringkat obligasi. Pengujian data dilakukan dengan menggunakan paired sample t-tes. Berdasarkan hasil penelitian dapat ditarik kesimpulan bahwa (1)Tidak terdapat perbedaan yang signifikan return saham disekitar tanggal pengumuman peningkatan peringkat obligasi. Hal ini menandakan bahwa pengumuman peningkatan peringkat obligasi tidak membawa kandungan informasi bagi investor. (2)Terdapat perbedaan yang signifikan return saham disekitar tanggal pengumuman penurunan peringkat obligasi. Hal ini mengindikasikan bahwa pengumuman penurunan peringkat obligasi membawa kandungan informasi bagi investor.

Kata kunci: Peringkat obligasi, return saham

Abstract

This study aims to determine whether there is a difference between stock returns before and after the announcement of both increases and decreases in bond ratings. This study is classified as a case study with an observation period of 5 days before and 5 days after the announcement of the bond rating. The population of this study is all companies listed on the Indonesia Stock Exchange that announced the ratings of bonds from 1999 to 2009, which made a total of 331 bond ratings in 52 companies. The sample was chosen using a purposive sampling method and 24 samples were obtained for the announcement of the increase in bond ratings and 18 samples for the announcement of the bond rating decline. Data testing is done using paired sample t-test. Based on the results of the study it can be concluded that (1) there is no significant difference in stock returns around the date of the announcement of the increase in bond ratings. This indicates that the announcement of an increase in bond ratings does not bring information to investors. (2) There is a significant difference in stock returns around the date of the announcement of the decline in bond ratings. This indicates that the announcement of the downgrade of bonds carries information content for investors.

Keywords: *bond rating, stock return*

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Introduction

An efficient capital market is a capital market whose prices of valuable documents reflect all relevant information (Husnan, 2005). The faster the new information is reflected in the price of securities, the more efficient the capital market. Relevant information is classified into three efficient market forms (Fama, 1970), namely weak form, semistrong, and strong form.

Form of information that can affect the price of a security, one of which is through announcements relating to debt. Information relating to debt, for example, is bond ratings. This information is an indicator of the possibility of payment of interest and debt in accordance with the period specified in the previous agreement.

In investing in stocks, investors do not only take into account the expected returns but must also consider the risks they will face. Therefore investors must have good ability in choosing investment alternatives that offer certain returns with the lowest risk level, or investments that offer the highest rate of return on certain risks.

Investors certainly must be able to analyze the risks of an investment in making investment decisions. Investors can directly analyze the company's risk using financial ratios or through cash flow analysis. Hanafi and Halim (2007) provide another alternative in analyzing risk by using information from the market. This information is an announcement regarding bond ratings.

Bond ratings can be useful as a marketing tool. Companies that get good ratings will have an appeal in the eyes of investors. Thus, the ranking can help the bond marketing system to look more attractive. The company will be helped by the results of the rating carried out by bond rating agencies in selling their debt letters through the capital market. The company that issues the bonds will seek to have a high bond rating so that the company's attractiveness in the eyes of investors can increase and the bond price can be high. Low bond ratings will have an effect on bond prices and are very open, possibly affecting other securities issued by companies such as stocks.

Information from the announcement of bond ratings will cause a reaction from investors in the capital market. Investors will react at the time before, during, and after the announcement of the published bond rating. To be able to find out the reaction of investors because of the announcement of the bond rating can be seen from the stock return.

Prasetio and Astuti (2003) assume stock returns will change when there is new information and is absorbed by the market. The publication of the bond rating announcement will create an impact in the form of an increase or decrease in stock returns when compared to the days outside the announcement date. This can happen if investors use information in the form of announcements of bond ratings in their activities.

Research that examines the effect of bond ratings on stock prices and stock returns has been done by Hand, et al. (1992). The results of their research show that a decrease in debt rating is bad information for shareholders and bondholders, but increasing debt ratings only provides weak information for stock prices and stock returns. Similar research has also been carried out by Prasetio and Astuti (2003). They test the impact of the bond rating announcement on stock returns. The results obtained state that the announcement of bond ratings does not carry information content for investors so it does not react significantly to stock returns.

Bond Rating

The debt rating system has been developed by several banks and financial consulting companies in America and Australia (Hawkins et al, 1983). There are differences in interpreting bond ratings.

Standard & Poor's (2005), is one of the international rating agencies in America, stating that "the ranking of corporate and municipal bonds is the valuation of current assets for the reasonableness of the creditworthiness of the obligor by emphasizing certain bonds". PT. PEFINDO (1997) states that "generally bond ratings are an indicator of the possibility of interest payments and debt on time, in accordance with an agreed agreement".

Foster (1986) states that "bond ratings can indicate the risk of bonds". The amount of the risk of bonds depends on the ability of companies that issue bonds to pay debts and interest at maturity. For example, buying bonds that are rated BBB and above are relatively safer compared to bonds that have a rating of B down. This is because bonds that have a rating of B and below have high yields, low ratings, and a large risk of default / junk debt.

Since 1995, debt securities, especially those issued through public offerings, must be rated (rated) by rating agencies registered with BAPEPAM (Setiawan and Shanti, 2009). Similar to Standard & Poor's (S & P's) and Moody's in America, there are also official bond rating agencies in Indonesia. The rating of the bonds was carried out by two rating agencies, namely PT. PEFINDO (Indonesian Securities Rating) and PT. Credit Credit Rating. The number of companies that use the services of PT. PEFINDO for bond rating is a difference compared to PT. Kasnic. In 2007, PT. Indonesia's Credit Card Rating changed its name to Moody's Indonesia. However, in 2009, the impact of the global crisis caused Moody's Corporation to close branch offices in Indonesia as well as attract national rankings so that the ratings were no longer carried out by Moody's Corporation. Therefore, data on bond ratings used in this study were obtained from PT. PEFINDO. PT. PEFINDO states that "bond ratings are the letters given to bonds to state their relative probability of existing standards". Bond rating according to PT. PEFINDO consists of:

1. AAA. Debt securities with an AAA rating are debt securities with the highest rating from PT. PEFINDO is supported by a comparatively superior obligor capability compared to other Indonesian entities to fulfill long-term financial obligations in accordance with the highest rating.
2. AA. The debt rating with AA rating has slightly below the highest credit quality, supported by the strong obligor's ability to fulfill its long-term financial obligations in accordance with the agreement relative to other Indonesian entities.
3. A. Debt securities with rating A have strong obligor capacity support compared to other Indonesian entities to fulfill their long-term financial obligations in accordance with the agreement, but are sensitive to adverse changes.
4. BBB. Debt securities with BBB are supported by adequate obligor capability relative to other Indonesian entities to fulfill financial obligations, but these capabilities can be weakened by changes in business and economic conditions that are detrimental to the obligor's adequate capacity but whose capabilities can be weakened by adverse changes.
5. BB. Debt securities with a BB rating show a relatively weak support of the obligor's ability relative to other entities to fulfill their long-term financial obligations in accordance with the agreement, and are sensitive to the state of business and the economy which are in uncertain business and economic conditions.
6. B. Debt securities with rating B show very weak protection parameters. Even though the obligor still has the ability to fulfill its long-term financial obligations, the adverse changes in business and economic conditions will worsen the obligor's ability to fulfill its financial obligations.
7. CCC. Debt securities with an CCC rating show debt securities that are no longer able to meet their financial obligations, and only depend on improving external conditions. The Obligor is no longer able to fulfill its obligations and depends on changes in its external environment.

D. Debt securities with a D rating indicate bad debt securities. The publishing company has stopped trying.

Ranking results rated by PT. PEFINDO can be given a plus (+) or minus (-) sign to indicate the difference in strength or relative ability in a ranking category.

Factors Affecting Bond Rating

Determination of ranking agency securities ratings, such as the Standard & Poor's international rating agents (S & P's), have qualitative and quantitative criteria. The factors that influence bond ratings according to Brigham and Houston (2006) are as follows:

1. Financial ratios such as the current ratio, debt ratio, profitability and fixed charge coverage ratio. The better the financial ratios the higher the bond rating.
2. Assurance of assets for bonds issued (mortage provision). If a bond is secured by a high-value asset, the bond rating will increase.
3. Position of bonds with other types of debt. If the bond position is higher than other debt, the bond rating will be set at one level higher than it should, and vice versa.
4. Guarantor. Issuer bonds are weak but guaranteed by a strong company, the issuer is also given a strong rating.
5. There is a sinking fund (provision for issuers to pay debts little by little every year).
6. Age of bonds. Cateris Paribus, bonds with a longer age have a greater risk, and vice versa.
7. Stable earnings and sales of issuers.
8. Regulations relating to the issuer's industry.
9. Product responsibility and environmental factors.
10. Accounting policies. The application of conservative accounting policies indicates higher quality financial statements.

Previous Research

Research that examines the effect of the announcement of bond ratings on stock prices has been done by Hand, et al. (1992), tested the daily excess bond & stock return related to the two types of bond rating agency announcements, the results of their research stated that the decrease in bond ratings is bad information for shareholders and bondholders, but an increase in bond ratings only provides weak information for prices stock and return.

Then research conducted by Butler and Rodgers (2002) examined the relationship between processing by bond rating agencies and companies, the results showed that the information produced by rating agencies is soft information for bond issuers. In a study conducted by Kliger, et al. (2000) state that changes in bond ratings will provide useful information for shareholders and bondholders.

The research conducted by Prasetio and Astuti (2003), about the impact of the bond rating announcement on the company's stock returns at the Jakarta Stock Exchange in the period 1997-2000 which states that the announcement of bond ratings does not carry information content for investors so the market does not act significantly on stock prices.

Hypothesis

The hypothesis proposed in this study is a short statement which is concluded from the theoretical basis, previous research and is a temporary answer to the problems discussed. Based on the description, the hypothesis proposed by the researcher is:

H1 : There is a significant difference between stock returns before and after the announcement of an increase in bond ratings.

H2 : There is a significant difference between stock returns before and after the announcement of the decline in bond ratings.

Research Methods

Types of Research

Based on the research objectives to be achieved, this study uses a case study method. According to Jogiyanto (2003) case studies are studies that study the market reaction to an event (event) whose information is published as an announcement. A case study can be used to test information content from an announcement. Testing information content is intended to see the reaction of an announcement. The reaction is indicated by the change in prices of the securities concerned. This reaction can be measured by using the return as the value of the price change.

Population and Samples

The population observed in this study is all the announcement of bond ratings on companies listed on the Stock Exchange during the years 1999-2009, which amounted to 331 announcements of bond ratings in 52 companies.

Samples were selected using purposive sampling method, the sample to be selected and will be sampled in this study are samples that meet the criteria desired by researchers (Cooper and Schindler, 2011). The criteria for the sample in this study are as follows:

a. Announcement of bond ratings that have increased and or decreased bond ratings.
b. Availability of date data and rating ratings of bond ratings and daily closing price of each stock.

Based on these criteria, the announcement of bond ratings that are able to meet the criteria as a sample of this study can be seen in the following table:

Table 3.1 Company Data and Announcement Date for Increasing Bond Rankings for the 1999-2009 Period

No	Code	Company Name	Date
1	HMSP	H M Sampoerna Tbk	06-Nov-01
2	DUTI	Duta Pertiwi Tbk	24-Jul-02
3	ASII	Astra International Tbk	13-Jan-03
4	DUTI	Duta Pertiwi Tbk	20-May-03
5	ASII	Astra International Tbk	14-Jul-03
6	ASII	Astra International Tbk	29-Jan-04
7	PNBN	Bank Pan Indonesia Tbk	04-August-04
8	BBNI	Bank Negara Indonesia Tbk	20-Aygust-04
9	ASII	Astra International Tbk	12-Oct-04
10	NISP	Bank OCBC NISP Tbk	05-Nov-04
11	LTLS	Lautan Luas Tbk	16-May-05
12	TKIM	Pabrik Kertas Tjiwi Kimia Tbk	06-Sep-06
13	BBRI	Bank Rakyat Indonesia Tbk	19-Dec-06
14	EXCL	XL Axiata Tbk	23-Feb-07
15	BLTA	Berlian Laju Tanker Tbk	03-May-07
16	ADHI	Adhi Karya (Persero) Tbk	10-May-07
17	KLBF	Kalbe Farma Tbk	29-Jun-07
18	SMRA	Summarecon Agung Tbk	27-Jul-07
19	HMSP	H M Sampoerna Tbk	07-Nov-07
20	ADMF	Adira Dinamika Multi Finance Tbk	03-Mar-08
21	BBNI	Bank Negara Indonesia Tbk	03-Mar-08
22	JSMR	Jasa Marga (Persero) Tbk	28-Apr-08
23	PNBN	Bank Pan Indonesia Tbk	01-Jul-09
24	RMBA	Bentoel Internasional Investama Tbk	03-Nov-09

Source: PT. PEFINDO

Table 3.2 Company Data and Announcement Date of Declining Rating of Bonds for 1999-2009 Period

No	Code	Company Name	Date
1	TKIM	Pabrik Kertas Tjiwi Kimia Tbk	14-Feb-01
2	INKP	Indah Kiat Pulp and Paper Tbk.	14-Feb-01
3	TKIM	Pabrik Kertas Tjiwi Kimia Tbk	13-Mar-01
4	INKP	Indah Kiat Pulp and Paper Tbk.	13-Mar-01
5	TKIM	Pabrik Kertas Tjiwi Kimia Tbk	08-May-01
6	DUTI	Duta Pertiwi Tbk	22-Mar-02

7	DUTI	Duta Pertiwi Tbk	08-Apr-02
8	DUTI	Duta Pertiwi Tbk	17-Apr-02
9	ASII	Astra International Tbk	25-Oct-02
10	BUDI	Budi Acid Jaya Tbk	23-Sep-03
11	MPPA	Matahari Putra Prima Tbk.	30-Sep-03
12	MTDL	Metrodata Electronics Tbk	12-Dec-03
13	LTLS	Lautan Luas Tbk	23-Jul-04
14	BLTA	Berlian Laju Tanker Tbk	31-Mar-08
15	FREN	Mobile-8 Telecom Tbk	02-Dec-08
16	EXCL	XL Axiata Tbk	11-Mar-09
17	APOL	Arpeni Pratama Ocean Line Tbk	10-Nov-09
18	APOL	Arpeni Pratama Ocean Line Tbk	11-Dec-09

Source: PT. PEFINDO

Types and Data Sources

This type of data is secondary data, namely data obtained indirectly through intermediary media or obtained and recorded by other parties. The data used in this study were obtained from the Yahoofinance website and PT. PEFINDO.

The data source used in this study is the stock price of each company listed on the IDX and bond ratings during the observation period, from 1999 to 2009. Data on the stock price was obtained through the Yahoofinance website. While data on bond ratings are obtained from PT. PEFINDO.

Data Collection Technique

Data collection techniques used in this study are documentation techniques. The researcher collected data on stock prices of companies listed on the Indonesia Stock Exchange to see the development of stock prices based on the observation period on the Yahoofinance site and to collect data to see the results of the announcement of bond ratings obtained from PT. PEFINDO.

Operational Definition

In this study the variables used are:

1. *Stock returns*

Return is the result obtained from an investment. Stock returns in this study are 2, namely stock returns before announcements and stock returns after the announcement of bond ratings. The calculation is:

$$R_{Before\ Announcement} = \frac{P_t - P_{t-1}}{P_{t-1}}$$

Where:

R = stock return

Pt = closing stock price before announcement on day t

Pt-1 = closing stock price before announcement on day t-1

$$R_{After\ Announcement} = \frac{P_t - P_{t-1}}{P_{t-1}}$$

Where:

R = stock return

Pt = closing stock price before announcement on day t

Pt-1 = closing stock price before announcement on day t-1

2. Bond Rating

Bond rating is the letters given to bonds to state the relative possibility of existing standards. The rating of a bond does not only indicate the ability of an issuer to pay interest and the principal

value of a bond but also an illustration of the performance / prospects of the issuer. Data on announcement of bond ratings published by PT. PEFINDO and can be obtained from www.new.pefindo.com.

Data Analysis Technique

A case study is a study that studies the market reaction to an event whose information is published as an announcement. Event studies are used to test the information content of an announcement and can also be used to test the market efficiency of a half-strong form (Jogiyanto, 2003). Testing the content of this information is intended to see how the market reacts to an announcement. Market reaction is indicated by a change in stock prices of the securities of the company concerned. The following are the steps taken in the study:

a. Looking for daily company stock data for 5 days before the announcement and 5 days after the announcement of the bond rating.
b. Determine daily stock returns, using formula:

$$R_{it} = \frac{P_t - P_{t-1}}{P_{t-1}}$$

Where:
R_{it} = daily stock returns of each company
P_t = the price of each company's daily stock at t
P_{t-1} = the price of each company's daily stock on t-1

c. Determine the average daily stock return before and after the announcement using the formula:

$$ARt = \frac{\sum_{i-1}^{n} Rit}{N}$$

Where:
ARt = Average Return or average return in the period of the event t.
Rit = Securities stock return 1 in the period of the event t.
N = Number of shares studied

d. Determine the average stock return before the announcement and after the announcement of the bond rating of each company for 5 days before the announcement and 5 days after the announcement of the bond rating, using the formula:

$$AARt = \frac{\sum_{i-1}^{n} ARit}{N}$$

Where:
AARt = Average Return or average return in the period of the event t.
ARit = Securities stock return 1 in the period of the event t.
N = Number of shares studied.

Statistical Test

Statistical testing is done on stock returns in order to see the significance of existing returns. The significance in question is that the stock return is not actually equal to zero. This study uses average stock returns before and after the announcement of bond ratings. Hypothesis testing in this study used a paired sample t-test. Test paired sample t-test to compare the average of two paired samples, whether different or the same (Idris, 2008). This analysis technique was chosen

because in this study used the same sample with paired data at different time conditions. This test uses a significance level of $\alpha = 5\%$.

With this level of significance, then:

a. If the probability value is ≥ significance level, then Ha is rejected. This means that there is no significant difference between stock returns before and after the announcement of bond ratings.
b. If the probability value is <significance level, Ha is accepted. This means that there is a significant difference between stock returns before and after the announcement of bond ratings.

Results and Discussion

A general Description of the Company

The object of research in this paper is a company listed on the Indonesia Stock Exchange, which is rated by the PT. PEFINDO in 1999 - 2009 which amounted to 27 companies. The following will be briefly described regarding the company profile which is the object of research based on the classification of the business sector.

Table 1: Classification of Companies by Business Sector

No	Code	Company Name	Business Sector
1	(ADHI)	Adhi Karya (Persero) Tbk	*Building Construction*
2	(WIKA)	Wijaya Karya (Persero) Tbk	
3	(ADMF)	Adira Dinamika Multi Finance Tbk	*Financial Institution*
4	(APOL)	Arpeni Pratama Ocean Line Tbk	*Transportation*
5	(BLTA)	Berlian Laju Tanker Tbk	
6	(ASII)	Astra International Tbk	*Automotive and Components*
7	(BBNI)	Bank Negara Indonesia Tbk	*Banking*
8	(BBRI)	Bank Rakyat Indonesia Tbk	
9	(NISP)	Bank OCBC NISP Tbk	
10	(PNBN)	Bank Pan Indonesia Tbk	
11	(BUDI)	Budi Acid Jaya Tbk	*Chemicals*
12	(CPIN)	charoen Pokphand Indonesia Tbk	*Animal Feed*
13	(MAIN)	Malindo Feedmill Tbk	
14	(CMNP)	Citra Marga Nushapala Persada Tbk	*Toll Road, Airport, Harbor and Allied Products*
15	(JSMR)	Jasa Marga (Persero) Tbk	
16	(DUTI)	Duta Pertiwi Tbk	*Property and Real Estate*
17	(SMRA)	Summarecon Agung Tbk	
18	(EXCL)	XL Axiata Tbk	*Telecommunication*
19	(FREN)	Mobile-8 Telecom Tbk	
20	(HMSP)	H M Sampoerna Tbk	*Tobacco Manufacturers*
21	(RMBA)	Bentoel Internasional Investama Tbk	
22	(INKP)	Indah Kiat Pulp and Paper Tbk.	*Pulp and Paper*
23	(TKIM)	Pabrik Kertas Tjiwi Kimia Tbk	
24	(KLBF)	Kalbe Farma Tbk	*Pharmaceuticals*
25	(LTLS)	Lautan Luas Tbk	*Wholesale*
26	(MPPA)	Matahari Putra Prima Tbk.	*Retail Trade*
27	(MTDL)	Metrodata Electronics Tbk	*Computer and Services*

Source: Indonesia *Stock Exchange*

In Table 1 it can be seen that there are 16 business sectors from 27 companies. The business sector in this research object is dominated by the banking sector as many as 4 companies. Then in the sectors of Building Construction, Transportation, Animal Feed, Toll Road, Airport, Harbor and Allied Products, Property and Real Estate, Telecommunication, Tobacco Manufacturers, and Pulp and Paper, each of the 2 companies. While in the Financial Institution sector, Automotive and Components, Chemicals, Pharmaceuticals, Wholesale, Retail Trade, and Computer and Services, each of them is 1 company.

Statistical test

In this statistical test, testing of stock returns is conducted, namely paired sample t-test. For testing there is a difference in stock returns before and after the announcement of an increase and a decrease in bond ratings used paired t-test samples. The following is the test carried out in this study:

Data Normality Test

Normality tests have been conducted in this study before the data were analyzed using the Kolmogorov-Smirnov One-Sample Test for stock average returns before and after the announcement of bond ratings. The basis of the decision making for the Kolmogorov-Smirnov test is if the Sig. Kolmogorov-Smirnov test> 0.05, the data distribution is declared normal. Conversely if the value of Sig. Kolmogorov-Smirnov test <0.05 means the distribution of data is declared abnormal.

Test the Normality of Stock Returns Before and After Announcement
Increased Bond Rating

The normality test is done by using the Kolmogorov-Smirnov Test to average stock returns before and after the announcement of both increases and decreases in bond ratings. Tables 2 and 3 for increasing bond ratings while tables 4 and 5 for decreasing bond ratings can be explained in the tables below.

Table 2: Data Normality Test Average Stock Return before Announcement Increased Bond Rating

One-Sample Kolmogorov-Smirnov Test

		ARUpBefore
N		24
Normal Parameters(a,b)	Mean	0,0012
	Std. Deviation	0,01769
Most Extreme Differences	Absolute	0,149
	Positive	0,137
	Negative	-0,149
Kolmogorov-Smirnov Z		0,730
Asymp. Sig. (2-tailed)		0,661

a. Test distribution is Normal.
b. Calculated from data.

Table 2 shows that the stock average return before the announcement of the bond rating increase is the average that is normally distributed, with the probability value of the data before the announcement of the bond rating increase is 0.661> 0.05. This means that the average stock return data before the announcement of the increase in bond ratings is normally distributed.

Table 3: Normality Test Data Average Stock Return after Announcement Increased Bond Rating

One-Sample Kolmogorov-Smirnov Test

		ARUpAfter
N		24
Normal Parameters(a,b)	Mean	0,0029
	Std. Deviation	0,01817
Most Extreme Differences	Absolute	0,191
	Positive	0,191
	Negative	-0,115
Kolmogorov-Smirnov Z		0,937
Asymp. Sig. (2-tailed)		0,344

a. Test distribution is Normal.
b. Calculated from data.

Table 3 shows that the stock average return after the announcement of the bond rating increase is the average that is normally distributed, with the probability data after the announcement of the bond rating increase is 0.344> 0.05. This result means the average stock return data after the announcement of the increase in bond ratings is normally distributed.

Test the Normality of Stock Returns Before and After Announcement Decline in Bond Rating

Table 4: Data Normality Test Average Stock Return before Announcement Decresead in Bond Rating

One-Sample Kolmogorov-Smirnov Test

		ARDownBefore
N		18
Normal Parameters(a,b)	Mean	0,0027
	Std. Deviation	0,02111
Most Extreme Differences	Absolute	0,140
	Positive	0,140
	Negative	-0,078
Kolmogorov-Smirnov Z		0,596
Asymp. Sig. (2-tailed)		0,870

a. Test distribution is Normal.
b. Calculated from data.

Table 4 shows that the stock average return before the announcement of a bond rating decrease is the average that is normally distributed, with the probability value of the data before the announcement of the decrease in bond rating is 0.870> 0.05. This means that the average stock return data before the announcement of the bond rating downgrade is normally distributed.

Table 5: Normality Test Data Average Stock Return after Announcement Decline in Bond Rating

One-Sample Kolmogorov-Smirnov Test

		ARDownSesudah
N		18
Normal Parameters(a,b)	Mean	-0,0199
	Std. Deviation	0,04312
Most Extreme Differences	Absolute	0,314
	Positive	0,196
	Negative	-0,314
Kolmogorov-Smirnov Z		1,330
Asymp. Sig. (2-tailed)		0,058

a. Test distribution is Normal.
b. Calculated from data.

Table 5 shows that the stock average return after the announcement of a bond rating decline is the average that is normally distributed, with the probability value of the data after the announcement of the decrease in bond rating is 0.058> 0.05. This result means that the average stock return data after the announcement of the bond rating downgrade is normally distributed.

Hypothesis testing

Stock Returns Before and After Announcement Increasing Bond Rating

Testing the hypothesis in this study using Paired Sample T-Test. Paired Sample T-Test is used to test the difference 2 on average for stock returns. The purpose of testing this hypothesis is to find out whether there is a significant difference between stock returns before and after the announcement of the bond rating, then the two paired sample t-test is used. With the help of the SPSS program the following results are obtained.

Table 6: Summary of Paired Sample T-Test Returns on Announcements on Increasing Bond Rating

Information	ARUpBefore	ARUpAfter
Mean	0,0012	0,0029
Std. Deviation	0,01769	0,01817
Std. Error Mean	0,00361	0,00371
Average of Paired Sample t-test = - 0,00170 Sig. (2-tailed) = 0,763		

Source: SPSS Processed Products

Table 6 shows the results of statistical calculations of average stock returns before and after the announcement of an increase in bond ratings. The average value of average stock returns before the announcement shows a number of 0.0012 and for average stock returns after the announcement shows a number of 0.0029. With the standard error the average for average stock returns before the announcement is 0.00361 and after the announcement is 0.00371. From the statistical table it can also be seen that the standard deviation for average stock returns before the announcement is 0.01769 and for average stock returns after the announcement is 0.01817.

From Table 6 it can also be seen that the average average return value before and after the announcement is -0.00170. Significance value (2-tailed) is 0.763. Where this value is greater than the probability limit set for this t test which is equal to 0.05, so the hypothesis in this study is rejected. This means that it can be concluded that there is no significant difference between stock returns before and after the announcement of an increase in bond ratings.

Stock Returns Before and After Announcement Decreasing Bond Rating

Table 7: Summary of Paired Sample T-Test Return Results on Announcement of Decreasing Bond Rating

Information	ARDownBefore	ARDownAfter
Mean	0,0027	-0,0199
Std. Deviation	0,02111	0,04312
Std. Error Mean	0,00498	0,01016
Average of Paired Sample t-test = 0,02261 Sig. (2-tailed) = 0,027		

Source: SPSS Processed Products

Table 7 shows the results of statistical calculations of average stock returns before and after the announcement of a bond rating decline. The average value of average stock returns before the announcement shows a number of 0.0027 and for average stock returns after the announcement shows a number of -0.0199. With the standard error the average for average stock returns before the announcement is 0.00498 and after the announcement is 0.01016. From the statistical table it can also be seen that the standard deviation for average stock returns before the announcement is 0.02111 and for average stock returns after the announcement is 0.04312.
From Table 7 it can also be seen that the average value of average stock returns before and after the announcement is 0.02261. Significance value (2-tailed) is 0.027. Where this value is smaller than the probability limit set for this t test which is equal to 0.05, so the hypothesis in this study was successfully accepted. This means that it can be concluded that there is a significant difference between stock returns before and after the announcement of a bond rating decline.

Discussion

Based on the results of research and processing, then in this section of the discussion will discuss the results of the study in accordance with the problems raised. The results of the study discuss whether there are differences in stock returns before and after the announcement of both increases and decreases in bond ratings.
Return is the result obtained from investment. Return can be a realized return that has occurred or an expected return that has not occurred, but is expected to occur in the future. The return used in this study is return realization. Return realization (realized return) is a return that has occurred and is calculated based on historical data. Return realization is important because it is used as one measure of company performance.
The results of the study regarding the testing of average stock returns on bond rating announcements using the paired sample t-test are as follows.

Stock Returns Before and after the Announcement of an Increase in Bond Rating

From the results of the t test (paired sample t-Test) in table 6, the significance level is greater than alpha (α), which is 5%. Then it can be concluded that there is no significant difference between the average return on shares before and after the announcement of the increase in bond ratings. This result indicates that the announcement of an increase in bond rating does not provide information that is beneficial for investors. Although there is a change in the average return on the stock before the announcement with the announcement of the bond rating, the difference is not significant.

According to Jogiyanto (2003) testing information content intends to observe the reaction of an announcement. If the announcement contains information, it is expected that the market will

react when the announcement is received by the market. The market reaction can be seen from the changes in the price of certain securities. To measure this reaction can use the return as the value of the price change. The results of this study indicate that the announcement of an increase in bond ratings does not carry information content for investors, so the market does not react significantly to stock returns. No significant reaction of the market to the announcement of the increase in bond ratings can be caused by investors tend to be less sensitive to the reduction in investment risk they face.

The results of this study are supported by the results of a study conducted by Prasetio and Astuti (2003) that there is no significant difference between stock returns before and after the announcement of bond ratings

Stock Returns before and after the Announcement of a Bond Rating Decline

From the results of the t test (paired sample t-Test) in table 7, the significance level is smaller than alpha (α) which is 5%. Then it can be concluded that there is a significant difference between the average return on shares before and after the announcement of the decline in bond rating.

The results of this study indicate that the announcement of the downgrade of bonds carries information content for investors, so the market reacts significantly to stock returns. Reacting the market significantly to the announcement of a bond rating downturn could be caused by investors tend to avoid the investment risks they face. The attitude of investors who tend to avoid risk and are less sensitive to a decrease in investment risk shows that investors in the capital market are risk averse.

Conclusion

Based on the results of data processing and discussion of the results of research conducted through paired sample t-test between announcements of increase and decrease in bond ratings with stock returns, then the following conclusions can be taken: Hypothesis 1 test results show, there is no significant difference between stock returns before and after the announcement of an increase in bond ratings. Therefore, it can be concluded that information about the announcement of an increase in bond ratings does not have meaningful content, so that investor preferences for that information do not change. While the results of hypothesis 2 test show, there is a significant difference between stock returns before and after the announcement of a bond rating decline. Then it can be concluded that the information about the announcement of the downgrade of bonds has meaningful content, so that investor preferences for that information change.

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