The Effects Of Subordinated Bonds Issued And The Bank Financial Performance Towards The Stock Trading Volume Activity

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Abstract: According to IDX statistical data of the year 2017, the market capitalization of finance sector stock was dominated by the stock of the banking subsector up to 91.87%, and the banking subsector has dominated 38.52% of the corporate bond market in Indonesia. This research aimed to 1) analyzing the financial performance of bond issued bank listed in the IDX from 2013 to 2017, 2) analyzing the effects of the bank subordinated bond issuance towards the stock trading volume activity, 3) analyzing the financial performance of bond issued bank listed in the IDX from 2013 to 2017 towards the stock trading volume activity. This research used the event study method, which implemented the descriptive and quantitative approaches. The populations in this study were bank companies listed on the Indonesia Stock Exchange or IDX that issued bonds, with the data from 16 banks as the samples. The hypothesis was analyzed using the multiple linear regression analysis to determine the effects of the bond issuance events and financial performance on the stock trading volume activity. This research showed that bond issued banks listed in the IDX had a good financial performance from 2013 to 2017. Based on the results of partial regression, the announcement of issuance of corporate bonds, dividends per share, CAR, and NIM had a significant influence on stock trading volume activity and the form of influence was positive. NPL and DER had significant effects on stock trading volume activity and the forms of influence were negative.

Keywords: Bank, financial performance stock, subordinate bonds, trading volume activity


Corporate funding through stocks or bonds through the capital market in Indonesia is increasingly in demand by the company, as shown by the recorded growth of the capital markets in Indonesia from 2013 until 2017. According to the IDX data of 2017, the capitalization of the Indonesian capital market was increased around 67.15%, or from Rp. 4.219 trillion in 2015 to Rp. 7.052 trillion in...
2017. Meanwhile, the trading frequency rose up to 98.33%, from 37.499 billion in 2013 to 74.371 billion in 2017. Furthermore, improved market conditions also interested more people in investing in the capital market. That could be shown in the total number of investors based on the KASEI 2017 data, stating a 250.28% increase from 320,506 Single Investor Identification (SID) in 2013 to 1,122,668 SID in 2017. Companies listed on the stock exchange also increased from 483 companies in 2013 to 566 companies in 2017.

Stocks with the largest market capitalizations in the Indonesian capital market in year 2017 were financial sector stock, contributing around 29.66%. Based on the IDX data of 2017, the market capitalization of financial sector stock markets was dominated by bank subsector stock, in the amount of 91.87%. A large amount of market capitalization indicated the higher stock price and volume of bank stock circulating in the market. A theory by Ang (1997) stated that the value of market capitalization was the market price of stock multiplied by the number of stock outstanding. Throughout 2013 to 2017, there was a high tendency for companies in Indonesia to issue corporate bonds. It was presented as a 77.50% increase in the number of the outstanding corporate bonds from 2013 to 2017, or from Rp. 218.220 trillion in 2013 to Rp. 387,330 trillion in 2017. In terms of the types of industries, the bank subsector controlled the corporate bond market in Indonesia. The outstanding bank sub-sector bonds were accounted for 38.52% of the corporate bond market in Indonesia. Banks were required to prepare alternative sources of funding in the face of the possibility of decreasing internal liquidity and third party funds (DPK), which were expected to fall amid the potential of rising inflation and the downward trend in the BI benchmark rate. Research by Graham and Harvey (2001) stated that more bond issuance occurred when interest rates were relatively low, as shown in Figure 1 when the BI reference interest rate decreased, the number of bond issuing banks listed on the Indonesia Stock Exchange (IDX) increased.


*Figure 1 The comparison data of bond banks from 2013 to 2017, with interests issued by BI*

Several interesting phenomenons happened with the condition of the stock and bond markets in Indonesia. In 2014, the financial stock returns increased and decreased in 2015, conversely the number of bonds issuing banks in 2014 decreased and increased in 2015, but at the end of 2017 stock returns and the number of bond issuing banks both increased even far beyond CSPI. Those phenomenons could be seen in Figure 2 below.
The performance of stocks and bonds in the capital market was influenced by the same fundamentals and operating cash flow, commencing a relation between movements in both the bond market and the stock market. As stated by Gebhardt et al. (2005), bond market movements could affect stock market performance. As a conclusion for the background and formulation of the problem above, the purposes of this study are: 1) Analyzing the financial performances of subordinated bonds of the issuing banks in Indonesia from 2013-2017, 2) Analyzing the effects of the bank’s subordinated bond issuance events on the stock trading volume activity, 3) Analyzing the effects of the financial performances of bond issuer banks listed on the Indonesia Stock Exchange in 2013 - 2017 against the stock trading volume activity.

THEORETICAL FRAMEWORK

The Pecking Order Theory. According to Myers (1984), the pecking order theory referred to companies that had a higher level of profits and a lower level of debts, because companies with high profitability had abundant internal funding sources. Specifically, the company had a sequence of preferences in the use of funds. If external funding were needed, the company would first choose the safest security, then the riskier security. The company would later start with debt then mix securities such as convertible bonds and stocks as last option.

Teori Signalling. The theory developed a model that treated a capital structure (use of debt) as a signal by managers to the market. If the manager had the confidence that the company’s prospects are good and therefore wanted the stock increase, then the manager would communicate this to the investors. The signaling theory, first developed by Spence (1974), stated that good companies would be able to distinguish themselves from bad companies by giving signals to the capital market.

The Bond Subordination. Bonds refer to securities issued by the issuer to investors (or bondholders), where the issuer will provide a return in the form of coupons paid periodically and the principal (principal) when the bonds are due (Manurung 2003). Subordinated bonds are bonds that have lower priority than other bonds issued by the issuer in the event of bankruptcy, or a hierarchy of creditors. First is payment from the liquidator, then payment of taxes and others. Bondholders whose payment were prioritized were bonds with the earliest issuance date, called senior bonds after the bonds were paid, then subordinated bond repayment payments were made (Sutedi, 2009). This type of bond in recent years has become the choice of the Indonesian national banks in meeting capital adequacy and at the same time, for credit expansion.

Factors That Affected Stock Trading Volume Activity. Brigham and Houston (2010) stated several internal and external factors that influenced
the stock trade, including announcements relating to equity and debt and the condition or performance of banks. According to Halim (2005), stock prices were formed in the capital market through stock trading, which is influenced by dividends per share. Another theory regarding dividends per share is the Bird in Hand theory by Myron Gordon and John Lintner (1963), stating that investors wanted a high dividend payment from the profits of the company in accordance with the investor’s goal, namely to invest stock get dividends. Stock prices were also influenced by the debt to equity ratio. According to Sudana (2011) a high debt to equity ratio (DER) indicates high capital dependence on outsiders, high debt burden and trade, and stock prices would decline. Internal factors that influenced stock trading were the company’s performances. Based on the Bank Indonesia Regulation No.13 / 1 / PBI / 2011 regarding the Rating for Commercial Banks, several factors for evaluating bank health are; a) Risk Profile, using the Non-Performing Loans (NPL), b) Earnings, with factors based on the ratio of the Net Interest Margin (NIM) and c) Capital.

Stock Trading Volume Activity. Trading volume is the number of stock in a company traded in a certain time, as well as the overall value of the purchase and sale transaction of stock by investors in a particular currency. Trading volume was the number of stocks traded in a certain period (Magdalena, 2004). According to research by Hugida (2011) the performance of a stock could be measured by its trading volume. The more frequently the stock is traded, it indicated that the stock was active and attracted the investors. According to Halim and Hidayat (2000), the volume of stock trades was one indicator used in technical analysis in the valuation of stock prices and an instrument that could be implemented to see capital market reactions to information through the movement of stock trading volume activities in the market. According to Yosef and Brown (1977), a small trading volume of stock could be a sign that shows the uncertainty or uncertainty of investors in the future.

METHOD

Scientific Approaches. The research implemented the event study method, with both the descriptive and quantitative approaches. The data was specified to the period between 2013 and 2017, where the latest data were gathered and several phenomena such as stock return fluctuations and the number of bond banks have occurred.

Data Types and Sources. The data in this study was a secondary data obtained by the Indonesia Stock Exchange (IDX) in the form of daily bank stock trading volumes, annual financial reports, and quarterly banks published publicly for the 2013-2017 period in the bank subsector companies.

Variables of Researches. The variables in this study consisted of 2 types, namely The dependent variable was the stock trading volume activity, the independent variable, which was the announcement of the issuance of corporate bonds, an event in which corporate bonds were first offered to the public marked by an announcement date (announcement date) where the public at large could buy corporate bonds on the capital market and the financial performance, which was dividend per share, NPL, DER, NIM, CAR. Dividends per share were the number of cash dividends given by companies. The amount is in units of rupiah per share. The Non-Performing Loans (NPL), namely the amount of credit in substandard, doubtful and bad quality. The NPL formula was as follows:

\[
NPL = \frac{\text{Substandard, doubtful, and postponed credit}}{\text{Total of shared credits}}
\]

The Debt to Equity Ratio (DER) was a ratio used to assess debt to equity. This ratio was sought by comparing all debts, including current debts and all equities. The DER formula was as follows:
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*Debt to Equity Ratio* = \( \frac{Total \ of \ Liability}{Total \ of \ Equity} \)

The Net Interest Margin (NIM) was the amount of the net interest income (bank interest incomes that has been reduced by principal expenses), with the value of productive assets. A high NIM value indicated that the profit earned by banks from interest income was quite high. The NIM formula was as follows:

\[
NIM = \frac{Net \ Interest \ Income \ (Bank \ Interest \ Incomes – Principal \ Expenses)}{Average \ of \ Earning \ Assets}
\]

The Capital Adequacy Ratio (CAR) was a ratio that measures the adequacy of capital owned by banks to support assets that contain or generate risk. A good CAR value was above 8%, in which the bank could be categorized as healthy. CAR ratio can be calculated using the following formula:

\[
CAR = \frac{Capital}{ATMR} \times 100\%
\]

**Population and Samples.** The population of the research was all banks listed in the IDX that issued bonds. Meanwhile, the sample for this study was the data of 16 banks listed on the Indonesia Stock Exchange (IDX) that issued bonds in the period between 2013 and 2017. A similar company could announce the bond issuance more than once during the 2013-2017 period, which was counted only once, with the total to 45 events.

**Data Analysis Method.** The hypothesis tests with multiple lines were analyzed to determine the effect of bond issuance events, as well as bank financial performance on the stock trading volume activity. The research framework could be shown in Figure 3.

**RESULTS AND DISCUSSION**

**The Performances of Bond Issuing Banks.** The data for describing the financial performance of a bond issuing bank was the bank’s annual financial statement data. Based on Figure 4, it could be seen how the financial performance of bond issuing banks through the average dividend ratio per share of NPL, DER, NIM, and CAR of each bank from 2013 to 2017.
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The average dividend per share of the bond issuing bank decreased from 2014 to 2015, then increased again from 2016 to 2017. When there was an increase in the dividend per share ratio, it indicated that the average bank issuing bonds were able to generate profits and provide dividends that could be increased every year to shareholders. On the contrary when the dividend per share ratio decreases, the dividends distributed by the issuing banks to shareholders would be decreased. The average bond issuing banks experienced an increase in profits from 2013 to 2017, but the dividend per share decreased from 2014 to 2015, possibly due to the company’s policy of reducing dividends and allocating profits to support the bank’s work plans going forward which required large capital investments.

The NPL ratio of bond issuing banks increased in every year, meaning that the average number of non-performing loans of bond issuing banks also increased each year. It could be seen that the NPL ratio increased by 125.48% from 0.84% in 2013 to 1.90% in 2017, the number of non-performing loans borne by banks has increased, but the average NPL was less than 2% or below the maximum NPL limit of the banking industry. It indicated that the quality of loans extended by bond issuing banks is still in the good category.

The DER ratio of bond issuing banks experienced fluctuations from 2013 to 2017. The increasing DER showed the lower funding of companies provided by shareholders or financial sources themselves, from the perspective of the ability to pay long-term obligations DER. This phenomenon increasingly showed the ability of companies to pay its long-term liabilities are decreasing.

As seen in Figure 5 above, the nominal bonds in 2014 decreased, but the DER ratio increased, meaning that the company’s funding was provided by shareholders or their financial resources decreased and more were sourced from the liability component. In 2014, the nominal bonds decreased and, based on the OJK data, there was a slowdown in the growth of third party funds (DPK) in the bank industry, meaning the source of liabilities which caused the DER ratio to increase did not originate from bonds or deposits but originated from other sources, one of which was stock, based on IDX data for 2014 market capitalization, price and stock returns of the bank subsector increased in 2014.


Figure 4  The financial performance conditions of bond issuing banks in 2013 – 2017
From 2015 to 2017, the nominal bonds continued to increase, but the DER ratio decreased. It indicated that although the liabilities in terms of bank debt increased, company fundings provided by shareholders or financial sources themselves also increased, due to an increase in the equity component of the bank, namely the balance bank bonds issuers’ profits were seen to continue to increase from 2013 to 2017.

The NIM ratio of the bond issuing bank was seen to have fluctuated from 2013 to 2017. Declining NIM ratio indicated that the average bank decreased net interest margin, the ability of banks to manage productive assets to generate net interest income decreased, therefore the interest income on productive assets has decreased. There was a decrease in the NIM ratio from 5.70% in 2013 to 5.19% in 2014, possibly due to an increase in BI interest rates from 7.50% in 2013 to 7.75% in 2014, as well as an increase in the NIM ratio. It indicated that banks experienced an increase in net interest margins, the ability of banks to manage earning assets, and generate net interest income increased and also affected the increase of the interest income on productive assets as well. In 2015 up to 2016, there was an increase in the NIM ratio from 5.19% in 2014 to 5.35% in 2015 and 5.54% in 2016, possibly due to a decrease in BI interest rates from 7.75% in 2014 to 7.50% in 2015 and 4.75% in 2016. In 2017 when the BI interest rate decreased to 4.25%. The NIM ratio also decreased to 5.21%, because, in addition to being influenced by interest rates BI, NIM ratios could also be influenced by the management of cost of funds and the level of efficiency carried out by banks, for example raising high cost funds such as deposits that are too high and the low achievement of collecting low cost funds Current Accounts and Savings Accounts (CASA) in banks. Therefore, when BI interest fell but banks were not efficient in managing the cost of funds, the interest income received would decrease.

The CAR ratio of the bond issuing bank showed an increase from 2013 to 2017, from 16.85% in 2013 to 19.65% in 2017. One of the capital components stipulated in Bank Indonesia Regulation (PBI) was referred to as the Supplementary Capital (tier 2), specifically subordinated bonds represented the Tier 2 supplementary capital in the bank’s capital com-
position, it could be seen that the CAR ratio increases when the nominal bonds were issued by banks increase. The increasing CAR ratio indicated that the greater the capital reserves were used for business development needs, as well as covering the risk of bank losses.

**Results of Analysis Multiple Linear Regression on The Effect of Subordinated Bond Issued on Stock Trading Volume Activity**

The results showed that stock trading volume after the announcement of the issuance of bonds proved to be significantly greater than the trading volume before the announcement. An increase in volume on the stock market after the announcement of the issuance of bonds indicated that the public considered that the issuance of bonds as a positive signal and good news. According to the signaling theory, first developed by Spence (1974), stated that good companies would be able to distinguish themselves from bad companies by giving signals to the capital market. Stock trading volume activities were used as a signal to see good companies or not. Trading volume information could be information for individual investors to make a trading decision. This related to one of result from Istanti (2009) which stated that stock trading would be relatively large if investors believed that they had special information that was not owned by dealers or other investors. Ervina and Rachman (2017) who confirm the impact of giving a positive signal from the announcement of bonds on the stock market performance and the results of research by Barber and Odean (2008) which shows that observations on any information affect the number of transactions made by investors, all investor actions are reactions. The market is marked by changes in stock prices, volume, and frequency of stock trading and the results of Hartono’s research (2008) which states that information published as an announcement will give a positive signal to investors in making investment decisions. In line with result of study from Kim and Abdullah (2012), who confirms that stock market reacted positively after the announcement of the bond issuance.

**Results of Analysis Multiple Linear Regression on The Effect of Bank Financial Performance on Stock Trading Volume Activity**

The test results on dividends per share showed that a partial dividend per share partially had a significant positive effect on stock trading volume. That indicated that when the dividend per share has increased the volume of stock trading will increase. That result related to the Bird in Hand theory by Myron Gordon and John Lintner (1963), stated that investors wanted a high dividend payment from the profits of the company in accordance with the investor’s goal, namely to invest stock to get dividends. The results of this study were in line with the results of Setiawan’s (2015) study, which stated that dividends per share affected the trading volume activity. The test results on NPL ratio showed that the NPL ratio had a significant negative effect on stock trading volume. That indicated that when the NPL rose up, the trading volume would decrease. The trade volume described the market reaction directly.

The more stock traded indicated market optimism about a stock. Thus the stock price would increase (Hadianto, 2007). Based on the NPL test results on stock prices, it showed that when NPL rises, stock prices would fall, the volume of stock trading which acted as a price forming variable also decreased, in accordance with the results of Irawan’s research (2017) which stated that NPLs had a negative effect on the volume of bank stock trades. This result has similarities with other research from Chordia (2001), which stated that the effect of trading activity volatility on expected stock returns is driven by the presence of risk and variability elements in liquidity so that stocks with high variabilities had high expected returns. The results showed that the DER had a significant positive effect on the stock trade volume. The results of this study were supported by the results of Aditya’s study (2012), stating that DER had a significant negative effect on the stock trade volume. The higher DER that could be reduced, the higher chances investors would be interested in stock, meaning when DER increased, the volume of stock trading decreased.
The results showed that the NIM ratio had a significant positive effect on the stock trade volume. The higher NIM showed greater bank revenue, increasing the investors’ interest in bank stock, in the form of an increase in trade volume of stock. The results of this study were also in line with the results of the study by Setiadi (2012) and Larasati (2017), which stated that the NIM significantly influenced the stock trade volume. The results showed that the CAR ratio had a significant positive effect on the stock trade volume. The CAR was able to provide a signal for investors in estimating the return that would be obtained. Investors considered CAR to be quite trustworthy in describing the level of return commensurate with the risk that will be borne. The increase in CAR may later increase the results to be received by investors so that investors increased the volume of bought stock. The results of this study were different from the results of Fahmi’s (2006) study which stated that CAR had a significant effect on the trade volume of banking stock. This result related to theory from Brigham and Houston (2010), who stated that several internal and external factors influenced the stock trade, including announcements relating to equity and debt and the condition or performance of banks.

**Recommendation.** The results of this study could be used as a reference for banks that funding decisions through bonds, to obtain a positive side of publication and a positive effect on the stock trading volume activity. It was also important for banks to always maintain a high level of profitability, as well as business prospects that we’re always developing. It also could be used as material for consideration and recommendations for investors in investing in stocks and bonds. For investors to obtain a large profit from stock capital gains, investors needed to consider several factors such as corporate actions, company performance conditions. The results showed a very high development of bank bond issuance in the past five years. Therefore the government needed to provide support for banks in lending. Bank of Indonesia and the OJK were also required to increase supervisions in the issuance of bonds to avoid the risk of default that might be encountered when the bonds were due.

**CONCLUSIONS AND RECOMMENDATIONS**

**Conclusions**

The financial performances of bond issuing banks were generally in good and positive perform condition. Based on the results of simultaneous regression testing, the announcement of bond issuance, dividend per share, NPL, DER, NIM, and CAR had a significant influence of around 99.99% on stock trading volume activity. Based on the results of partial testing, the events of bond issuance, dividends per share, NIM, and CAR shared a significant positive effect on the stock trading volume activity. The DER and NPL ratios obtained a significant negative effect on the stock trading volume activity. The market considered that bond issuance is good news for investors and there is a signaling effect, which is shown by an increase in the stock trading volume activity after the bank issued subordinate bonds.

**Recommendations**

Further researches could be conducted in analyzing the condition of the capital structure before and after issuing the bonds. Future studies could also investigate how the effects of capital from bonds for bank profitabilities. Furthermore, those researched could examine how the influences of other corporate actions, such as the issuance of new stock split on the stock market reaction.

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