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 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 subordinate bond issuance towards the stock trading volume activity, 3) analyzing the finance 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 the quantitative approaches. The populations in this study were bank companies listed on the Indonesia Stock Exchange or IDX that issued bonds, with the datas 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 towards the stock trading volume activity. This research showed that bond issued bank 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: Subordinate bonds, bank, stock, trading volume activity, financial performance
1 INTRODUCTION

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 throughout 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, the improved market conditions also interested more people in investing in the capital market. This 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 on year 2017 were financial sector shares, contributing around 29.66%. Based on the IDX data of 2017, the market capitalization of financial sector stock markets was dominated by bank subsector shares, in the amount of 91.87%. The large amount of market capitalization indicated the higher stock price and volume of bank shares circulating in the market. A theory by Ang (1997) stated that the value of market capitalization was the market price of shares multiplied by the number of shares outstanding. Throughout 2013 to 2017, there was a high tendency for the 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 the 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. A 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.

![Source: The IDX Yearly Statistics (2013-2017), www.bi.go.id](image)

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

Several interesting phenomenons happened in the relation to 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 bond 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.

2 THEORETICAL FRAMEWORK

2.1 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 was needed, the company would first choose the safest security first, then the riskier security. The company would later start with debt then mix securities such as convertible bonds and shares as a last resort.

2.2 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 shares to 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.

2.3 The Bond Subordination. Bonds refers 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 bonds in recent years has become the choice of the Indonesian national banks in meeting the capital adequacy and at the same time for the purposes of credit expansion.

2.4 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 shares to get dividends. Stock prices were also influenced by 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.

2.5 Stock Trading Volume Activity. Trading volume is the number of shares in a company traded in a certain time, as well as the overall value of the purchase and sale transaction of shares by investors in a particular currency. Trading volume was the number of shares 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 shares are traded, it indicated that the shares were 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 shares could be a sign that shows the uncertainty or uncertainty of investors in the future.

3 METHODS

3.1 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 datas were gathered and several phenomenons such as stock return fluctuations and the amount of bond banks were occurred.

3.2 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.

3.3 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 was the amount 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:

$$NPL = \frac{\text{Substandard, doubtful, and postponed credits}}{\text{Total of shared credits}}$$
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:

\[
\text{Debt to Equity Ratio} = \frac{\text{Total of Liability}}{\text{Total of Equity}}
\]

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:

\[
\text{NIM} = \frac{\text{Net Interest Income (Bank Interest Incomes - Principal Expenses)}}{\text{ATMR}}
\]

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:

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

3.4 Population and Samples. The population of the research were all banks listed in the IDX that issued bonds. Meanwhile, the sample for this study were 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.

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

Figure 3 Research framework

4 RESULTS AND DISCUSSIONS

4.1 The Performances of Bond Issuing Banks. The data for describing the financial performance of a bond issuing banks 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.
Figure 4 The financial performance conditions of bond issuing banks in 2013 – 2017

The average dividend per share of the bond issuing bank decreased from 2014 to 2015, then increased again in 2016 to 2017. When there was an increase in the dividend per share ratio, it indicated that the average bank issuing bonds was 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.


Figure 5 The Comparison Between the DER Ratio, Bond Nominals dan Current Year Profits from Bond Issuing Banks in 2013-2017

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 own 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 shares, based on IDX data for 2014 market capitalization, price and stock returns of the bank subsector increased in 2014.

In 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.

![Graph showing the comparison between the BI Exchange Rate and the NIM Ratio of Bond Issuing Banks in 2013-2017](image)


**Figure 6 The Comparison Between the BI Exchange Rate and the NIM Ratio of Bond Issuing Banks in 2013-2017**

From Figure 6 above, 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 Saving 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 showed an increase from 2013 to 2017, at the amount of 16.62% or 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 composition, 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.

### 4.2 Results of Analysis Multiple Linear Regression on The Effect of Subordinated Bond Issued and The Bank Financial Performance on Stock Trading Volume Activity.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficient</th>
<th>Prob.</th>
<th>Hypothesis Tests</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dividen per share</td>
<td>-1.230274</td>
<td>0.0000</td>
<td>Influential</td>
</tr>
<tr>
<td>NPL</td>
<td>-1.478667</td>
<td>0.0000</td>
<td>Influential</td>
</tr>
<tr>
<td>DER</td>
<td>0.032083</td>
<td>0.0000</td>
<td>Influential</td>
</tr>
<tr>
<td>NIM</td>
<td>0.038106</td>
<td>0.0000</td>
<td>Influential</td>
</tr>
<tr>
<td>CAR</td>
<td>0.417776</td>
<td>0.0000</td>
<td>Influential</td>
</tr>
<tr>
<td>Dummy</td>
<td>0.059103</td>
<td>0.0000</td>
<td>Influential</td>
</tr>
</tbody>
</table>
As seen in table 1, the test results on the bond issuance events on the trading volume of the stock showed a prob value (p-value) <0.10, rejecting the H0. The trading volume of shares 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 a good news. This trading volume was often used as a benchmark to study information and impacts of various events. 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 (Chordia, 2001). Trading volume activities were used to see the valuation of info by individual investors in the sense that the info made a trading decision or not. This related to one of the motivations of investors in buying and selling shares, that is income related to capital gains. Istanti (2009) suggested the results of research that stock trading would be relatively large if investors believed that they had special information that was not owned by dealers or other investors.

The table 1 also showed that the test results on dividends per share was on the volume of stock trading shows the value of prob. (P-value) <0.10 or the decline of H0, meaning that partially dividend per share partially had a significant positive effect on stock trading volume. This indicated that when the dividend per share has increased the volume of stock trading will increase. 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 NPL ratio had a probability value (p-value) <0.10 or rejected H0, meaning that the NPL ratio had a significant negative effect on stock trading volume. This indicated that when the NPL rose up, the trading volume would decrease. The trade volume described the market reaction directly. The more shares 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.

The results showed that the DER ratio had a probability value (p-value) <0.10 or partially rejected H0, meaning the DER ratio 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 shares, meaning when DER increased, the volume of stock trading decreased.

The NIM ratio had a probability value (p-value) <0.10 or rejected H0 partially, meaning the NIM ratio had a significant positive effect on the stock trade volume. The higher NIM showed, the greater bank revenue, increasing the investors’ interest in bank shares, in the form of an increase in trade volume of shares. The results of this study were also in line with the results of the study by Setiadi (2012), which stated that the NIM significantly influenced the stock trade volume.

The CAR ratio had a probability value (p-value) <0.10 or rejected H0 partially, meaning 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 shares. The results of this study was differed from the results of Fahmi's (2006) study which stated that CAR had a significant effect on the trade volume of banking shares.

4.3 Managerial Implications. The results of this study could be used as a reference for banks that funding decisions through bonds, in order 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 were always developing. It also could be used as material for consideration and recommendations for investors in investing in stocks and bonds. In order 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 5 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 in order to avoid the risk of default that might be encountered when the bonds were due.

5 CONCLUSION

5.1 Conclusions. The financial performances of bond issuing banks were generally in good and functioning 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 investment and there is a signaling effect which is shown by an increase in the stock trading volume activity after the bank issued subordinate bonds.

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


