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Risk based bank rating and stock return A case study on state-owned bank in Indonesia

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ABSTRACT: The purpose of this research is to examine the effect of bank soundness as measured by risk based bank rating on stock returns. Risk based bank rating consists of risk profile (credit risk-NPL and liquidity risk-LDR), GCG disclosure, earnings (return on assets-ROA and operating expense to income ratio-OEIR), and capital (CAR). The population in this research was 4 state-owned banks and because only 4 banks, then all of them were taken as samples. Observation period was five years with quarterly data. Hypothesis testing used ordinary least square. The results of the study show that return on assets (ROA) and OEIR had a significant effect, while NPL, GCG and CAR had no significant affect on stock returns.

Keywords: good corporate governance, non performing loan, return on assets

1 INTRODUCTION

Bank Indonesia, through the Regulation of Bank Indonesia No. 13/1/PBI/2011, changed the level of bank health with *Risk Based Banking Rating* or well-known as the RGEC model, which consists of *risk profile, good corporate governance, earning,* and *capital*.

The main elements of risk profile are credit risk and liquidation risk. Credit risk is measured by *Non-Performing Loan* (NPL) which shows the ability of bank management in managing the non-performing loans. Thus, NPL has a negative effect on stock *return*. The results of the study conducted by Zakaria et al. (2015), Mwaurah et. al (2017) and Shrestha (2011) show that *Non-Performing Loan* (NPL) has a negative effect on changes in stock prices. Liquidity risk is the company's ability to pay customer funds. Liquidity risk is measured by the *Loan to Deposit Ratio* (LDR), which is the ratio of the amount of credit provided using the public funds. The higher the LDR, the lower the bank's liquidity because the greater the amount of public funds is placed on the loans provided. Zakaria et al. (2015) and Rengasamy (2014) conclude that LDR has a significant and positive effect on stock prices, but Honora et al. (2015) state that LDR has no effect on stock return.

As a trusted institution, banks have to implement the principles of GCG of bank. According to Malik (2012), companies that implement GCG can give a signal that they will have a good performance which will have an effect on their stock prices. Effendi (2008) also states that one of the benefits of implementing GCG in banking companies is the ability to increase company value and stock price. Drobetz et al. (2003) proposes a significant effect of GCG on company value. Similarly, the findings by Mohamed et al. (2016).

The assessment of the element of profitability is measured by the comparison between profit and total assets and on equity. *Return on Assets* (ROA) shows the ability to generate profits with funds invested in total assets (Lisa & Clara 2009). Investors see ROA as a profit that is very important in purchasing shares, so that the greater the ROA, the higher the stock price. According to Honora et al. (2015), Nurhakim et al. (2016) and Heryanto (2016), ROA has significant effect on stock return.

Operating Expense Ratio is the efficiency of the bank, as it must be controlled as low as possible. The lower the level of the BOPO ratio, the better the performance of the bank's management, because it is more efficient in using existing resources in the company, in this case, the company can minimize the level of costs incurred for operational and non-operational activities, so that the investors will be interested in making investment as it can increase stock prices. Indriana (2009), Honora et al. (2015) and Nurhakim et al. (2016) state that BOPO has a negative effect on stock prices.

CAR is used to measure the ability of existing capital to cover possible risks in credit activities, including the obligation to provide minimum capital for banks. The greater the CAR, the greater the bank profits or the smaller the risk of a bank, the greater the bank profits (Yuliani 2007). Abdullah & Suryanto (2004) shows the results of capital aspect calculated using CAR have a positive effect on changes in stock prices. On the contrary, Honora et al. (2015) and Muhamad (2015) utter that CAR has no effect on the stock return.

Banks can use the *Non-Performing Loan* (NPL) ratio as an indicator of credit risk that shows the ability of bank management in managing non-performing loans. The high NPL will reduce the company's stock price. NPL has a negative effect on changes in stock prices. In accordance with the research conducted by Lestari (2015), *Non-Performing Loan* (NPL) has negative effect on changes in stock prices. Zakaria et al. (2015) also state that *Non-Performing Loan* (NPL) has a negative effect on changes in stock prices. Similarly, Mwaurah et al. (2017) and Shrestha (2011) also illiterate a significant effect between NPL and stock return.

H_1: NPL has a negative effect on stock return

Loan to deposit ratio (LDR) is a measure of bank liquidity. The higher the LDR, the lower the bank's liquidity because it is too high for the amount of public funds allocated to credit. However, the higher the LDR value, the higher the company's profit. Based on the explanation above, it can be concluded that the higher the LDR, the higher the stock price of a bank. This is consistent with the study conducted by Zakaria et al. (2015) which states that the LDR has a significant effect on stock price. Likewise, Rengasamy (2014) concludes that LDR has an effect on profitability.

H_2: LDR has a positive effect on stock return

Governance process includes the function of bank compliance, management of conflict of interest, implementation of internal and external audit functions, implementation of risk management including internal control systems, provision of funds to related parties and large funds, as well as the bank's strategic plan. The lower value of GCG *Self Assessment*, the higher the company's stock price, because the investors have their trust in the management in managing the company. Effendi (2008) also states that one of the benefits of implementing GCG in banking companies is to increase company value and the company's stock price. This is consistent with the study conducted by Elewa (2016) that GCG has a positive and significant effect on stock return. Drobetz et al. (2003) point out a significant effect of GCG on company value. Similarly, the findings by Mohamed et al. (2016).

H_3: GCG has a positive effect on stock return

There are two aspects of *Earning*, namely ROA and ROE. ROA shows the company's ability to measure the effectiveness of a company's performance in generating profits by utilizing assets owned, while ROE measures the rate of return. The higher ROA and ROE will attract investors to invest in the bank so that the stock price increases. This is in accordance with the study conducted by Lestari (2015) that *Return on Asset* (ROA) has a significant effect on stock returns. Honora et al. (2015) emphasize that ROA has significant effect on stock return. Nurhakim et al. (2016) and Heryanto (2016) also propose a significant effect between ROA and stock return.

H_4: ROA has a positive effect on stock return

Operating Expense Ratio (OEIR) is the comparison between the operational costs and income. The lower the level of the OER ratio, the better the performance of the bank's management, because it is more efficient in using existing resources in the company, in this case, the company can minimize the level of costs incurred for operational and non-operational activities, so that the investors will be interested in making investment as it can increase stock prices. This is in accordance with the research conducted by Renwarin (2017) which states that OEIR has a negative effect on stock price.

H_5: OEIR has a negative effect on stock return

Capital Adequacy Ratio is intended to determine the existing capital to cover possible losses in credit and security trading activities. According to the Decree of Bank Indonesia No. 30/11/KEP/DIR/Dated April 30, 1997, the CAR value of a bank must not be less than 8%. This shows that investors tend to pay attention to the capital aspect (CAR) in determining and buying share. In other words, the higher the CAR of a company, the higher the company's stock price. This is in accordance with the research conducted by Takarini & Putra (2013) which says that

CAR has an effect on changes in stock prices. Thus, the hypothesis in this study is as follows:

H_6: CAR has a positive effect on stock return

2 RESEARCH METHODS

In this research all hypotheses tested by using the multiple regression analysis tool with the SPSS version 21.0 program. Dependent variable is RS and independent variables are NPL LDR GCG ROA BOPO and CAR.

3 RESULTS AND DISCUSSIONS

By using the multiple regression analysis tool with the SPSS version 21.0 program, the results of the hypothesis are obtained as in table 1 below:

Table 1: The Results of the Hypothesis Testing

Model	Beta	Std. Error	t	sig
(Constant)	8,863.922	4,018.873	2.206	0.042
NPL	23.428	231.993	0.101	0.921
LDR	14.651	20.463	0.716	0.484
GCG	90.204	283.459	0.318	0.754
ROA	1,331.143	503.495	2.644	0.018
BOPO	-117.018	55.211	-2.119	0.050
CAR	153.590	118.284	1.298	0.213

a. Dependent Variable: RS

Based on the table above, it was found that credit risk (NPL) did not affect the stock return. This result is due to state-owned banks are to control the NPL so that under the minimum provisions, it tends to be very small, thereby, investors believe in handling credit risk which results in the NPL not having an effect on stock returns. This result is in accordance with the findings of Balvers (2017) and Honora et al. (2015) who conclude that NPL had no significant effect on stock returns.

Liquidity risk (LDR) also does not affect stock returns. State-owned banks are banks that are very careful in maintaining liquidity. Investors strongly believe in the liquidity of state-owned banks, so their transactions are not affected by liquidity risk. These results support the research findings of Honora et al. (2015) and Lestari (2015) that propose the LDR had no effect on the stock return

Good corporate governance (GCG) shows a non-significant effect on the stock return. State-owned banks have carried out GCG activities very well with a high level of corporate governance (ICG) index. Investors believe that state-owned banks have carried out GCG well so they do not affect them to do the buying and selling shares of state-owned banks by considering GCG. These results contradict with Drobetz et al. (2003) who found a positive and significant effect on stock returns but in line with Elewa (2016) who says that GCG had no effect on the stock price.

Earning as measured by return on assets (ROA) finds a significant and positive effect, this means that the higher ROA, the higher the stock return. Profit (ROA) is the main consideration for investors in conducting transactions in state-owned bank shares, so the factor that investors pay attention to is ROA. Because with high ROA, they expect dividends to be paid so that they can increase stock prices. This result is in accordance with the findings of Honora et al. (2015), Nurhakim, et al. (2016) and Heryanto (2016) who state a significant effect between ROA and stock returns

Earning measured by the operating expense to operating income ratio (OEIR) shows a significant and negative effect. This means that the higher OEIR will reduce the stock return. OEIR indicates the level of efficiency, the higher of OEIR, the higher the operating costs borne by the bank. The higher OEIR will cause a decrease in the company's profits so that high OEIR will reduce investor’s interest in buying shares in state-owned banks which cause a decline in stock prices. This finding supports the results of Indriana (2009), Nurhakim et al. (2016) and Honora et al. (2015) who state that OEIR had a significant and negative effect on stock returns.

Capital as measured by the capital adequacy ratio (CAR) shows a non-significant effect, this means that the high and low CAR does not affect the stock return. Capital is very important for banks because it is useful for backing up losses. State-owned banks are very prudential in maintaining CAR so that the average is far above the minimum requirement. Investors believe that state-owned banks in managing capital are very good, so they are not considered in purchasing their shares. These results are in accordance with the findings of Lestari (2015), Muhammad (2015) and Honora (2015) who find no significant effect between CAR and stock return

4 CONCLUSION

Conclusion for this study are: credit risk (NPL) did not affect the stock return. Liquidity risk (LDR) also does not affect stock returns. Good corporate governance (GCG) shows a non-significant effect on the stock return.

Earning as measured by return on assets (ROA) have a significant and positive effect. Earning measured by the operating expense to operating income ratio (OEIR) shows a significant and negative effect. Capital as measured by the capital adequacy ratio (CAR) shows a non-significant effect

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