Stock Price Response to Bank's Health Components Information: Study on Banks Listed in Indonesia Stock Exchange

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Abstract

At present, the Central Bank of Indonesia (Bank Indonesia) uses the RGEC (Risk Profile, Governance, Earnings, and capital) method to assess the health of banks in Indonesia. Every year, the bank reports the health performance and this report is very relevant information for investors in the capital market. This study investigates whether investors in the capital market respond to the same degree from each component of the bank's health information. By using the sample of banks listed on the Indonesia Stock Exchange in 2014-2017, this study found that investors responded positively to the earnings and the capital components but did not respond significantly to the risk profile and the governance components. The risk profile is not responded by investors, perhaps because the risk of going public banks is considered relatively low, so it is not considered as significant information affecting value. While the governance component is not responded by investors because there is a problem of the data validity or information is considered less important.

Keywords: Bank's health, Stock Price, Risk Profile, Governance, Earnings, Capital

Introduction

Banking is a highly regulated industry because the sustainability and security of the banking industry will greatly affect the economy of a country. In Indonesia, there are institutions that make regulations and supervise banks so that the banking industry is always healthy. Various regulations have been made including regulations regarding bank health assessment. The latest regulation on bank health assessment is Bank Indonesia Regulation No.13/1/PBI/2011. The assessment includes the risk profile, Good Corporate Governance, Earnings, and Capital which is then called the RGEC method. This method is a refinement of the previous health assessment method whose components are Capital, Asset Quality, Management, Earnings, Liquidity, and Sensitivity to Market Risk (CAMELS).

In an efficient capital market, the health level of a bank will be reflected in its share price. Banks that improve their health will be responded by the capital market with rising stock prices, and vice versa. The results of previous studies on the response of stock prices to information on health components of banks, in Indonesia, are still diverse. The risk profile component has two main risks, namely credit risk as measured by non-performing loans (NPL) and liquidity risk as measured by loan to deposit ratio (LDR). The increase in the bank's risk profile is bad information, so that investors' response to the increased risk profile should be negative, stock prices will fall. Research by Indiyani and Dewi (2016) supports this argument, but Lestari (2015) and Heryana (2018) research shows that NPL does not have a significant effect on stock prices. Meanwhile, Maharani (2015) and Ayem and Wahyuni (2017) found that LDR did not stock prices.

The governance component should be responded positively by stock investors if there is an increase in the value of the component. Indriani and Dewi's research (2016) does support this argument. They found a positive effect on increasing the value of governance on stock prices. The earnings component should also be responded positively by investors if bank earnings increase. Lestari's (2015) research supports this argument, but Maharani's (2015) and Heryana (2018) research does not find a significant effect of earnings increase on stock prices. The capital

component, in general, should be responded positively by investors because the higher the capital the safer the bank. High capital indicates that the bank has sufficient capital to cover losses that may arise in the future. Heryana's research (2018) found that increasing capital was responded positively by investors.

This study re-examines the effect of the health component of banks on stock prices by providing analysis and interpretation of findings that may not be in accordance with existing theories.

Literature Review

Bank is a financial institution that collects funds from the public and then the collected funds are distributed in the form of loans or financing for a business or personal needs. The banking industry is a very important industry for a country so the government strictly regulates the rules of the game that every bank needs to follow. To manage the banking industry, the government has formed three institutions namely Bank Indonesia (BI) as a regulatory body, the Financial Services Authority (OJK) as a supervisory institution, and the Deposit Insurance Agency (LPS) as a guarantor institution for customer funds if at any time there are banks that closed down.

There are many regulations related to banking. One of the most important regulations is regulations related to bank performance or health. In the 1990s, bank health measurement methods followed the CAMEL (Capital, Asset Quality, management, Earnings, and Liquidity) methods. In this regulation, risk measurement is still focused on credit risk and liquidity risk. In the 2000s, Bank Indonesia issued new regulations, changing CAMEL to CAMELS. The additional "S" component accommodates market risk at the bank. In the 2010s, Bank Indonesia issued new regulations, namely the RGEC (Risk profile, Governance, Earnings, and Capital) method. One of the most important changes from this new guideline is that the calculation of the Capital Adequacy Ratio (CAR) has included market risk, whereas the previous regulation only included credit risk. This is in accordance with global banking guidelines, namely the Basel II.

The study of bank health can be grouped into three. First is a descriptive study that describes the health of banks or compares the health of certain bank groups with other bank groups. Research that falls into this category includes research conducted by Fitrawati, Saifi, and Zahroh (2016), Paramartha and Darmayanti (2017), Sari (2016), and Umiyati (2015). This type of research is generally only preliminary research. Second, is a study that explores the factors that influence the health of banks. Some of these factors are general but some are specific. Examples of studies that include specific factors are the research of Gebba and Ahmed (2013) who analyzed the effect of privatization on bank health in Egypt. They concluded that after privatization, bank health tends to improve. Another example is Haque's (2013) study which examined the effect of the generation of banks on bank health. He concluded that the generation of the bank had no effect on the health of the bank. Third, is a study of the effect of bank health on Performance. For example, Haryati and Kristijadi (2014) examined the influence of governance and risk profile on financial performance. Nicola, Manalu, and Hutapea (2017) examined the effect of RGEC level on a financial index. The others examined the effect of the bank's health component on stock prices.

This last category of bank health studies, especially that related to the stock price, intersects with the study of capital market efficiency. Fama (1991) grouped capital market efficiency studies into three namely return predictability, event studies, and tests for private information. The study of the effect of bank health on stock prices can be included in the event study category. If using the previous category, this study can be classified as a semi-strong market efficiency hypothesis test.

Analysis of the effect of banking health on stock prices can be separated based on health components. The first component is the risk profile. There are a lot of bank risks but what is considered important in the risk profile are credit risk and liquidity risk. Another important risk, namely market risk, has been absorbed in the Capital component. Viewed from the perspective of bank health, increasing credit risk and liquidity risk will make bank health decline. Previous

research supporting this argument is the research of Indiyani and Dewi (2016) which found a significant negative effect of credit risk on market prices. Other studies generally do not support the above arguments. Lestari (2015) and Heryana (2018) found no significant effect of credit risk on stock prices. While Maharani (2015) and Ayem and Wahyuni (2017) also found no significant effect of liquidity risk on stock prices. However, it refers to the efficient capital market hypothesis and because credit risk and liquidity risk are relevant information and can be accessed by the public, we propose a hypothesis:

H1: Credit risk negatively affects stock prices
H2: Liquidity risk negatively affects stock prices

If an increase in the risk profile component decreases bank health, then an increase in other health components will improve bank health. When banks do better governance, banks will be healthier. If the bank generates higher profits, the bank will also be healthier. Likewise, if there is more bank capital, the bank will also be healthier because if there is a loss, the bank can cover it with the capital owned. Previous research does support this argument, but some do not. Research by Indiyani and Dewi (2016) supports the positive influence of improved governance on stock prices. Lestasri's research (2015) supports that earnings have a positive effect on stock prices. Heryana's research (2018) supports that increasing capital increases stock prices. Research that does not support is the research by Maharani (2015) and research by Heryana (2018) which did not find any significant effect of increasing earnings on stock prices. However, once again, referring to the efficient capital market hypothesis and information on governance, earnings, and capital is relevant information, then we propose the hypothesis:

H3: Governance has a positive effect on stock prices
H4: Earning has a positive effect on stock prices
H5: Capital has a positive effect on stock prices

Research Methods

The research sample is commercial banks listed on the Indonesia Stock Exchange from 2014 - 2017. In 2014 there were 29 banks, in 2015 there were 31 banks and in 2016 and 2017 there were 33 banks respectively. Thus, the total data is 126 bank-years.

There are six variables used in this study. First is the share price, measured by annual stock return (RS). The other five variables are the components of bank health. The risk profile component is represented by credit risk, which is measured by Non Performing Loans (NPL), and liquidity risk, which is measured by Loan to Deposit Ratio (LDR). The governance component is measured by the bank's self assessment data on the implementation of corporate governance (GCG). There are five ranks in the governance assessment. The bank with the first rank gets a score of 5, the second rank gets a score of 4, and so on. The earnings component is measured by Return on Assets (ROA), while the capital component is measured by the capital adequacy ratio (CAR).

To test the hypothesis, we use the regression equation below. In this test, we complete the classic assumption test.

$$RS_i = \alpha + \beta_1 NPL_i + \beta_2 LDR_i + \beta_3 GCG_i + \beta_4 ROA_i + \beta_5 CAR_i$$

Notes :
RS_i = Annual stock return of bank i
NPL_i = Non Performing Loan of bank i
LDR_i = Loan to Deposit Ratio of bank i
GCG_i = Corporate Governanceof bank i
ROA_i = Return on Assets of bank i
CAR_i = Capital Adequancy Ratio of bank i

Research Findings

There are six variables used in this study. Table 1 below shows the statistical description of the variable.

Table 1. Statistic Descriptive of Research Variables

Variables	Minimum	Maximum	Mean	Std. Deviation	Variance
NPL	,00	8,11	1,8887	1,38881	1,929
LDR	42,02	119,22	83,0290	14,52021	210,836
GCG	2,00	5,00	3,8095	,51713	,267
ROA	-11,15	4,00	,7059	2,17409	4,727
CAR	10,44	66,43	20,6298	7,25193	52,591
RS	-54,69	426,07	20,7579	67,20661	4516,729

The credit risk profile of banks in Indonesia is generally very good because the average NPL is below 2%. The first rating limit of NPL is a maximum of 2%. Meanwhile, the liquidity risk profile, in general, is not yet ideal. The first rating limit for the LDR ratio is under 75%, while the average sample bank LDR is 83%. The governance component is already good but not ideal yet. The ideal GCG score is 5, while the average GCG score of the sample bank is 3.8. The earnings component, in general, is not good. The first rank of ROA is a minimum of 1.5%, while the average ROA of a sample bank is 0.7%. The capital component is generally very good because the first rank of CAR is at least 12%, while the average CAR of the sample banks is more than 20%. Banking stock returns during the study period were quite good because the average annual return was more than 20%, even though the range of returns was very wide.

In this study, we propose five hypotheses. Hypothesis test results can be seen in Table 2 below.

Table 2. Research Hypothesis Test Results

Coefficientsa					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-5.255	66.812		-.079	.937
NPL	1.946	4.575	.040	.425	.671
LDR	.082	.402	.018	.205	.838
GCG	-13.345	13.345	-.103	-1.000	.319
ROA	7.633	3.469	.247	2.200	.030
CAR	2.954	.799	.319	3.696	.000
a. Dependent Variable: RS					

From Table 2 above it appears that only hypotheses related to the components of earnings and capital are proven. Earnings proved to have a significant positive effect on stock returns. Capital is also proven to have a significant positive effect on bank stock returns. While the other three hypotheses are not supported by empirical evidence. Credit risk does not prove to have a significant effect on stock returns. Liquidity risk is not proven to have a significant effect on stock returns. Corporate governance is also not proven to have a significant effect on stock returns.

Discussion

The results of this study indicate that investors in the capital market only respond to earnings and capital component information and ignore the risk profile and governance component information. Risk profile and governance information is, of course, relevant information, and according to the efficient capital market hypothesis, any relevant information must be responded to by the market. So, why have these two components of bank health not been responded to by investors? Here are some possible explanations.

The capital market will respond to new and relevant information. Information can be relevant but less "new" in terms of content. As we know that in the capital market there are many capital market analysts. These analysts always submit an analysis or prediction about the stock to investors. If there is new information whose results are in accordance with analysts' predictions, the information will be less important, because the information content has been previously thought. Credit risk information is information that is regularly announced with relatively stable results, so that credit risk information is easier to predict by analysts. Another argument could be because bank credit risk is information that is considered not too important by investors unless the value is very extreme. The data in Table 1 shows that there are very few banks with very extreme credit risk. When credit risk information is only normal, investors do not respond to that information. Research by Lestari (2015) and Heryana (2018), which also did not find the effect of credit risk on stock prices, may also be caused by this phenomenon.

The argument of why liquidity risk does not affect stock returns may also be the same as the above argument. However, the general condition of liquidity risk is different from credit risk because credit risk is generally in the best position while liquidity risk is not in the best position. If bank liquidity is in an ideal position, it will also raise profitability issues. If bank liquidity is high, many funds will not be distributed. The fewer funds channeled, the smaller the potential profit to be obtained. Maybe that's the reason why investors don't respond negatively when liquidity risk increases. Maharani (2015) and Ayem and Wahyuni (2017) studies which found no effect of liquidity risk on stock prices might be able to use this explanation.

Why isn't corporate governance being responded by investors? There are at least two arguments that explain it. First, related to data credibility. Corporate governance data used in this study is self-assessment data. It may be that investors do not trust the validity of the self-assessment. Second, investors consider that corporate governance information is less important unless there are extreme conditions. The data in Table 1 shows that there are no banks with very bad governance and the range between the highest and lowest values is not too wide. In essence, nothing is surprising about bank governance so investors do not respond to information about governance.

Why do investors respond to earnings information? Viewed from the standpoint of the owner (investor), earnings are the most important information because profits determine the amount of dividends that will be received by investors. So, it is natural that investors still respond positively to earnings information. Perhaps, for this reason, this study found that earnings have a positive effect on stock returns, as well as Lestari's (2015) research. Then why is capital also responded by investors? Perhaps because the capital component is considered more representative of the risk profile of the bank. CAR, which is a measure of the capital component, contains elements of credit risk and market risk. If the bank has a high CAR, the bank is considered to be more secure because if there is a loss, the bank will be able to cover up by using the capital it has. Perhaps for this reason, Heryana's research (2018) also found that capital has a positive effect on stock returns.

Conclusion

This study found evidence that investors did not provide the same response to the four components of banking health. Investors respond positively to earnings and capital components information but do not respond to the risk profile component (credit risk and liquidity risk) and the corporate governance component. Credit risk information that is not responded to by investors may be because credit risk information is announced regularly and there is no surprising information. Liquidity risk is not responded by investors, it could also be because there are no surprising data. Besides that, it is also because of the high liquidity of the bank that it will negatively impact the profit potential. Corporate governance is not responded by investors because the data validity problems or information is considered less important. Earnings have been responded positively because investors consider earnings to be the most important health component because they are directly related to the amount of dividends that investors will receive. Capital is responded to by investors because capital reflects bank security and is also a reflection of credit risk and market risk.

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