INFLUENCE OF BANK HEALTH LEVEL ON STOCK RETURN

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Article history: received 31 November 2023; revised 02 December 2023; accepted 04 January 2024 DOI: https://doi.org/10.33751/jhss.v8i1.8760

Abstract. The main objective of this research is to assess the correlation between the soundness of banks and their stock returns. The investigation encompasses 39 banking firms that are publicly traded on the Indonesian stock exchange throughout the time span from 2018 to 2021. A quantitative approach is employed, involving the use of descriptive analysis for panel data. The findings indicate that the amalgamation of NPL, GCG, ROA, and CAR collectively exert an influence on stock returns. However, it's noteworthy that only the ROA and CAR variables exhibit a distinct partial impact on stock returns. The conclusions drawn from this study encompass a few implications. One of them is the anticipation for banking institutions to effectively optimize and elevate their health status, consequently leading to an enhancement in the returns of banking stocks. From an investor's perspective, this research serves as a pertinent factor to weigh when making investment decisions, by examining internal dynamics of companies, which are some of the pivotal elements steering stock returns.

Keywords: NPL; GCG; ROA; CAR; stock return

I. INTRODUCTION

Currently, the progress of the banking industry in Indonesia is experiencing significant growth, primarily due to technological advancements and digitalization, supported by the increasing number of banking companies engaging in digitalization. This digitalization of the banking industry is driven by the growth of digital payment systems. According to Bank Indonesia, the value of digital banking transactions has increased by 62.82% since 2021, while the value of electronic money transactions has risen by 66.65%. The digitalization of banking also has a positive impact on the stock returns of banks in Indonesia (Sari [1]). Stock return refers to the calculation of gains or losses for investors from their stock investments during a specific period, taking into account factors such as stock prices and dividends received by shareholders. Presented below are the stock returns of companies in the sub-sector of the banking industry listed on the Indonesia Stock Exchange (BEI) during the period of 2018-2021.



Figure 1. Stock Return of Banking Sub-Sector 2018-2021 Source: Processed Data (2023)

Based on Figure 1, this data is obtained from the Indonesia Stock Exchange and indicates that the stock returns

in the banking industry sub-sector from 2018 to 2021 generally experienced fluctuations. The highest growth in stock returns occurred in 2021 at 106.62%. Meanwhile, the stock return in 2018 had a low growth of -4.85%. The growth rate of stock returns recorded in 2021 is not solely due to the development of digitalization in the banking sector but is also influenced by the strong performance of banks. This factor can be observed through the analysis of the health of the respective banks. According to the provisions in Regulation OJK No. 4/POJK.03/2016, the assessment of bank health, which focuses on risks or what is known as Risk-Based Bank Rating (RBBR), is conducted using the RGEC approach (Risk Profile, Good Corporate Governance, Earnings, and Capital). Risk Profile refers to the potential losses that may arise when investment returns do not align with expectations. The measurement of Risk Profile applied in this study uses Non-Performing Loans (NPL). According to Bank Indonesia Circular Letter No. 12/24/DPDNP/2011, NPL reflects the condition where customers are no longer able to meet their obligations to the bank as per the agreements. Any increase in the amount of troubled loans (NPL) will have an adverse impact on the performance of stock returns (Hariyani [2]). Research conducted by Sari [3] reflects that NPL has a significant negative impact on stock returns. However, in a study carried out by Afriyanti and Ardiyanti [4], it was concluded that NPL does not have a significant influence on stock returns. Assessment of the effectiveness of management in implementing the principles of Good Corporate Governance Indonesia (GCG) (Bank Circular Letter No. 12/24/DPDNP/2011) is another aspect. Strong performance in company operations potentially aligns with income levels, which in turn will affect the company's stock return [5]. According to research conducted by Khairani and Dillak [6], it

was found that GCG does not have an impact on Stock Return. A similar result is also shown by research carried out by Hadiwijaya [7], revealing a positive relationship between GCG and bank stock returns in Malaysia. Earnings are a component in assessing a bank's health, reflected in its income aspect. The measurement of Earnings used in this study is Return on Assets (ROA). ROA is used as an evaluative measure of management's effectiveness in managing banking assets, with a focus on profit Circular achievement (Bank Indonesia Letter No. 12/24/DPDNP/2011). Based on findings from research conducted by Ismal et al. (2018), it was revealed that ROA has a positive and significant correlation with bank stock returns. Conversely, in the results obtained by Ghozali [8] from the banking sector in Indonesia, no significant influence was detected between ROA and bank stock returns. Capital refers to the amount of capital a bank possesses and is an indicator to assess the financial health of the bank. The capital assessment indicator used in this study is Capital Adequacy Ratio (CAR). CAR is used to measure the bank's level of capital adequacy in facing potential risks (Hery [9]). The results of the investigation conducted by Kurniawan and Purnama [10] indicate a positive correlation between CAR and stock return in Indonesian banking companies. On the other hand, research by Danbolt [11] involving banking companies in Norway found that CAR does not have a detected influence on stock returns.

II. RESEARCH METHODS

The research method applied was a quantitative descriptive approach, which is a method of data analysis that utilizes numerical data to test hypotheses (Sugiyono [12]). In this study, the sample consisted of companies in the banking industry sub-sector that were listed on the Indonesia Stock Exchange during the period of 2018-2021. There were 39 companies taken as the sample and selected through purposive sampling approach. The data used in this study was secondary data obtained from the annual reports of the companies provided on the websites www.idx.co.id and www.yahoofinance.com. The analytical approach applied in this research involved descriptive statistical analysis, panel data regression analysis, as well as hypothesis testing through the implementation of the F-test and t-test.

III. RESULTS AND DISCUSSION

Descriptive Statistical Analysis

Based on the results of descriptive statistical analysis to analyze the basic information of the independent and dependent variables, the obtained results are as follows, as highlighted below:

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	Ν	RETURNSAHAM	NPL	GCG	ROA	CAR
Mean	149	0.437802	0.018338	2.067114	0.002438	0.307479
Median	149	-0.002900	0.014000	2.000000	0.005700	0.219200
Maximum	149	15.84780	0.099200	4.000000	0.051600	3.905000
Minimum	149	-0.999900	0.000000	1.000000	- 0.158900	0.090100
Std. Dev.	149	1.876376	0.015221	0.502217	0.031938	0.385705

Table 1: Descriptive Statistica	l Analysis
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Source: E-Views 12 Output Results, 2023

From the results of the descriptive statistical analysis, it can be observed that the valid data count in this study amounts to 149 out of a total sample of 156 data. The findings for the focused variable, namely stock return, indicate that the average stock return of banking companies during the 2018-2021 period is 0.437802, with a standard deviation of 1.876376. This finding indicates that the standard deviation value is larger than the mean, suggesting significant data variability in this study. In the first aspect of the independent variable, namely Non-Performing Loans (NPL), it was found that the mean value reaches 0.018338. This result reflects that banking companies have managed the risk of customer loan defaults to the bank quite well during the 2018-2021 period. The maximum NPL value, which is 0.099200, is attributed to the performance of Bank Neo Commerce, Tbk in 2018. Conversely, the minimum NPL value is 0.000000, recorded for Bank Capital Indonesia Tbk in 2021, as well as Bank Aladin Syariah Tbk from 2018 to 2021. For the second independent variable, namely Good Corporate Governance (GCG), the findings indicate that during the 2018-2021 period, GCG in banking companies is reflected by an average self-assessment score of approximately 2.067114. This result signifies that the banking industry has successfully implemented corporate GCG practices. Bank Mandiri, Tbk, and Bank OCBC NISP Tbk obtained the lowest average scores in GCG with a value of 1, whereas Bank Pembangunan Daerah Banten Tbk achieved the highest score in the GCG category with a score of 4.

In the third independent variable, namely Return on Assets (ROA), it can be seen from Table 1 that the average ROA value is around 0.002438. This indicates that the performance of banking companies in utilizing their assets to generate profits is not yet optimal. The highest peak of ROA value, which is 0.051600, was achieved by Bank Bisnis International, Tbk in 2021. On the other hand, the lowest ROA value, reaching -0.158900, was identified at Bank Jago, Tbk in 2019. In the fourth independent variable, namely Capital Adequacy Ratio (CAR), the average CAR value is found to be 0.307479. This result reflects that during the 2018-2021 period, banking companies have maintained sufficient capital to mitigate potential losses. The highest CAR value, which is 3.905000, was recorded by Bank Aladin Syariah, Tbk in 2021. Conversely, the lowest CAR value was identified at Bank Pembangunan Daerah Banten, Tbk in 2019, with a value of 0.090100.

Panel Data Regression

From the data processing steps that have been carried out using the panel data regression analysis approach to uncover the relationship between independent and dependent variables, the following is an overview of the results of the panel data regression analysis (table2).

Based on the results of the Fixed Effect model testing above, the panel data regression equation that can be formulated is as follows:

 $Y{=}\ 0.406568\ {\text{-}}\ 1.857038X1\ {\text{-}}\ 0.813345X2\ {\text{-}}\ 17.50657X3\ {\text{+}}\ 5.819067\ X4\ {\text{+}}\ \epsilon$

note:

Y: Return Saham X1: NPL



X2: GCG
X3: ROA
X4: CAR
ε: Error term

$T_{-1} = 0$	D	Data	Demandian	A		D
Table 7	Panel	глятя	Regression	Anar	vere	Recinite
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Variable	Coefficient	Std. Error	t-Statistic	Prob.
С	0.406568	1.131157	0.359427	0.7200
NPL	-1.857038	13.24654	-0.140190	0.8888
GCG	-0.813345	0.501254	-1.622619	0.1076
ROA	-17.50657	5.919199	-2.957592	0.0038
CAR	5.819067	0.996006	5.842402	0.0000

Effects Specification						
Cross-section fixed (dummy variables)						
Root MSE	1.250556	R-squared	0.552811			
Mean dependent var	0.437802	Adjusted R-squared	0.375623			
S.D. dependent var	1.876376	S.E. of regression	1.482666			
Akaike info criterion	3.862235	Sum squared resid	233.0196			
Schwarz criterion	4.729145	Log likelihood	-244.7365			
Hannan-Quinn criter.	4.214446	F-statistic	3.119914			
Durbin-Watson stat	2.107458	Prob(F-statistic)	0.000001			

Source: E-Views 12 Output Results, 2023

Based on the results of the equation above, the following conclusions can be drawn:

- 1. The constant value of 0.406568 reflects a situation where factors like NPL, GCG, ROA, and CAR as independent variables lead to a Y value of 0.406568.
- 2. The regression coefficient value of -1.857038 indicates that each incremental change in NPL corresponds to a decrease in stock return by approximately -1.857038. This relationship also applies conversely, where each decrease in NPL is associated with an increase in stock return by the same value, -1.857038.
- 3. The regression coefficient value of -0.813345 signifies that when the GCG variable experiences a positive change of one unit or remains constant, its impact results in a decrease in stock return by around -0.813345.
- 4. The recorded regression coefficient value of -17.50657 provides insight that each positive change in the Earnings (ROA) variable, whether in the scale of one unit or under stable conditions, leads to a decrease in stock return by approximately -17.50657.
- 5. The regression coefficient value of 5.819067 indicates that any change occurring in the Capital (CAR) variable, whether it's an increase of one unit or remains stable, results in an increase in stock return by around 5.819067.

The Influence of NPL, GCG, ROA, and CAR on Stock Return

From the simultaneous analysis conducted (F-test), it was found that the Prob(F-statistic) value is 0.000001, which is smaller than 0.05. This condition leads to the rejection of H0 and the acceptance of Ha. This conclusion indicates that all independent variables, including NPL, GCG, ROA, and CAR, collectively influence the stock return variable. Meanwhile, the results of the coefficient of determination testing show an Adjusted R-squared value of 0.375623. This information

explains that the independent variables, including NPL, GCG, ROA, and CAR, have the capability to influence the Stock Return variable by approximately 37.56%. These findings align with those of Tahmat and Nainggolan as well as Femayonah and Wafiroh [13], who also observed a significant impact between RGEC and stock return.

The Influence of NPL on Stock Return

Based on the results of partial testing (t-test), the regression coefficient value for the NPL variable is -1.857038, with a probability (p-value) of 0.8888, which is greater than 0.05. This means that partially, the NPL variable is not proven to have an impact on stock return. The NPL ratio demonstrates the management's efficiency in handling problematic credit risks. When the NPL value tends to be high, it has the potential to undermine investor confidence in banking institutions. Furthermore, this can impede the banking's ability to generate profits (Femayona and Wafiroh [13]). From the results of this study, it is identified that investors might not focus too much on the NPL aspect, especially if NPL figures are within the limits set by the Bank Indonesia. These findings support the view also expressed by Femayonah and Wafiroh [13], stating that NPL does not have an impact on stock return. The same notion is presented in Viorentina's study [14], indicating that NPL doesn't show a significant influence on stock prices.

The Influence of GCG on Stock Return

Based on the results of partial testing (t-test), the regression coefficient value for the GCG variable is -0.813345, with a probability (p-value) of around 0.1076, which exceeds the value of 0.05. Therefore, it can be concluded that GCG does not have an impact on stock return, partially. In this context, it can be stated that the quality of the implemented GCG components by banking companies doesn't affect investor decisions when making investments. These findings align with the results found in Viorentina's study [14] as well as the viewpoint of Khairani and Dillak [6], indicating that GCG does not have a significant influence on stock prices.

The Influence of ROA on Stock Return

From the results of partial testing (t-test), it's revealed that the regression coefficient value for this variable reaches - 17.50657, while the probability value (p-value) falls within the range of 0.0038, which is less than 0.05. This conclusion indicates that, in partial context, the ROA variable has an impact on stock return levels. A higher efficiency level of assets generated by companies reflects better performance in managing assets to generate profits. Previous research by Yani and Santosa **[15]** also found a correlation between ROA and stock return levels.

The Influence of CAR on Stock Return

From the results of partial examination (t-test), it's evident that the regression coefficient value for this variable is 5.819067, and the p-value is recorded at around 0.0000, which is lower than 0.05. This conclusion indicates that, in a partial context, the CAR ratio variable has an impact on stock return. The better the CAR ratio held by banking companies, the better the company's ability to manage credit-related risks and other risky assets. This can enhance investor confidence to invest, and the result is an increase in stock return. These findings are in line with the research by Viorentina [13], which shows a

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positive impact between CAR and stock prices, as well as the study conducted by Femayonah and Wafiroh [13], which found that CAR has an influence on stock return levels.

III. CONCLUSION

Based on the research findings, it can be concluded that the independent variables, namely NPL, GCG, ROA, and CAR, collectively have an impact on the dependent variable, which is the stock return of banking companies listed on the Indonesia Stock Exchange (IDX) during the 2018-2021 period. However, in partial testing, it can be affirmed that NPL does not have an influence on stock return. Although descriptive statistical analysis shows a promising average NPL value, this is not a determining factor for investors in making investment decisions. The next variable, GCG, also does not affect the stock return of banking companies listed on the IDX during the 2018-2021 period. This implies that investors do not view this variable as a primary criterion for making investments, even though the management has effectively adhered to GCG principles. On the other hand, Earnings measured through ROA demonstrate an influence on the stock return of banking companies listed on the IDX during the 2018-2021 period. Similarly, CAR has also been proven to influence the stock return of banking companies listed on the IDX during the same period. Based on the findings from this research, it would be beneficial for future studies to expand by adding or modifying independent variables in the RGEC method, aiming to achieve more comprehensive data outcomes. For investors, it is hoped that the results of this research will encourage smarter decisionmaking in evaluating investment opportunities in the banking sector. The implications of these research findings encompass several aspects, where banking company management should focus on efforts to optimize and enhance the financial health of banks in an efficient manner, leading to positive impacts on banking stock return performance. For investors, these research results can serve as valuable sources of information aiding in investment decision-making. considering the internal conditions of the company, which is one of the factors affecting stock return performance.

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