

Factors Affecting the Performance Risk of Banks Listed on the Indonesia Stock Exchange

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ABSTRACT

This study aims to identify variables that affect the performance of banks listed on the Indonesia Stock Exchange. The addition of cost efficiency variables as independent variables is a novelty of this study. This research method involves collecting data from 17 banking companies over a six-year period (2017–2022), and applying data processing analysis using panel data regression analysis techniques. The results of the study found that Capital has a positive impact on Liquidity (LIQ) and Cost Efficiency has a positive impact on Return on Assets (ROA). The implication for financial managers is to choose the best way to utilize assets to achieve business goals, especially to improve shareholder welfare. This study emphasizes the importance of capital and cost efficiency for investors when choosing investment opportunities in banking companies in Indonesia.

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1. INTRODUCTION

Banks play an important role in the financial and economic system, and are also one of the conditions for long-term economic growth. Bank performance can be evaluated at the micro and macro levels. In particular, competition negatively affects banking performance at the micro level, so the main goal is to make a profit, which is important for banks to grow sustainably. Commercial banks with lower costs tend to get a larger market share. Therefore, capital structure plays an important role in determining banking performance (Oanh, Van Nguyen, Le, & Dhuong, 2023). Capital structure and liquidity, as well as bank performance, have a causal relationship. Banks must maintain an appropriate amount of cash, liquid assets, and potential credit lines to meet liquidity in providing banking services to consumers who need funds for expansion (Huu Vu & Thanh Ngo, 2023).

Financial activities between parties with excess funds (surplus) and parties in need of funds (deficit) can be used as intermediaries in the banking world. By providing loans and credit, banks facilitate investment and economic growth. In this case, the financial performance of banks, such as interest rates, credit policies, and liquidity, will affect the access of the public and companies to funds needed for business expansion and investment (Hordofa, 2023). If banks experience financial difficulties or suffer large losses, this can lead to overall financial instability. In extreme situations, bank failure can trigger a financial crisis that has a negative impact on the economy at large. Therefore, the financial performance of banks must be closely monitored to ensure the stability of the financial system (Zelalem & Abebe, 2022).

Good financial performance makes it easier for banks to obtain funds from financial markets. Banks with good financial stability often get loans from external parties, such as loans from other banks, bond issuances or stock offerings (Xie, Zhang, Liu, Yang, & Hu, 2023). Banking has

set liquidity risk as a top priority. Banks must set standards and regulations to manage and assess liquidity regularly and efficiently (Hamdy, Mohamed, & Mahdy, 2023). Financial Performance is proxied by Return on Assets (ROA), and Return on Equity (ROE), namely Return on Assets (ROA) shows the ratio used to measure the extent to which a company is able to generate profits from its assets (Arifah, Rahmawati, Probohudono, Honggowati, & Kiswanto, 2023a). Factors that can affect a company's financial performance and credit risk are Capital and Diversification (Ghenimi, Chaibi, & Omri, 2024).

The ability of a company to meet its financial obligations in the short term is known as liquidity. In a situation where the company is undercapitalized, the company faces difficulties in managing cash flow, paying debts, and meeting daily liquidity needs. However, strong capital can help companies face liquidity challenges and minimize the risk of inability to pay debts when due (Ahmad, Yovita, Lestari, & Leon, 2023). Diversification improves financial performance, credit risk, and liquidity risk, and can improve the company's financial performance. By diversifying the investment portfolio, the company can reduce its dependence on a single asset or business (Nguyen, Tran, & Pham, 2023). Larger banks may have greater resources to conduct in-depth credit analysis and better monitor credit risk (Agustina, Haymans, & Amran, 2023).

The novelty of this study is the addition of the Cost efficiency (CER) variable in accordance with research conducted by Khalifaturofi'ah (2023) which states that cost efficiency has a positive effect on financial performance. In general, the more innovative a bank is, the more efficient the bank is. Better bank financial performance is determined by the efficiency of its cost management. An efficient bank will easily find and manage profits so that its financial performance will increase. This research will be conducted from 2017-2022 at banking companies in Indonesia. This research was conducted with the aim of determining the factors that influence the performance risk of banks listed on the Indonesia Stock Exchange.

2. METHOD

This study aims to determine and test the effect of capital, diversification, and cost efficiency on financial performance, credit risk, and liquidity risk. Secondary data obtained and collected previously were taken for six years (2017-2022). This method approach ensures that the sample used represents the population of banking companies listed on the IDX and is in accordance with the research framework. This data comes from annual reports that have been published and can be viewed via the Indonesia Stock Exchange (IDX) website. This study uses the panel data regression analysis method with E-views 10 software. In this study, the sampling method used is purposive sampling. The type of data used in the study is quantitative. The data collection method in the study is the secondary data collection method. The data source comes from the Indonesia Stock Exchange website (<https://www.idx.co.id/>) and from each company's website. The sample of this study covers 100 financial reporting periods, consisting of 17 banking companies in Indonesia for 6 years (2017-2022 period).

Table 2. Sampling Criteria

Information	Amount
Banking Companies in Indonesia for the period 2017-2022	47
Banking companies that do not have data available regarding the measurement of each variable in each company.	(3)
Number of companies eligible for sampling	17
Total number of samples (6 periods)	102

3. RESULT AND DISCUSSION

Descriptive Statistical Analysis

Descriptive statistics is a branch of statistics that deals with the collection, presentation, and interpretation of data for the purpose of explaining or describing a particular phenomenon or population. The main purpose of descriptive statistics is to summarize and present data in a concise and informative manner in order to provide a clear understanding of the basic characteristics of the observed data.

Table 2. Descriptive Statistical Analysis Results

Variable	Mean	Maximum	Minimum	Std. Dev.
ROA	1.5078	18.06	-9.23	3.1721
ROE	8.9442	19.0262	-20.15	19.0262
Zscore	31.6165	123.93	-20.15	40.2528
LIQ	192.3476	2206.29	0.001334	476.9467

Source: Data processing using E-views

Return on Assets(ROA), the mean value is 1.5078 with a standard deviation value of 3.1721. The minimum ROA value is -9.23, which is owned by ARTO in 2019, while the maximum value is 18.06, which is owned by AGRO and BACA in 2021. Return on Equity (ROE) has a mean value of 8.9442 with a standard deviation value of 19.0262. ARTO in 2018 had a minimum size value of -20.15, while AGRO in 2021 had a maximum value of 123.93. Log Zscore has a mean value of 31.6165 with a standard deviation value of 40.2528. ARTO in 2020 has a minimum Log Zscore value of -0.43816, while BINA in 2022 has a maximum value of 162.2627. Finally, LIQ has a mean value of 192.3476 with a standard deviation value of 476.9467. AMAR in 2020 has a minimum LIQ value of 0.001334, while BINA in 2017 has a maximum value of 2206.29.

Test Individual (T-test)

This test aims to determine whether each independent variable has a significant impact on the dependent variable. The criteria for assessment are if the significance value (sig) of the t-test is less than 0.05, then the null hypothesis (H_0) will be rejected, indicating that the independent variable has a significant effect on the dependent variable. Conversely, if the significance value (sig) of the t-test is greater than 0.05, then the null hypothesis (H_0) is accepted, indicating that the independent variable does not have a significant impact on the dependent variable.

H_1 : There is an influence of Capital on Financial Performance, Credit Risk, and Liquidity Risk.

Based on the t-test, the p-value is 0.0208. This value indicates that the p-value < alpha used in this study, which is 0.05. In this context, because the resulting p-value is smaller than alpha, H_0 is accepted. This shows that there is sufficient evidence to reject the null hypothesis (H_0) and states that capital has a significant effect on liquidity risk. In line with research by Ghenimi et al., (2024) shows that capital has a positive effect on liquidity risk. Sufficient capital allows banks to pursue profitable business opportunities and support sustainable growth. With strong capital, banks can increase revenue, manage costs more efficiently, and achieve better profitability. As a result, the bank's financial performance can improve. In contrast to research by Imani & Pracoyo (2018) it can be concluded that capital and performance do not have a linear relationship.

H_2 : There is an influence of Diversification on Financial Performance, Credit Risk, and Liquidity Risk.

Based on the t-test, the p-value was obtained as 0.1627 in model 1 (ROA), 0.2236 in model 2 (ROE), 0.9422 in model 3 (Log Zscore), and 0.1594 in model 4 (LIQ). These values indicate that the p-value > alpha used in this study, which is 0.05. In this context, because the resulting p-value is greater than alpha, H_0 is rejected. H_0 in the t-test is that the regression coefficient of the diversification variable is equal to zero, which means that the independent variable does not have a significant effect on Financial Performance, Credit Risk, and Liquidity Risk. When the p-value > alpha, this indicates that this study does not have enough statistical evidence to state that the diversification regression coefficient significantly affects Financial Performance, Credit Risk, and Liquidity Risk in the regression model. In line with research conducted by Ghenimi et al., (2024) showed that diversification has a significant positive impact on this relationship. By allocating resources to different business segments or geographic regions, banks can reduce their dependence on a particular sector or market. Similarly, Duho & Onumah's (2019) research found that diversification has a significant positive impact on the relationship. Diversification can help reduce credit risk by reducing exposure to a single sector or borrower that is vulnerable to instability.

H_3 : There is an influence of Cost Efficiency on Financial Performance, Credit Risk, and Liquidity Risk

Based on the t-test, the p-value obtained was 0.0228. This value shows that the p-value < alpha used in this study, which is 0.05. In this context, because the resulting p-value is smaller than alpha, H_0 is accepted. This shows that there is sufficient evidence to reject the null hypothesis (H_0) and states that cost efficiency has a significant effect on return on assets. In line with research conducted by Ghenimi et al., (2024) showed that cost efficiency has a significant positive impact on ROA. With increasing net income, the company's ROA can increase due to higher income compared to the assets used. Lower costs mean higher net income for each unit of sales. In contrast to PH Nguyen & Pham (2020) who showed that cost efficiency has a significant negative impact on ROA. If the company is not efficient in managing its operating costs, high costs can reduce its profitability. High operating costs mean lower net income for each unit of sales. In this case, ROA can decrease due to lower income compared to the assets used.

Research Regression Model

The panel data regression model used by the previous study Ghenimi 2024 can be written as follows:

$$ROA = 0.014492 - 0.001143 * CAP + 0.000406 * DIV + 0.000220 * CER$$

$$ROE = 0.103789 - 0.073412 * CAP + 0.002136 * DIV + 0.000940 * CER$$

$$Log Zscore = 31.00713 + 1.622022 * CAP - 0.004490 * DIV - 0.000587 * CER$$

$$LIQ = 3.093552 + 3.972859 * CAP + 0.053492 * DIV - 0.009981 * CER$$

Information :

ROA	: <i>Return on Asset</i>		
ROE	: <i>Return on Equity</i>	Zscore Log	: <i>Insolvency Risk</i>
Cons	: Alpha Constant	LIQ	: <i>Liquidity</i>
STAMP	: Capital		
DIV	: Diversification		
CER	: <i>Cost Efficiency</i>		

4. CONCLUSION

Based on the results and discussion above, it can be concluded that capital and cost efficiency have a significant influence on financial performance and risk, especially liquidity risk and Return on Assets (ROA). Capital is shown to play a positive role in reducing liquidity risk, while cost efficiency improves profitability by increasing ROA. However, diversification showed no significant effect on financial performance, credit risk, or liquidity risk. Thus, a strong capital strategy and cost efficiency proved to have more impact on improving performance and risk management than diversification.

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