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BANK BUKOPIN ROA AND ROE ANALYSIS ON DEBT TO EQUITY RATIO (DER) POST ACQUISITION OF KOOKMIN BANK

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Abstract

This research aims to analyze the effect of Return on Assets (ROA) and Return on Equity (ROE) on the Debt to Equity Ratio (DER) at Bank Bukopin after its acquisition by Kookmin Bank during the 2021–2024 periode. This acquisition is expected to strengthen the capital structure and improve Bank Bukopin's financial performance through improving efficiency and profitability. This research uses a quantitative approach with secondary data obtained from Bank Bukopin's quarterly financial reports published by the Financial Services Authority (OJK) and the bank's official website. Data analysis was carried out using the multiple linear regression analysis method, but hypothesis testing only focused on the t test to determine the partial influence of each independent variable on the dependent variable. The research results show that the ROA variable has a significant negative effect on DER, which means that increasing the efficiency of asset use in generating profits can reduce the level of bank dependence on debt-based funding. Meanwhile, the ROE variable has a significant positive effect on DER, which indicates that increasing profitability based on equity tends to be accompanied by an increase in the use of debt to maximize returns to shareholders. These results indicate that after the acquisition of Kookmin Bank, Bank Bukopin experienced improvements in aspects of profitability and capital management, although the financing structure still utilizes leverage as a performance improvement strategy.

Keywords:
Return on Asset (ROA) and Return on Equity (ROE)

Introduction

In the era of globalization and consolidation of the financial industry, interbank acquisitions have become one of the main strategies for large banks to expand market reach, strengthen capital capacity, increase operational efficiency and strengthen competitiveness. It is hoped that the acquisition process will create synergies that will result in increased financial performance of the acquiring bank in the medium to long term. One indicator that is often used to measure the financial impact of acquisitions is Return on Assets (ROA) and Return on Equity (ROE), which reflect the efficiency of asset utilization and the ability to generate returns from one's own capital (Fahmi, 2015).

In the banking context, ROA and ROE are important benchmarks because the banking industry relies heavily on asset management (credit, securities, liquidity) and capital structure. ROA measures net profit relative to total assets, while ROE shows net profit relative to shareholder equity. The high or low ROA and ROE after an

acquisition is a signal whether the post-acquisition integration and synergy is successful or not.

One empirical study on cross-border banking shows that takeover banks tend to experience increased profitability in the three years after the takeover, mainly due to improved cost efficiency and risk management (Claessens, Demirgüç-Kunt, & Huizinga, 2010). In the domestic banking context, several studies have also found that ownership changes can affect bank performance and risk (for example, research on Indonesian banks) (Saputra, 2014).

Specific to the Kookmin Bank case, local research shows that after Kookmin took over another bank (for example the case of Bank Bukopin as an acquisition target), changes in financial performance became the object of attention. Putri & Murwanti (2024) in their research "Comparative Analysis of Financial Performance at Kookmin Bank Before and After the Acquisition of PT Bank Bukopin Tbk" reported that there was a significant difference only in the Capital Adequacy Ratio (CAR), but ROA and ROE did not show significant differences between the period before and after the acquisition (significance value > 0.05) (Putri & Murwanti, 2024). This shows that in the case of Kookmin – Bukopin, the acquisition has no clear impact on increasing the efficiency of asset utilization or return on own capital.

Nevertheless, Kookmin's (KB Financial Group) financial report for the first semester of 2024 indicates that ROA is 0.54 % and ROE is 8.38 % (KBFG, 2024) — indicating that the bank continues to maintain a reasonable level of profitability in the context of the banking industry. Meanwhile, the 2024 full annual report states ROA of 0.57% and ROE of 8.86% for the overall operations of KB Kookmin Bank (KBFG, 2024).

However, it is important to note that single profitability figures such as ROA and ROE are not enough to judge the overall success of an acquisition. There are moderating factors such as cost structure, IT system integration, credit quality, non- performing loans, leverage, and macroeconomic conditions that influence the post- acquisition impact. In addition, the short-term and long-term impacts can be different: in the short term, acquisitions can incur integration burdens, restructuring and transaction costs, which can suppress ROA/ROE; on the other hand, in the medium to long term, operational synergies and economies of scale are expected to drive increased profitability (Gaughan, 2017).

Other, more general research states that changes in ownership can indeed trigger efficiency and performance improvements, but the impact is very dependent on the extent to which the acquisition is successfully carried out - whether there is restructuring, unification of organizational culture, optimization of operations, and good risk control (Saputra, 2014). In many cases, changes in ownership do not immediately have a significant impact on ROA or ROE if the integration process is slow or bureaucratic obstacles are high.

With this background, it is necessary to carry out an in-depth analysis of the ROA and ROE of the acquiring bank (KookminBank or KB Financial Group entity) in the period before and after the acquisition. The main focus is to find out whether the acquisition has succeeded in increasing asset efficiency and return on equity, or whether it has created pressure that reduces profitability. In addition, the analysis must be linked to supporting or inhibiting factors such as asset quality, capital

structure, operational expenses, as well as external factors (macroeconomics, banking sector competition).

Methodologically, this research will compare ROA and ROE values for several years before the acquisition and for several years after, then carry out statistical tests (paired difference tests, significance tests) as well as regression analysis with control variables. Previous findings such as Putri & Murwanti (2024) stated that there were no significant changes found in ROA and ROE after the acquisition of Kookmin – Bukopin, even though the CAR changed significantly. This leaves open the question of whether this is a special case or reflects a general pattern in the banking industry that makes acquisitions.

Thus, this research has high relevance, both academically and practically. From an academic perspective, the research will contribute to the literature combining financial theory (ratio analysis) and merger & acquisition studies in the banking sector. Practically, the results of the analysis can provide input for bank management and regulators regarding whether the acquisition strategy is indeed able to improve financial performance and whether there are key aspects that must be controlled so that synergy is achieved.

Finally, based on the description above, a problem formulation can be developed: Have the ROA and ROE of the acquiring bank experienced a significant increase after the acquisition of KookminBank? If yes, what factors influenced these changes? This research aims to answer these problems through quantitative analysis based on financial reports and adequate statistical methodology.

Theoretical Framework

Many theories about banking performance mention Return on Assets (ROA) and Return on Equity (ROE) as key indicators that reflect operational efficiency and effective use of capital. ROA measures a bank's ability to generate profits from all the assets it owns after taking into account all its liabilities and expenses, while ROE looks at the return on its own capital, namely how net profits are distributed to shareholder equity. In the context of bank acquisitions, the post-takeover transition period often brings major changes in organizational structure, system integration, asset and capital allocation, corporate culture, as well as risk and operational policies. If the acquisition is successful in generating synergies, then asset efficiency and return on capital are expected to increase, reflected in an increase in ROA and ROE compared to the period before the acquisition.

So that this theory can be analyzed systematically, several relevant theories and literature need to be used as a basis. First, the theory of synergy in mergers and acquisitions explains that merging or taking over two entities allows cost reduction through duplication of functions (redundancy), scale optimization (economies of scale), and better resource allocation. In banking, synergy can emerge through branch network consolidation, combining staff or IT systems, product harmonization, and other operational efficiencies. Synergy can also increase banks' bargaining power in obtaining funds (funding), reduce costs of funds, reduce operational costs, and increase credit capacity and non-interest income.

capital structure theory is important in explaining changes in ROE and ROA after acquisition. Capital modeling includes equity and debt (liabilities), as well as how the bank manages leverage. Trade-off theory and pecking order theory are

often used: trade-off theory emphasizes that banks will choose a combination of debt and capital so that the tax benefit margin from debt can be utilized, while still keeping the risk of bankruptcy or distress within reasonable limits; The pecking order theory states that banks prefer internal funding if they can, and only use debt if necessary. In acquisitions, the capital structure often changes—either due to the acquirer's capital injection, due to adjustments in assets and liabilities, or due to changes in minimum capital regulations—which will then affect the bank's ability to generate ROA and ROE.

Risk management theory and asset quality (asset quality theory) are inseparable components of the theoretical framework of bank performance. One of the main factors that can suppress ROA and ROE is credit risk, for example Non- Performing Loans (NPL). The higher the NPL, the greater the loss reserves and credit write-off expenses, which reduce profitability. In an acquisition, the bank resulting from the takeover must carry out due diligence on the quality of the target's assets. If there are problematic assets that are not properly identified or restructuring costs are high, then post-acquisition ROA and ROE may decline before potential synergies emerge.

The theory of operational efficiency and costs (operational efficiency) is also very relevant. Operational costs to income (cost-to-income ratio) and the efficiency of asset/liability management influence how much net income remains after variable and fixed costs. After an acquisition, banks must undergo system integration, which may incur initial costs (e.g. IT integration, training, employee redundancy) that can reduce efficiency in the short term. However, if the integration is successful, operating costs relative to revenue can fall, improving ROA and ROE.

The theory of economies of scale explains that banks that are larger in terms of assets and operations can obtain lower average costs, due to spreading fixed costs over a wider base, better negotiation of fund costs, and use of a more efficient system. Acquisitions are often a way to increase the size of a bank, so the theory of economies of scale predicts that ROA and ROE will increase with asset growth and efficiencies resulting from a larger operational scale.

xternal or contextual theories also need to be taken into account: macro- variables such as economic growth, interest rates, inflation, and banking regulations can influence a bank's overall profitability. For example, in times of economic growth, credit demand rises, NPLs may decline, and banks may earn better margins; conversely, in a tight regulatory environment or crisis period, capital costs and risks increase, which can suppress ROA/ROE, even though the acquired bank has internal advantages. In addition, minimum capital regulations, central bank supervision, and liquidity requirements also shape capital structure and its impact on profitability.

Organizational change theory and cultural integration (organizational change theory) are important in the context of acquisitions. It's not enough just financial theory; Acquisitions bring challenges to organizational culture, adaptation of systems and procedures, employee loyalty, leadership, and internal communications. Non- financial obstacles such as employee resistance, incompatible IT systems, different governance, or different decision-making cultures can reduce the speed at which synergies emerge, even resulting in waste or conflict. During the integration period, efficiency and asset quality could be compromised, which could suppress ROA/ROE

DuPont analysis is often used as a decompositional theory tool for ROE: breaking down ROE into several components such as profit margin, asset utilization efficiency (asset turnover), and leverage (equity multiplier). This theoretical framework helps in understanding whether changes in ROE after an acquisition come primarily from improved margins (e.g. interest or non-interest income is higher than costs), from increases in asset turnover (e.g. more productive use of assets), or from changes in leverage. If, for example, the acquiring bank increases leverage, ROE can increase even though ROA does not change much, but with higher risk.

By combining these theories in one theoretical framework, research can focus on how bank acquisitions (in this case KookminBank) affect ROA and ROE through the following channels: changes in capital structure, increased operational efficiency, the impact of credit risk and asset quality, the acquisition of economies of scale, as well as the effects of regulations and macroeconomic conditions. The research will analyze ROA and ROE before and after the acquisition, compared over an adequate time span, and using control variables that represent the factors above (for example NPL ratio, cost-income ratio, bank asset size, CAR, economic growth). This theoretical framework allows hypotheses such as: Bank acquisition by Kookmin will increase ROA/ROE; Improvements in asset quality and operational efficiency will mediate the effect of acquisitions on ROA/ROE; A more optimal capital structure and controlled leverage will amplify the positive effect on ROE, but with a potential trade- off in risk.

Method

.This research uses a descriptive quantitative approach which aims to describe and analyze changes in bank financial performance based on profitability ratios, namely Return on Assets (ROA) and Return on Equity (ROE), before and after the acquisition by KookminBank. A descriptive quantitative approach was chosen because this research focuses on presenting numerical data and simple statistical analysis to explain financial phenomena that occur without testing hypotheses inferentially (Sugiyono, 2019).

The type of data used is secondary data, obtained from the annual financial reports of KookminBank and PT Bank Bukopin Tbk over a six year period, covering three years before and three years after the acquisition. The main data sources include annual reports officially published by banks, the Indonesia Stock Exchange (BEI) website, and publications from the Financial Services Authority (OJK).

Data analysis is carried out by calculating and comparing ROA and ROE values from each year of observation, then interpreting the trends and changes that occur. The results of the analysis are presented in the form of tables and graphs to show the development pattern of financial performance. This approach allows researchers to identify trends in increasing or decreasing bank performance after acquisitions without drawing causal conclusions.

This research upholds the principles of academic ethics by ensuring that all data comes from official sources and is used solely for scientific purposes.

Results .

a. Normality test

According to Sugiyono (2017:239), the normality test is used to study The normality of the variables studied is whether the data is normally distributed or not No. This is important because if the data for each variable is not normal, then Hypothesis testing cannot use parametric statistics.

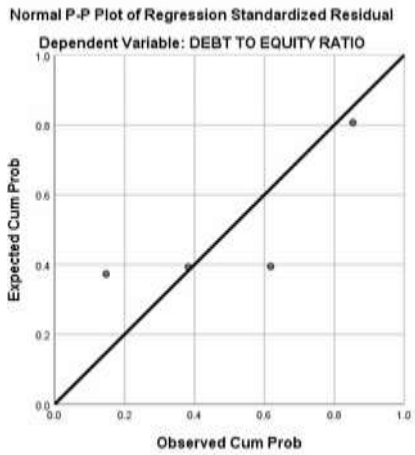
One-Sample Kolmogorov-Smirnov Test

		Return on Asset	Return on Equity	Net Profit Margin	debt to Asset Ratio	Unstandardized Residual	Unstandardized Residual	Unstandardized Residual
N		6	6	6	6	6	6	6
Normal Parameters[a,b]	Mean	.1306	.1545	.1509	.3433	.0000000	.0000000	.0000000
	Std. Deviation	.05089	.06357	.04573	.44590	.41925210	.41925210	.41925210
Most Extreme Differences	Absolute	.266	.294	.246	.460	.282	.282	.282
	Positive	.266	.294	.246	.460	.282	.282	.282
	Negative	-.243	-.215	-.227	-.315	-.198	-.198	-.198
Test Statistic		.266	.294	.246	.460	.282	.282	.282
Asymp. Sig. (2-tailed)		.200[c,d]	.115[c]	.200[c,d]	.000[c]	.148[c]	.148[c]	.148[c]

a. Test distribution is Normal.
b. Calculated from data.
c. Lilliefors Significance Correction.
d. This is a lower bound of the true significance.

From the table above, you can get the results of the Kolomogorov-Smirnov test with the Asymp value. Sig. of 0.200 is greater than 0.05 so it can be concluded that the data is normally distributed

normality test results



From the P-plot above, it shows that the points are not parallel to the diagonal line, so the P-plot has no discrepancies Normal contribution

b. Muticollinearity test

According to Ghozali (2016:82), the multicollinearity test aims to test whether the regression model found any correlation between the independent variables.A good regression model should have no correlation between variables independent. If the independent variables are correlated with each other, then these variables not orthogonal. Orthogonal variables are independent variables that have correlation values

between independent variables is equal to zero. Basis for decision making multicollinearity test is as follows:

1. The size of the Inflation Factor/VIF variable guides a regression model Multicollinearity free, namely VIF value < 10.
2. The amount of tolerance is a guideline for a regression model that is free of multicollinearity namely the Tolerance value < 0.1

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	25.407	86.962		.292	.819	-1079.545	1130.359					
	RETURN ON ASSET	168.376	2670.485	.121	.063	.960	-33763.351	34100.103	.019	.063	.063	.271	3.684
	RETURN ON EQUIT	-14.887	239.066	-.119	-.062	.960	-3052.513	3022.739	-.016	-.062	-.062	.271	3.684

a. Dependent Variable: DEBT TO EQUITY RATIO

From the multicollinearity results above, ROA AND ROE in the table above shows that there is no multicollinearity phenomenon in the data. It can be seen that if the value is 3,684>0.01 or VIP is less than 10, then there is no multicollinearity in the data

c. heteroscedasticity test

According to Ghozali (2016:83), the aim of this test is to test whether in the regression model there is an inequality of variance in the residuals one observation to another. A good regression model is one homoscedasticity, namely the variance from the residual from one observation to another others are fixed to dictate it or by looking at the graph calculation between the predicted value of the level variable (zpred) and the residual (Sresid). The basis for the Heteroscedasticity test analysis is as follows:

1. If there is a certain pattern, such as the dots forming a pattern regular (wavy widening then narrowing) then occurs heteroscedasticity.
2. If there is no clear pattern such as dots spread above and below the number 0 on the Y axis, then this indicates that this does not happen heteroscedasticity.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
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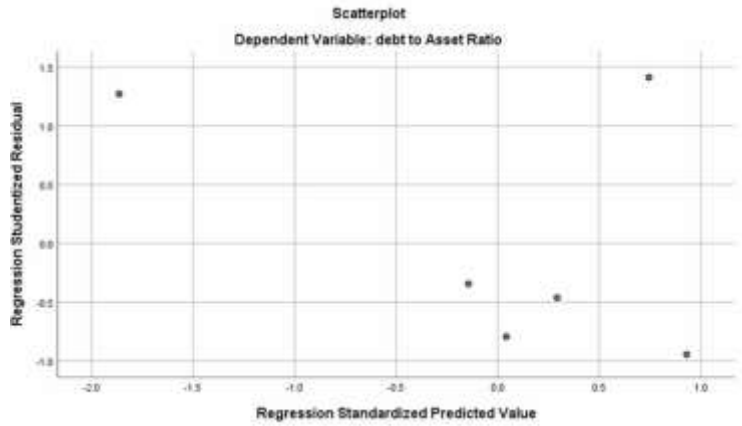
a. Dependent Variable: DEBT TO EQUITY RATIO

The results of the heteroscedasticity test on ROA and ROE in the table above show that the data does not occur heteroscedasticity. It can be seen that the significant level value is 0.819, 0.960> 0.05, so the data is declared to have no symptoms of heteroscedasticity.

heteroscedasticity test results with scatterplot graphs



Discussion

a. influence of Return on assets (ROA) on Debt to equity ratio (DER)

Based on the SPSS data above, through the multicollinearity test, it shows that return on assets (ROA) has a significance value of 0.960. This shows that return on assets (ROA) has no influence on the debt equity ratio or DER because the significance value of 0.960 is greater than 0.05

b. The influence of Return on equity (ROE) on the Debt Equity ratio(DER)

Based on the SPSS data above, the multicollinearity test shows that return on equity (ROE) has a significance value of 0.960, this is the same as return on assets (ROA) which has no influence on the debt equity ratio (DER) because it has the same significance value of 0.960 which is greater than 0.05

c. The influence of Return on assets (ROA) and Return on equity (ROE) on Debt to equity ratio (DER) at PT Bank Bukopin or Kookmin Bank

Based on the results of the t test, return on assets (ROA) has a value of 0.63, this states that the value of 0.63 is greater than 0.05, while return on equity (ROE) has a value of 0.62, which states that the value is 0.62>0.05. Apart from that, return on assets (ROA) and return on equity (ROE) have the same significance value, namely 0.960, which means return on assets and return on equity have no influence on the debt equity ratio (DER) at PT Bank. Bukopin or Kookmin Bank

Conclusion

The research results show that return on assets (ROA) has no effect on the debt to equity ratio (DER) while return on equity (ROE) has no effect on the debt to ratio (DER) because return on assets and return on equity influence each other. It is recommended that investors who want to invest some of their wealth must be more selective in choosing a bank that will be used as a place to invest so that the investment made produces a profit or gain

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