

Model Return on Equity in relation to Oil Price and Loan to Deposit Ratio

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ABSTRACT

This research can present an in-depth understanding of how companies and financial institutions deal with market complexity, improve financial performance, and innovate in the face of challenges and opportunities that arise in the current economic context. Using quantitative research methods with statistical regression models as analysis so that it can be used to evaluate the quantitative relationship between LDR, oil prices, and ROE, with the number of respondents of all bank issuers listed on the Indonesia Stock Exchange and submitting complete financial statements. There is a positive and significant influence between the Bank's LDR variable and ROE, both a significant and positive influence between the Oil Price variable and ROE, simultaneously also have a positive and significant effect. This result, although positive, does not mean that there needs to be improvement in management in an effort to improve results for the company.

INTRODUCTION

In an era of ever-changing economies and the complexity of global markets, research into the relationship between Loan to Deposit Ratio (LDR), oil prices, and Return on Equity (ROE) is becoming increasingly important. LDR reflects banks' lending policies, oil prices affect operating costs and energy sector revenues, while ROE is a key indicator of a company's financial health. A deep understanding of the interaction of these three variables can provide a more accurate view of how companies and financial institutions can optimize their performance in various market conditions.

The phenomena associated with these three variables open a research window rich in complexity and dynamics. A high loan-to-deposit ratio (LDR) may reflect the bank's efforts to increase revenue through lending (Islamiyah & Sukaris, 2023), But at the same time, it can pose liquidity risks that need to be elaborated (Wang, 2022). Secondly, fluctuations in oil prices that are strongly influenced by geopolitical factors and global market dynamics play a central role in corporate spending and state revenues (Alexeev & Zakharov, 2021; Liu, 2019). This phenomenon opens up opportunities and challenges that require in-depth analysis. Third, ROE as a benchmark of financial performance creates a foundation for further understanding of how companies manage their capital to achieve optimal returns (D.e & Osaze, 2013).

Oil price fluctuations, however, not only affect the energy sector, but also have a significant impact on monetary policy, inflation, and overall economic growth (Jassim & Bekheet, 2022). As a result, a deep understanding of how these three variables relate to each other becomes key to predicting and responding to changes in the economic environment (Stevens, 2015).

However, in this complexity, there are still knowledge gaps that need to be filled. Such gaps can include questions about the extent to which LDR is optimal, how volatile oil prices can be effectively managed, and what are the key factors affecting ROE amid changing economic conditions. Through this gap analysis, research can make additional contributions to the economic and financial literature, enriching our understanding of the complex interactions among these key factors.

The things that exist from the above phenomena arise a problem in this study, namely changes in global economic dynamics, fluctuations in oil prices, and advances in financial technology pose complex challenges for companies and financial institutions. A deep understanding of how the Loan to Deposit Ratio (LDR), oil prices, and Return on Equity (ROE) relate to each other and how innovation can overcome uncertainty is important.

In the face of market dynamics and economic changes, this research aims to explore innovation and novelty in relation to Loan to Deposit Ratio (LDR), oil prices, and Return on Equity (ROE), This research can explore how companies and financial institutions adapt to the LDR gap, especially taking into account the latest technological trends and regulatory changes in the financial sector. Through the exploration of this aspect of novelty, it is hoped that research can contribute to the economic and financial literature by enriching our understanding of the way companies and financial institutions navigate

challenges and seize opportunities amid changing economic and technological environments.

By achieving these goals, it is hoped that this research can present an in-depth understanding of how companies and financial institutions deal with market complexity, improve financial performance, and innovate in facing challenges and opportunities that arise in the current economic context.

THEORETICAL REVIEW

Return on Equity

Return on Equity (ROE) is a financial metric that assesses a company's profitability by determining the percentage of net income generated in relation to shareholders' equity. It gauges the efficiency with which a company utilizes its equity to produce profits (Heliani et al., 2022). ROE is an important metric for investors as it provides insight into a company's ability to generate profits from the money invested by shareholders. A higher ROE indicates that a company is generating more profits per unit of shareholder equity, which is generally seen as a positive sign. However, it is important to note that a high ROE may not always be a good thing, as it could be due to excessive leverage or financial risk (Badruzaman et al., 2022).

ROE is commonly employed alongside additional financial ratios like the debt-to-equity ratio, price-to-earnings ratio, and earnings per share. This combination offers a more comprehensive analysis of a company's overall financial well-being (Fakhroni & Futaqi, 2022; Fatonah et al., 2022). Return on Equity (ROE) is a financial ratio that measures a company's profitability by calculating the amount of net income returned as a percentage of shareholders' equity. It is a measure of how effectively a company is using its equity to generate profits (Nino et al., 2020).

In the results of research from (Nino et al., 2020) stated the influence of oil prices on ROE is expected to be mediated, as fluctuations in oil prices can influence a company's profitability, subsequently affecting its ROE. Hence, a deep comprehension of the interconnection between these variables is essential for anticipating and adapting to shifts in the economic landscape

H₁: Influence between Oil Price and Return on Equity (ROE)

Oil Price

Oil price refers to the cost of crude oil, which is the primary energy source for various industries, including transportation, manufacturing, and power generation. Oil prices are influenced by various factors, such as geopolitical events, global market dynamics, and supply and demand imbalances (Alaigba et al., 2016). Crude oil holds a pivotal position as a primary commodity in the world economy, and the fluctuations in its prices wield substantial influence in shaping economic circumstances and impacting financial markets. The variations in oil prices can exert a significant influence on the economy, impacting industries, enterprises, and consumers in diverse ways (Chuvakhina, 2019).

Loan to Deposit Ratio

Loan to Deposit Ratio (LDR) is a financial indicator utilized to assess the liquidity and solvency of a bank. It is computed by dividing the aggregate loans and advances on a bank's balance sheet by its total deposits, encompassing cash, savings, and time deposits (Wicaksana & Sukmana, 2019).

The influence of Loan to Deposit Ratio (LDR) on a bank's financial performance can manifest in both positive and negative aspects. A decreased LDR has the potential to enhance liquidity, contributing to improved financial performance and stability. Conversely, an elevated LDR may signify reduced liquidity, posing risks and potential financial instability for the bank (Park & Min, 2021).

Various factors, including monetary policy, economic circumstances, and the risk management approaches of the bank, can influence Loan to Deposit Ratio (LDR). Banks with elevated LDRs might encounter increased risks, given that a larger portion of their assets is in the form of loans, which inherently carry more risk compared to deposits (Qomariyah, 2023).

The impact of Loan to Deposit Ratio (LDR) on Return on Equity (ROE) has been studied in various contexts. A study on the impact of ROE on Price Earnings Ratio (PER) and Price to Book Value (PBV) in LQ45 companies listed on the Indonesia Stock Exchange found that ROE has a positive and significant effect on both PER and PBV (heri Winarno, 2017).

H₂: Pengaruh antara Oil Price dengan Return on Equity (ROE)

Here is the framework model in this study;

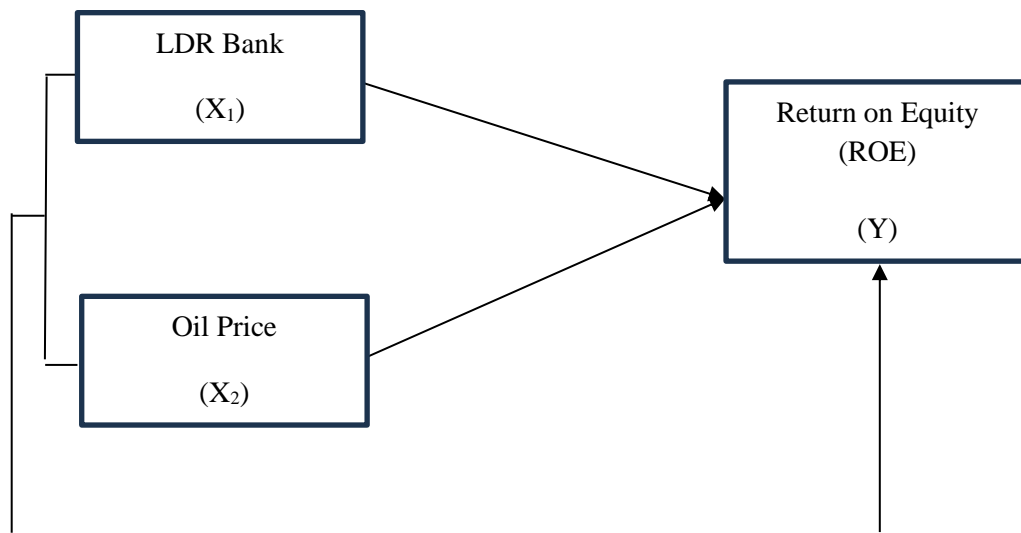


Figure 1. Conceptual Framework

METHODOLOGY

Using quantitative research methods with statistical regression models as analysis so that it can be used to evaluate the quantitative relationship between

LDR, oil prices, and ROE. The number of respondents of all bank issuers listed on the Indonesia Stock Exchange and submitting complete financial statements.

Will be tested independent variable with independent variable, with the help of SPSS 28 by getting results and analysis.

RESULTS

From the results of data processing obtained from questionnaires distributed with independent variables, namely oil price and Loan to Deposit Ratio with dependent variables Return On Equity and processed with the help of SPSS 28, the results of the study are described as follows:

The validity test of three variables is declared valid with the results of each of them against the test assisted by SPSS 28 and the reliability test of the three variables is also valid. Furthermore, the results of the summary model with the following results;

Table 1.
Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.432 ^a	.187	.153	4.303

a. Predictors: (Constant), Oil Price, LDR Bank

The table above shows that the correlation value or relationship coefficient (R) of 0.432, indicates an influence between the independent variable and the dependent variable. The output also produces a coefficient of determination (R²) of 0.187, indicating that there is an influence of the independent variable on the dependent variable of 18.7%, while the rest is influenced by other factors outside the independent variable.

Table 2. Anova

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	204.000	2	102.000	5.509	.007 ^b
	Residual	888.745	48	18.516		
	Total	1092.745	50			

a. Dependent Variable: ROE Bank

b. Predictors: (Constant), Oil Price, LDR Bank

Based on these data, the calculated F value is 5.509 and the table F is 3.180, with a significance or probability level of 0.007, which is greater than 0.05. Therefore, it can be concluded that regression models can be used to predict the variable Return on Equity.

Table 3. Results Coefficient

		Coefficients ^a				
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	21.387	6.492		3.294	.002
	LDR Bank	.318	.148	.303	2.145	.037
	Oil Price	.191	.127	.212	1.498	.141

a. Dependent Variable: ROE Bank

The positive constant value of 21.387 indicates the positive influence of the independent variable, the regression coefficient X of 0.318 states that if the LDR variable is positive then there is an increase for the ROE variable of 0.318 or 31.8% and the oil price variable increases by 0.191 or 19.1%.

The regression results above are results that represent the existence of processed data.

DISCUSSION

From the results of the calculation above, for the independent variable LDR Bank (X1) with Return on Equity (ROE) (Y), the result is positive with a result of 0.318% in other words from the data, there is an increase of 31.8% for the LDR variable, while the second independent variable, namely Oil Price from the result data, is stated to increase by 0.191 or 19.1% and positive for the dependent variable Return on Equity (R O E).

Simultaneously or together, the results of the coefficient test were obtained where the LDR and Oil Price variables against ROE were obtained by 18.7% and the rest of the other variables were not discussed in this study.

CONCLUSIONS AND RECOMMENDATIONS

There is a positive and significant influence between the Bank's LDR variable and ROE, both a significant and positive influence between the Oil Price variable and ROE, simultaneously also have a positive and significant effect.

This result, although positive, does not mean that there needs to be improvement in management in an effort to improve results for the company.

FURTHER STUDY

This research is just the beginning, with the results of this study providing an overview in the financial field, especially related to the variables in this study, for other researchers in the future can make references and references.

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The results of this research can contribute to research institutions and provide real benefits and contributions in the field of financial management.

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