

# THE INFLUENCE OF LOAN TO DEPOSIT RATIO AND DEBT TO EQUITY RATIO ON RETURN ON EQUITY AT PT BANK NEGARA INDONESIA (PERSERO) TBK FOR THE PERIOD 2014–2023

Eni Puji Astuti<sup>1</sup>, Rahmi Hermawati<sup>2</sup>, Rima Handayani<sup>3</sup>

<sup>1,2,3</sup>Fakultas Ekonomi dan Bisnis, <u>dosen00807@unpam.ac.id</u>, Universitas Pamulang

#### ABSTRACT

This study aims to analyze the influence of the Loan to Deposit Ratio (LDR) and Debt to Equity Ratio (DER) on Return on Equity (ROE) at PT Bank Negara Indonesia (Persero) Tbk during the 2014–2023 period. Using a descriptive quantitative approach, this research leverages financial statement data from the company over ten years. The analysis involves multiple linear regression, with LDR and DER serving as independent variables and ROE as the dependent variable. The findings reveal that LDR does not significantly affect ROE, indicating that the bank's liquidity in channeling third-party funds into credit does not directly enhance profitability. Similarly, DER does not show a significant influence on ROE, suggesting that financial leverage alone is not a determining factor for profitability. Furthermore, the simultaneous analysis of LDR and DER demonstrates no significant impact on ROE, highlighting the need to consider other factors that might play a more substantial role in influencing financial performance. The results suggest that operational efficiency, credit quality, risk management, and macroeconomic conditions may be more critical determinants of ROE. This study underscores the importance of adopting a comprehensive approach to analyzing financial performance and offers recommendations for improving profitability and competitiveness in the banking sector. **Keywords:** Loan to Deposit Ratio, Debt to Equity Ratio, Return on Equity.

#### **1. INTRODUCTION**

The influence of globalization, as seen today, has led to the development of businesses across various sectors. Specifically, in the economic sector, globalization has resulted in a shift towards a more open economic system. Banks, as financial institutions entrusted by society, play an essential role in the economic system. Almost all business fields, both domestic and international, related to various financial activities require banking services. Currently, the banking world has advanced significantly due to fierce competition. This growth is also influenced by the increasing awareness of society regarding the benefits of banking in their lives, both in business and in everyday activities. Therefore, banks are obliged to provide excellent services and conveniences for their customers to increase profits and advance banking shares.

Banks serve as financial institutions that channel funds from parties with a surplus of funds to those experiencing a shortage or needing funds. Banks are expected to circulate public savings to boost the banking industry in Indonesia. However, the banking industry in Indonesia has experienced ups and downs.

The banking world in Indonesia has entered an era of competitive rivalry due to the large number of banks operating locally and internationally. The rapid development of the banking sector and the high complexity of banking activities can impact the financial performance of a bank. Weak internal conditions, such as inadequate management, providing credit to related business groups, and insufficient capital to cover risks, can cause a bank's performance to decline. Financial performance measurement, based on the Ministry of Finance Decree No. KEP.792/MK/IV/12/1970 dated December 7, 1970, concerning financial institutions, later amended by the Ministry of Finance Decree No. 28/KMK/10/1989 dated March 25, 1989, on supervision and development of non-bank financial institutions and followed up with the Bank Indonesia Circular Letter No. SE.23/21/BPPP, states that financial institution performance is assessed in terms of capitalization, productive asset quality, management aspects, profitability, and liquidity.

PT Bank Negara Indonesia (Persero) Tbk is the oldest bank owned by the Indonesian government. Bank Negara Indonesia was initially established as a central bank under the name Bank Negara Indonesia, based on Government Regulation in Lieu of Law No. 2 of 1946 on July 5, 1946. BNI's founding date is commemorated as National Bank Day. BNI is now recorded as the fourth-largest national bank in Indonesia.

The primary goal of the company is to generate profits by efficiently and effectively utilizing the company's resources (factors of production) to produce competitive products in the market. Therefore, it is crucial for the company to understand its financial condition, which includes the Balance Sheet, Income Statement, and other financial reports.



Information regarding the bank's financial statements is one way to assist business actors in assessing a bank's financial condition. Financial statements published by banks are a source of information about the bank's financial position, performance, and changes in financial position, which are very useful for evaluating the bank's financial performance. Bank financial statements can serve as a measure of a bank's performance by analyzing financial reports.

To measure a bank's profitability, financial ratios, such as Return on Equity (ROE), can be used. This ratio indicates the return on total equity (shares) used to generate profit. Return on Equity is the ratio of profit after tax to total equity derived from owner's capital contributions, retained earnings, and other reserves accumulated by the company (Kasmir, 2016:267). Bank financial performance analysis begins with reviewing financial statements, calculating, comparing, measuring, interpreting, and providing solutions. Calculations to analyze financial performance can be conducted using various techniques, including ratio analysis. Ratio analysis is used to understand the relationship between components within a financial statement or between components in the balance sheet and income statement (Kasmir, 2016:72).

Debt to Equity Ratio (DER) is a ratio that compares the total debt to equity. This ratio is often used by analysts and investors to determine the extent of a company's debt relative to its equity owned by the company or shareholders. The higher the DER figure, the greater the assumed risk to the company's liquidity. A DER of 1.00 indicates that the company has less debt than the equity it owns. Loan to Deposit Ratio (LDR) is an indicator of financial performance assessment used to measure liquidity levels. This ratio compares total credit to third-party funds, commonly used to measure the funds allocated as credit. According to Riyadi (2015:199), "Loan to Deposit Ratio is the ratio of total loans to third-party funds (DPK) collected by the bank." This ratio indicates the bank's ability to channel funds sourced from the public (e.g., checking accounts, savings, time deposits, certificate deposits, and other immediate liabilities) in the form of credit. If further developed, the comparison can include not only credit but also securities issued (bonds) and core capital (Riyadi, 2015:200).

Years	LDR (%)	<b>DER (%)</b>	ROE (%)	
2014	77,90	665,76	16,19	
2015	85,86	710,87	18,99	
2016	92,45	559,26	17,74	
2017	92,13	526,18	11,65	
2018	94,66	552,02	12,78	
2019	89,56	578,85	13,64	
2020	92,86	608,14	13,67	
2021	95,57	550,77	12,40	
2022	90,52	661,13	2,94	
2023	79,87	662,59	8,67	

Table 1. Financial Ratio at PT. Bank Negara Indonesia (Persero) Tbk Period 2014 – 2023

Based on the available data, Return On Equity (ROE) has fluctuated during the period from 2014 to 2022. ROE increased from 16.19% in 2014 to 18.99% in 2016, but it declined until 2021. In 2022, ROE rose again to 8.67%. Meanwhile, the Loan to Deposit Ratio (LDR) showed an increase from 77.90% in 2014 to 94.66% in 2017, then decreased in 2018 and increased again in 2019. In 2022-2023, LDR decreased again to 79.87%. The Debt to Equity Ratio (DER), although stable between 500%-600% from 2014 to 2023, spiked in 2014 to 710.87%.

These fluctuations have impacted the company's use of capital to cover debt, which also increased, as well as the amount of credit disbursed to the public. This affects the availability of capital and indirectly impacts the company's profits. Previous research by Nurul Wahyuti and Aliah Pratiwi (2020) found that LDR and DER did not significantly affect ROE at Bank Negara Indonesia, while a study by May Randi Putra et al. (2021) showed that both had a significant impact on ROE. Based on the available data, it can be concluded that LDR at PT Bank Negara Indonesia (Persero) Tbk has been fluctuating over the last 10 years, with DER experiencing both increases and decreases, while ROE has continued to decline.



Research on the influence of the Loan to Deposit Ratio (LDR) and Debt to Equity Ratio (DER) on Return on Equity (ROE) has been conducted extensively. Several studies, such as those by Wahyuti and Pratiwi (2020), found that LDR and DER did not have a significant effect on ROE at Bank BNI Tbk. Conversely, research by May Randi Putra et al. (2021) showed that both variables significantly influenced ROE. These differing results highlight inconsistencies in findings related to the relationship between LDR, DER, and ROE, creating a research gap that needs to be addressed.

The urgency of this research lies in the importance of gaining a deeper understanding of the factors influencing ROE, particularly in the context of banking in Indonesia. ROE is a key financial performance indicator that reflects a bank's ability to generate profits from shareholders' equity. In the face of increasing competition in the banking industry, the ability to optimize financial ratios such as LDR and DER becomes increasingly relevant to ensuring the sustainability and profitability of the institution. This study provides critical insights into the relationship between LDR and DER and their impact on ROE, specifically at PT Bank Negara Indonesia (Persero) Tbk during the 2014–2023 period. The findings are expected to offer strategic recommendations for bank management to improve financial performance and competitiveness in the banking sector.

#### 2. METHODS

This study uses a quantitative approach with a descriptive method, aimed at explaining a researched situation with support from literature studies. The research results are obtained from the analysis of the variable indicators that are calculated and presented by the researcher. The data used in this study are the financial statements of PT Bank Negara Indonesia (Persero) Tbk from 2014 to 2023, which were obtained from the company's website. The research was conducted starting in January 2022, with data collection and information gathering over three months (January-March 2022).

The variables studied in this research consist of the Loan to Deposit Ratio (LDR), Debt to Equity Ratio (DER), and Return on Equity (ROE). LDR and DER function as independent variables, while ROE is the dependent variable. Sampling was carried out using purposive sampling technique with the criterion of the company's balance sheet and income statement reports listed on the Indonesia Stock Exchange. The data collection techniques used were documentation and literature studies, which involved reviewing relevant documents and literature that support this research.

Data analysis was conducted using multiple linear regression with SPSS version 26. This technique relies on a quantitative approach, focusing on numerical data to provide accurate conclusions. Descriptive testing was used to describe the collected data, while classical assumption tests were performed to ensure the regression model meets the BLUE (Best Linear Unbiased Estimator) criteria. Normality, multicollinearity, heteroscedasticity, and autocorrelation tests were conducted to ensure the reliability of the regression model. Multiple linear regression analysis was used to examine the relationship between LDR, DER, and ROE, as well as to test the strength of the relationship between variables using correlation coefficients and the coefficient of determination (R<sup>2</sup>). Hypothesis testing was conducted to determine whether the independent variables significantly affect the dependent variable. The results of the t-test and F-test show whether the hypothesis is accepted or rejected, as well as the feasibility of the research model used

#### 3. RESULT AND DISCUSSION

#### A. PT Bank Negara Indonesia (Persero) Tbk Profile

PT Bank Negara Indonesia (Persero) Tbk, or BNI, was established on July 5, 1946, as the first state-owned bank in Indonesia, born during the nation's struggle for independence. Initially serving as the central and commercial bank, BNI was also responsible for issuing the first official currency of the Republic of Indonesia (ORI) in October 1946. Its first director was Raden Mas (R.M.) Margono Djojohadikusumo. Over the years, BNI's role evolved, becoming a foreign exchange bank in 1950 and later a development bank in 1955. The bank introduced innovative services, such as Floating Banks and Mobile Banks, to reach remote communities, supporting Indonesia's economic development. In 1968, BNI became a state-owned enterprise known as PT Bank Negara Indonesia (Persero), Tbk, and went public in 1996.

BNI's adaptability to changes in technology, social, and cultural environments reflects its commitment to continuous performance improvement. The bank has targeted specific customer segments, including women with Bank Sarinah and children with Bank Bocah, promoting financial literacy and saving habits from an early age. BNI has also established strong connections with higher education institutions, opening branches in universities.



BNI's vision is to become a leading financial institution in sustainable services and performance. Its mission includes delivering excellent digital solutions, strengthening international services, enhancing investment value, fostering an empowering work environment, promoting corporate social responsibility, and adhering to good governance practices. Its work culture, known as "PRINSIP 46," is built on professionalism, integrity, customer orientation, and continuous improvement.

#### **B.** Descriptive Statistics

Table 2. Descriptive Statistics							
	Ν	Minimum	Maximum	Mean	Std. Deviation		
LDR DER	10	77.90	95.57	89.1380	6.06135		
ROE	10	526.18	710.87	607.5570	63.28791		
Valid N (listwise)	10						

In this section, the calculation results for each variable, including the number of data (N), mean value, and standard deviation of the processed variables, namely Loan to Deposit Ratio (LDR), Debt to Equity Ratio (DER), and Return on Equity (ROE), are presented using SPSS version 26. From these calculations, it is known that the number of data (N) in this study is 10 data points. For the LDR variable, the mean value is 89.1380 with a standard deviation of 6.06135. For the DER variable, the mean value is 607.5570 with a standard deviation of 63.28791. Finally, the ROE variable has a mean value of 12.8670 with a standard deviation of 4.61144.

### **B.** Classic Assumption Test

#### 1. Normality Test

#### Table 3. One Sample Kolmogorov-Smirnov Test

	1 0	
		Unstandardized Residual
N		10
Normal Parameters <sup>a,b</sup>	Mea	
Std. Deviation		4.56392101
		184
Most Extreme Differences Positive	Absolute	.107
Negative		194
		184
Test Statistic		.184

The normality test aims to determine whether the independent and dependent variables in the regression model have a normal distribution. A good regression model is one that has normally or nearly normally distributed data. Based on the results of the Kolmogorov-Smirnov test, the probability value obtained is 0.200, which is greater than 0.05 (0.200 > 0.05), meaning that Ha is accepted and H0 is rejected. This indicates that the residual data are normally distributed and meet the normality test. Further analysis using the Normal Probability Plot of Regression Standardized Residual also shows that the distribution of residual data follows the normal line, confirming that the data used in this study meet the normality test and can be considered very good.

#### 2. Multicollinearity Test

The multicollinearity test is conducted to determine whether there is a correlation between the independent variables in the regression model. A good regression model should not have correlations between the independent variables, because if the variables are correlated, they are not orthogonal. To detect



## International Journal Management and Economic

IJME JOURNAL Vol. 4 No. 1 January 2025 – pISSN: 2829-0399, eISSN: 2829-0526, Page 82-89

multicollinearity, the tolerance value and variance inflation factor (VIF) can be examined. A regression model is considered free from multicollinearity if the VIF value is less than 10 and the tolerance value is greater than 0.1.

Tuble in Multiconniculity 1650								
			Standardized Coefficients			Collinearity Statistics		
Model	В	Std. Error	Beta	t	Sig.	Tolerance	VIF	
(Constant) LDR DER	34.541 157	57.086 .415	206	.605 377	.564 .717	.470	2.129	
	013	.040	174	319	.759	.470	2.129	

Table 4. Multicollinearity Test

a. Dependent Variable: ROE

The results of the multicollinearity test show that the tolerance value for the LDR variable is 0.470, which is greater than 0.1, and the VIF value is 2.129, which is less than 10, indicating that there is no multicollinearity. Similarly, for the DER variable, the tolerance value is 0.470, greater than 0.1, and the VIF value is 2.129, less than 10, also showing no multicollinearity.

#### 3. Autocorrelation Test

The autocorrelation test aims to examine whether there is a correlation between the disturbance errors in the current period and the previous period in the linear regression model. Autocorrelation may occur because consecutive observations over time are related to each other. A good regression model is one that is free from autocorrelation. To detect autocorrelation, a Durbin-Watson (D-W) test can be performed.

	Table 5. Autocorrelation Test							
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson			
1	.143 <sup>a</sup>	.021	259	5.17500		.911		

a. Predictors: (Constant), DER, LDR

b. Dependent Variable: ROE

Based on the regression analysis results, the D-W value obtained is 0.911. Referring to the D-W table with a 5% significance level, 2 independent variables (K=2), and 10 samples (n=10), the D-W table values are dl = 0.6972 and du = 1.6044. Therefore, since the calculated D-W value of 0.911 falls between dl and du (0.6972 < 0.911 < 1.6044), it indicates that there is no positive or negative autocorrelation in this regression model, meaning there is no significant correlation between disturbance errors in different periods.

#### 4. Heteroscedasticity Test

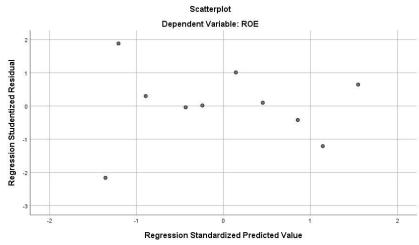


Figure 1. Heteroscedasticity Test



Based on the results of the test displayed, the points that are evenly scattered and not concentrated in one place indicate that there is no heteroscedasticity problem in this regression model. Therefore, the regression model can be considered good and suitable for use.

Table 6. Multiple Linear Regression Analysis									
	Unstandardized		Standardized			Collinearity	y Statistics		
	В	Std. Error	Beta			Tolerance	VIF		
(Constant) LDR	34.541	57.086	206	.605	.564	.470	2.129		
DER	157	.415	174	377	.717	.470	2.129		

#### C. Multiple Linear Regression Analysis

a. Dependent Variable: ROE

Multiple linear regression analysis is used to test the relationship between one dependent variable and two or more independent variables. In this study, Return On Equity (ROE) serves as the dependent variable, while Loan to Deposit Ratio (LDR) and Debt to Equity Ratio (DER) are the independent variables. Based on the calculation results, the constant value obtained is 34.541, meaning that if LDR and DER are assumed to remain constant, ROE will be 34.541. Meanwhile, the negative coefficient for LDR of -0.157 indicates that if LDR increases by 1%, ROE will decrease by 0.157%. On the other hand, the DER coefficient of -0.013 indicates that if DER increases by 1%, ROE will increase by 0.013%.

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.924	2	1.962	.073	.930 <sup>b</sup>
	Residual	187.464	7	26.781		
	Total	191.389	9			

Table 7 ANOVA

From the table results, it can be observed that the F-test shows an F-calculated value of 0.073 with a significance level of 0.930, with degrees of freedom (df1 = k-1, thus 3-1 = 2) and (df2 = n-k, thus 10-3 = 7). Meanwhile, the F-table value is 4.74. Based on this, the F-calculated value of 0.073 is less than the F-table value of 4.74, with a significance level of 0.930 > 0.05. Therefore, the conclusion is that H0 is accepted and Ha is rejected. It can thus be concluded that LDR and DER do not have a significant simultaneous effect on ROE.

#### **D.** Discussion

The research examining the effect of Loan to Deposit Ratio (LDR) and Debt to Equity Ratio (DER) on Return On Equity (ROE) provides a comprehensive analysis of these financial indicators. The study leverages data analysis tools, specifically SPSS, to explore the relationship between LDR, DER, and ROE in the context of PT Bank Negara Indonesia (Persero) Tbk. This investigation sheds light on how these variables impact the profitability of a prominent banking institution over a specific timeframe.

The first key finding relates to the effect of LDR on ROE. The analysis indicates that LDR does not significantly influence ROE. This suggests that the proportion of loans disbursed relative to third-party funds does not directly enhance the bank's profitability. The result aligns with previous studies, such as those examining other major banks, which found that a higher LDR may not necessarily translate into better financial returns. Instead, it highlights potential inefficiencies in how loans are managed or allocated.

The second aspect of the research focuses on DER's impact on ROE. Like LDR, DER also shows no significant effect on ROE when analyzed independently. This implies that the ratio of a bank's debt to its equity is not a determining factor for profitability in this context. Previous research corroborates this finding, noting that while DER might indicate financial leverage, it does not always result in improved equity returns. This points to the need for balanced financial management rather than over-reliance on leveraging debt to drive profits. When examining the simultaneous effects of LDR and DER on ROE, the findings reveal that these variables, even in combination, do not significantly affect ROE. This suggests that neither the liquidity represented by LDR nor



the leverage denoted by DER plays a decisive role in determining the bank's overall profitability. Instead, other factors, possibly operational efficiencies or market conditions, may have a more substantial impact on ROE.

The absence of a significant relationship between LDR, DER, and ROE raises important questions about the utility of these ratios as standalone indicators of financial performance. While they provide insights into liquidity and leverage, they may not fully capture the complexities of profitability in the banking sector. This underscores the need for a more holistic approach to financial performance analysis that considers other variables and external factors.

The findings also align with earlier research that explored similar dynamics in other banking institutions. Studies have often highlighted that profitability is influenced by a combination of internal and external factors, including operational costs, risk management, credit quality, and macroeconomic conditions. These elements might better explain the variations in ROE observed in this study. For PT Bank Negara Indonesia (Persero) Tbk, these results underscore the importance of diversifying its focus when assessing profitability. Reliance on LDR and DER alone may not provide sufficient insights for decision-making. Instead, the bank should consider integrating other financial and non-financial metrics to evaluate its performance comprehensively and identify areas for improvement. From a managerial perspective, the findings suggest that improving profitability requires strategies beyond adjusting LDR and DER. For instance, enhancing operational efficiency, optimizing resource allocation, and strengthening risk management frameworks could have a more pronounced impact on ROE. Additionally, fostering innovation and customer engagement may help drive better financial outcomes.

The research also highlights a broader implication for the banking industry. It emphasizes the importance of understanding that traditional financial ratios, while useful, may have limitations in predicting profitability. As the industry evolves, particularly with advancements in technology and shifting market dynamics, banks must adopt more sophisticated methods of performance evaluation to remain competitive. In conclusion, the study provides valuable insights into the relationship between LDR, DER, and ROE at PT Bank Negara Indonesia (Persero) Tbk. While these ratios offer important financial perspectives, their limited influence on profitability suggests that other factors may play a more critical role. The findings encourage banks to adopt a multi-faceted approach to financial management, ensuring a more comprehensive and effective strategy for achieving sustainable growth and profitability.

#### 4. CONCLUSION

This study concludes that the Loan to Deposit Ratio (LDR) and Debt to Equity Ratio (DER) do not have a significant effect on Return on Equity (ROE), either partially or simultaneously, at PT Bank Negara Indonesia (Persero) Tbk during the 2014–2023 period. The analysis results indicate that LDR, which represents the bank's liquidity level in channeling third-party funds into credit, does not directly influence profitability. Similarly, DER, which reflects the ratio of the company's debt to equity, also does not show a significant effect on ROE. Simultaneously, the combination of LDR and DER also does not have a meaningful impact on ROE. The fluctuations in LDR, DER, and ROE values during the research period highlight that other factors beyond the studied variables likely have a greater influence on the company's profitability. These findings are consistent with previous studies that also indicate these indicators, while important for understanding liquidity and leverage, are not the sole determinants of financial performance. This study recommends that PT Bank Negara Indonesia (Persero) Tbk expand its analysis by considering other variables, such as operational efficiency, credit quality, risk management, and macroeconomic conditions. By integrating these various indicators, the company can develop a more comprehensive strategy to improve its profitability and competitiveness in the banking industry.

#### REFERENCES

- [1] Bank Negara Indonesia. (2014–2023). Laporan keuangan publikasi tahunan. Diakses dari www.bni.co.id
- [2] Brigham, E. F., & Houston, J. F. (2018). Dasar-dasar manajemen keuangan (Edisi ke-14). Salemba Empat.
- [3] Hery (2019). Manajemen perbankan. Jakarta: PT Grasindo.
- [4] Hery (2018). Analisa laporan keuangan. Jakarta: PT Grasindo.
- [5] Kasmir. (2015). Analisis laporan keuangan (Edisi pertama, Cetakan kedelapan). Jakarta: PT Raja Grafindo Persada.
- [6] Kasmir. (2016). Manajemen perbankan (Edisi pertama, Cetakan kelima). Jakarta: PT Raja Grafindo Persada.
- [7] Kasmir. (2018). Analisis laporan keuangan. Jakarta: PT Raja Grafindo Persada.



## International Journal Management and Economic

IJME JOURNAL Vol. 4 No. 1 January 2025 – pISSN: 2829-0399, eISSN: 2829-0526, Page 82-89

- [8] Balqish, A. T. (2020). Pengaruh CR dan DER terhadap ROE pada perusahaan perdagangan eceran di BEI periode 2015–2018. Owner: Riset dan Jurnal Akuntansi, 4(2), 657-666.
- [9] Gustinya, D., S. E., & Ak, M. (2022). Pengaruh Loan to Deposit Ratio dan Return On Asset terhadap dividen perusahaan perbankan pada Bursa Efek Indonesia periode 2016–2020. Jurnal Akuntansi dan Bisnis Krisnadwipayana, 9(1), 537-548.
- [10] Haeril, H., & Albar, A. (2021). Analisis pengaruh risiko, CAR, BOPO, dan LDR terhadap ROE pada perusahaan perbankan yang terdaftar di Bursa Efek Indonesia. Jurnal Economics and Digital Business Review, 2(1), 36-60.
- [11] Maulida, M., Nurodin, I., & Nugroho, G. W. (2022). Analisis rasio kecukupan modal (CAR) dan Loan To Deposit Ratio (LDR) terhadap Return On Equity (ROE) pada perusahaan perbankan yang terdaftar di Indonesia Stock Exchange (IDX). COSTING: Journal of Economic, Business and Accounting, 5(2), 1007-1014.
- [12] Munawar, H. A. (2018). Pengaruh LDR dan DER terhadap ROE pada PT Bank Mandiri Tbk. Jurnal ADBIS, 2(2), 2528-3928.
- [13] Munira, M., Merawati, E. E., & Astuti, S. B. (2018). Pengaruh ROE dan DER terhadap harga saham perusahaan kertas di Bursa Efek Indonesia. JABE (Journal of Applied Business and Economics), 4(3), 191-205.
- [14] Rahmawati, N., & Husayetti. (2020). Pengaruh Loan to Deposit Ratio dan Debt to Equity Ratio terhadap Return On Equity pada PT. Bank Mandiri (Persero) Tbk, periode 2009–2018. Journal of Economic, 11(1), 2087-8133.
- [15] Wahyuti, N., & Pratiwi, A. (2020). Pengaruh Loan To Deposit Ratio (LDR) dan Debt To Equity Ratio (DER) terhadap Return On Equity (ROE) pada Bank BNI Tbk. Jurnal Ekonomi dan Bisnis Dharma Andalas, 22(2), 315-324.
- [16] Widodo, A., Komariyah, I., Narimawati, U., Affandi, A., & Priadana, S. (2022). Pengaruh Current Ratio (CR) dan Debt to Equity Ratio (DER) terhadap Return on Equity (ROE) pada PT Kalbe Farma Tbk periode 2011–2020. JIIP-Jurnal Ilmiah Ilmu Pendidikan, 5(4), 1199-1205