Journal of Ecohumanism
2025
Volume: 4, No: 1, pp. 1669 – 1675
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v4i1.5979

Factors that Influence the Financial Performance of Conventional Banks

Toong Hai Sam[1], Zaky Machmuddah[2], Ayu Safitri[3], Abdul Rohman[4], Li Feng[5], Zhu Yuan Hong[6]

Abstract

In 2023, banking performance in Indonesia will slow down. This can cause potential investors and investors to reduce their interest in investing in banking in Indonesia. The purpose of this study is to prove the factors that influence the financial performance of conventional banking in Indonesia. Data analysis using WarpPLS, with a sample of 235 observation data. The data was obtained from the predetermined sample selection process. This study has succeeded in proving that the financial performance of conventional banking is influenced by Operating Costs to Operating Revenue (OCOR) and Loan to Deposit Ratio (LDR). While the Capital Adequacy Ratio (CAR) does not affect it. The implication of this research is the importance of the role of regulators in regulating banking policies in Indonesia in terms of development governance, considering the opportunities and challenges of the increasingly complex business world today.

Keywords: *Financial Performance, Conventional Banks, Banking Performance.*

Introduction

The global economic landscape presents a complex set of opportunities and challenges in 2024. The acceleration towards digitalization, coupled with evolving consumer expectations and regulatory environments, have significantly impacted the trajectory of banking operations and strategies. Macroeconomic factors, including inflation rates, central bank interest rate adjustments, and the shift towards sustainability, are reshaping the banking sector landscape. Banks are now required to reassess their operational frameworks, investment strategies, and technology infrastructure to align with the new economic realities. The banking sector in Indonesia in particular has experienced a significant slowdown in growth since 2023. The increase in benchmark interest rates, the global economic slowdown, and the decline in commodity prices are the main causes.

This business phenomenon should be addressed immediately by banks in Indonesia in order to maintain the sustainability of their business. For this reason, banking performance is the main spearhead that needs to be considered. Therefore, the level of customer satisfaction needs to be increased beyond the threshold so that a positive impact on financial performance can be enjoyed in the long term (How & Lee, 2021). Banking financial performance in this study is proxied by Return on Assets (ROA). ROA shows the rate of return on company assets, meaning that the higher the ROA, the better its performance is considered. Banking financial performance is influenced by many factors, in this study the factors reviewed include the Capital Adequacy Ratio (CAR), Operating Costs to Operating Revenue (OCOR) and Loan to Deposit Ratio (LDR).

To assess how prepared a bank is to face the risk of loss, it can be measured using CAR, because CAR is a comparison between bank capital and the bank's total risky assets. This means that the higher the CAR, the

[1] Faculty of Business and Communications, Inti International University, Malaysia, Email: toonghai.sam@newinti.edu.my, ORCID ID: https://orcid.org/0000-0001-7145-5625
[2] Accounting Department, Faculty of Economics and Business, Universitas Dian Nuswantoro, Indonesia, Email: zaky.machmuddah@dsn.dinus.ac.id, ORCID ID: https://orcid.org/0000-0001-8416-1757.
[3] Accounting Department, Faculty of Economics and Business, Universitas Dian Nuswantoro, Indonesia, Email: zaky.machmuddah@dsn.dinus.ac.id, ORCID ID: https://orcid.org/0000-0001-8416-1757.
[4] Accounting Department, Faculty of Economics and Business, Universitas Diponegoro, Indonesia, https://orcid.org/0000-0002-3941-3780, Email: wayemroh@gmail.com.
[5] Faculty of Business and Communications, Inti International University, Malaysia, Email: i20019507@student.newinti.edu.my, ORCID ID: https://orcid.org/0009-0008-5987-2985
[6] Faculty of Business and Communications, Inti International University, Malaysia, Email: I20019882@student.newinti.edu.my, ORCID ID: https://orcid.org/0009-0001-8246-1913

Journal of Ecohumanism
2025
Volume: 4, No: 1, pp. 1669 – 1675
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v4i1.5979

better the company's performance will be, because its capital is higher than its total risky assets. This explanation is in accordance with (Masmuna et al., 2024), (Randa et al., 2024), (Murtiningsih & Tohirin, 2023), (Fauji et al., 2022), (Hawaldar et al., 2022), (Suroso, 2022), (Kadek et al., 2021), (Brastama & Yadnya, 2020), and (Sunaryo, 2020), which state that there is a positive influence between CAR and ROA. However, (Indriani et al., 2020) states otherwise. Meanwhile (Adhim & Mulyati, 2024), (Salsabila et al., 2024), (Hasanudin et al., 2023), (Rahmi et al., 2022), (Juniarti, 2021), and (Liniarti, 2021), stated that it had no effect.

The next factor is OCOR, which explains the ratio between the total costs incurred by the bank for its operations and the total revenue obtained from the bank's operational activities. This means that the lower the OCOR, the more effective and efficient the company is because it can control its operational costs so that the company's performance will be better, thus increasing ROA. Conversely, the higher the OCOR, the worse the company's performance will be so that ROA will decrease. This is in accordance with (Adhim & Mulyati, 2024), (Jelli & Dura, 2024), (Randa et al., 2024), (Hasanudin et al., 2023), (Murtiningsih & Tohirin, 2023), (Fauji et al., 2022), and (Tho'in, 2022), which state that there is a negative influence between OCOR and ROA. On the other hand (Liniarti, 2021) states something different. In addition, (Akbar et al., 2024) and (Antika et al., 2024), state that there is no influence between both.

The last factor discussed is LDR, which is the comparison between the total deposits held by the bank and the total loans provided by the bank. This means that the higher the LDR, the more effective it will be in increasing interest income so that ROA will increase. This explanation is in accordance with (Antika et al., 2024), (Hasanudin et al., 2023), and (Gerinata, 2021), which state that there is a positive influence between LDR and ROA. However, (Adhim & Mulyati, 2024), (Salsabila et al., 2024), (Randa et al., 2024), (Rahmi et al., 2022), (Suroso, 2022), (Juniarti, 2021), and (Liniarti, 2021), state the opposite. The still varied findings of previous studies indicate that it is still important to conduct research on this matter. The research question is what factors influence the performance of conventional banking in Indonesia?

Theoritical Framework and Hyphotesis Development

Signal theory explains the behavior of two parties when they access different information. Signal theory explains the actions taken by the signaler to influence the behavior of the signal recipient (Spence, 1973). Signal theory is used in accounting, auditing and financial management studies which explain that management gives signals about the company through various aspects of financial information disclosure that can be seen as signals by investors. In general, signals are interpreted as signals made by the company to external parties. These signals can be realized in various forms, both those that can be directly observed and those that must be studied more deeply to be able to find out.

As for the form or type of signal issued, all are intended to imply something with the hope that the market or external parties will change their assessment of the company. This means that the selected signal must contain the power of information to be able to change the assessment of external parties to the company. In general, signal theory is concerned with understanding how some signals are valuable or useful while others are useless. Signal theory examines how signals relate to the qualities they reflect and what elements of the signal or the surrounding community make the signal convincing and attractive. In addition, this theory also examines what happens when the signal is not completely convincing or how much uncertainty can be tolerated before the signal becomes completely meaningless. The desires of the signal sender and the signal receiver often match, but there are times when they do not match at all. Generally, internal parties to the company have better information about the condition of the company and future prospects compared to external parties, such as investors, creditors, or the government or even shareholders (Spence, 1973).

To attract investors, the company must provide its best signal so that investors are willing to invest in the company. The signal given by the company can be in the form of a company performance report. In banking companies, company performance can be influenced by many factors. These factors include CAR, OCOR, and LDR.

Journal of Ecohumanism
2025
Volume: 4, No: 1, pp. 1669 – 1675
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v4i1.5979

CAR is the bank's ability which is measured using the ratio of capital adequacy to risky assets. High CAR indicates that the bank's financial performance is also high, meaning that there is a positive influence between CAR and ROA. Conversely, the lower the CAR, the bank's financial performance will also decrease so that ROA will decrease. This explanation is in accordance with the signal theory, which states that when a good or bad signal is conveyed by a company, it will get a reaction from investors. This reaction can be seen in changes in stock prices or an increase in the company's financial performance. This explanation is in accordance with (Masmuna et al., 2024), (Randa et al., 2024), (Murtiningsih & Tohirin, 2023), (Fauji et al., 2022), (Hawaldar et al., 2022), (Suroso, 2022), (Kadek et al., 2021), (Brastama & Yadnya, 2020), and (Sunaryo, 2020), which state that there is a positive influence between CAR and ROA.

Hypothesis1: There is a positive influence between CAR and ROA.

OCOR explains the ratio between the total costs incurred by the bank for its operations and the total revenue obtained from the bank's operational activities. This means that the lower the OCOR, the more effective and efficient the company is because it can control its operational costs so that the company's performance will be better which will later increase ROA. Conversely, the higher the OCOR, the worse the company's performance will be which will later have an impact on decreasing ROA. This is in line with signal theory, which states that positive or negative signals given by the company will affect the response of investors. This explanation is in accordance with (Adhim & Mulyati, 2024), (Jelli & Dura, 2024), (Randa et al., 2024), (Hasanudin et al., 2023), (Murtiningsih & Tohirin, 2023), (Fauji et al., 2022), and (Tho'in, 2022), which state that there is a negative influence between OCOR and ROA.

Hypothesis2: There is a negative influence between OCOR on ROA.

LDR is a comparison between the total deposits owned by the bank and the total loans provided by the bank. This means that the higher the LDR, the more effective it will be in increasing interest income so that ROA will increase and the lower the LDR, the more interest income will decrease so that ROA will decrease. This is in line with signal theory, which states that positive or negative signals given by the company will affect the response of investors. This explanation is in accordance with (Antika et al., 2024), (Hasanudin et al., 2023), and (Gerinata, 2021), which state that there is a positive influence between LDR and ROA.

Hypothesis 3: There is a positive influence between LDR and ROA.

Research Method

This study includes quantitative research with secondary data. The population of this study is banking companies listed on the Indonesia Stock Exchange. The sample was obtained using selection according to the established criteria. The study observation year is from 2019-2023. The analysis tool used is WarpPLS. The measurement of variables uses the following formula:

ROA (Randa et al., 2024) is formulated:

$$ROA = \frac{Bank\ Net\ Profit}{Total\ Asset} \times 100\%$$

Journal of Ecohumanism
2025
Volume: 4, No: 1, pp. 1669 – 1675
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v4i1.5979

CAR (Randa et al., 2024) is formulated:

$$CAR = \frac{Bank\ Capital}{Risk\ Weighted\ Assets} \times 100\%$$

OCOR (Randa et al., 2024) is formulated:

$$OCOR = \frac{Total\ Operational\ Costs}{Operational\ Revenue} \times 100\%$$

LDR (Randa et al., 2024) is formulated:

$$LDR = \frac{Total\ Credit\ Given}{Total\ Third\ Party\ Funds} \times 100\%$$

Results and Discussion

The data used in this study is 235 observation data, obtained from conventional bank data listed on the Indonesia Stock Exchange over a five-year period, from 2019-2023. WarpPLS shows the following results:

Table 1. Research Result

Description	Terms	Result	Judgment
Average Path Coefficient (APC)	P-value ≤0.05	0.209, P<0.001	Fit
Average R-Square (ARS)	P-value ≤0.05	0.252, P<0.001	Fit
Average Adjusted R-Squared (AARS)	P-value ≤0.05	0.242, P<0.001	Fit
Average Block VIF (AVIF)	Acceptable if ≤ 5; Ideally ≤ 3,3	1.182	Ideally
Average Full Collinearity (AFVIF)	Acceptable if ≤ 5; Ideally ≤ 3,3	1.358	Ideally
Goodness Tenenhaus (GoF)	Small ≥ 0,1; Medium ≥ 0.25; Large > 0.36	0.502	Large
Sympson's paradox ratio (SPR)	Acceptable if ≥ 0.9; Ideally = 1	1.000	Ideally
R-Squared Contribution Ratio (RSCR)	Acceptable if ≥ 0.9; Ideally = 1	1.000	Ideally
Statistical Suppression Ratio (SSR)	Acceptable if ≥ 0.7	1.000	Fit
Nonlinear bivariate causality direction ratio (NLBCDR)	Acceptable if ≥ 0.7	0.833	Fit
R-Square coefficients:		0.252	
Adjusted R-squared coefficients		0.242	
Q-squared coefficients		0.302	

Source: data processing, 2024.

Journal of Ecohumanism
2025
Volume: 4, No: 1, pp. 1669 – 1675
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v4i1.5979

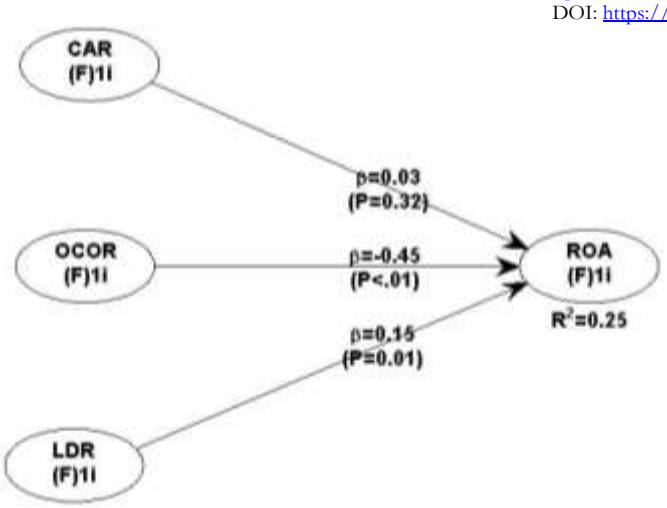

Figure 1. Research Result

Based on figure 1. shows that ROA is not affected by CAR. This means that high and low ROA are not affected by high and low CAR, this may be due to the bank's suboptimal management of its capital to be distributed to customers in the form of credit, because the bank prioritizes maintaining the CAR percentage in accordance with regulatory provisions in Indonesia. In terms of maintaining the CAR percentage in accordance with the regulator, the bank will be very careful, so that high and low CAR does not have an impact on ROA. This study is supported by (Adhim & Mulyati, 2024), (Salsabila et al., 2024), (Hasanudin et al., 2023), (Rahmi et al., 2022), and (Liniarti, 2021), which state that there is no effect of CAR on ROA. However, this study contradicts (Masmuna et al., 2024), (Randa et al., 2024), (Murtiningsih & Tohirin, 2023), (Fauji et al., 2022), (Hawaldar et al., 2022), (Suroso, 2022), (Kadek et al., 2021), (Brastama & Yadnya, 2020), and (Sunaryo, 2020) which show the opposite.

In contrast to CAR, based on figure 1. there is a negative influence between OCOR and ROA. This study has succeeded in proving the hypothesis that was built. This means that the lower the OCOR, the more effective and efficient the company is because it can control its operational costs so that the company's performance will be better which will have an impact on increasing ROA. Conversely, the higher the OCOR, the worse the company's performance will be, resulting in a decrease in ROA. This is in line with signal theory, which states that positive or negative signals given by the company will affect the response of investors. This means that signal theory is very useful, especially in providing information for investment decision making. This explanation is in accordance with (Adhim & Mulyati, 2024), (Jelli & Dura, 2024), (Randa et al., 2024), (Hasanudin et al., 2023), (Murtiningsih & Tohirin, 2023), (Fauji et al., 2022), and (Tho'in, 2022), which state that there is a negative influence between OCOR and ROA. This study is different from (Liniarti, 2021) which states that there is a positive influence between OCOR and ROA. In addition, (Akbar et al., 2024) and (Antika et al., 2024), state that there is no influence between both.

Meanwhile, based on figure 1. LDR also succeeded in proving the hypothesis that was built. This means that the higher the LDR, the more effective it will be in increasing interest income so that ROA will increase and the lower the LDR, the more interest income will decrease so that ROA will decrease. This is in line with signal theory, which states that positive or negative signals given by the company will affect the response of investors. This means that signal theory is very useful, especially in providing information for investment decision making. This explanation is in accordance with (Antika et al., 2024), (Hasanudin et al., 2023), and (Gerinata, 2021), which state that there is a positive influence between LDR and ROA. However, (Adhim & Mulyati, 2024), (Randa et al., 2024), (Salsabila et al., 2024), (Rahmi et al., 2022), (Suroso, 2022), (Juniarti, 2021), and (Liniarti, 2021), state the opposite.

Journal of Ecohumanism
2025
Volume: 4, No: 1, pp. 1669 – 1675
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v4i1.5979

Conclusion

This study concludes that OCOR and LDR successfully prove the hypothesis that was built. However, ROA is not affected by CAR, this is thought to be due to the caution of banking in Indonesia in fulfilling the provisions set by the regulator. The weakness of this study is the R square of 24%, so the suggestion for the next study is to modify the research model to obtain better results. The implication of this study is the importance of the banking sector paying attention to its financial performance for the sustainability of the company. And the implication for regulators is the determination of policies that are in accordance with the conditions in their country.

Acknowledgement

This paper is part of a research funded by the Ministry of Higher Education Malaysia under the Fundamental Research Grant Scheme (FRGS/1/2022/SS107/INTI/02/1) and supported by Inti International University, Malaysia.

References

Adhim, C., & Mulyati. (2024). The Influence of Capital Adequacy Ratio (CAR), Non-Performing Loan (NPL), Loan to Deposit Ratio (LDR), and Operational Costs to Operating Income (BOPO) on Return on Asset (ROA) in Banks Listed on the Indonesia Stock Exchange. International Journal of Science, Technology & Management, 1–13.

Akbar, A. A., Nurdiansyah, D. H., & Karawang, U. S. (2024). The Effect of NPL, BOPO, NIM on ROA of State-Owned Banks Listed on The Indonesia Stock Exchange Pengaruh NPL, BOPO, NIM Terhadap ROA pada Bank BUMN yang terdaftar pada Bursa Efek Indonesia. Jurnal Inovasi Bisnis Dan Akuntansi , 5(1), 91–101. http://journal.al-matani.com/index.php/invest/index

Antika, E. L. K., Rahmi, P. P., Sudaryo, Y., Sumarwidjaja, R. N., & Febriyanti, D. (2024). The Effect of Net Interest Margin (NIM), Operating Expenses, Operating Income (BOPO), Loan to Deposit Ratio (LDR), on Return on Assets (ROA) at PT Bank Mayapada International Tbk for the Period of 2014-2023. Journal Syntax Idea, 6(7), 3322–3329.

Brastama, F. R., & Yadnya, I. P. (2020). The Effect of Capital Adequacy Ratio and Non Performing Loan on Banking Stock Prices with Profitability as Intervening Variable. American Journal of Humanities and Social Sciences Research, 43–49(12), 43–49. www.ajhssr.com

Fauji, A., Oktafiani, W., & Bangsa, B. (2022). The Effect of Capital Adequacy Ratio and Operating Income Operating Expenses on Return on Assets in Banking Companies Listed on the Indonesia Stock Exchange. Jurnal Ekonomi, 11(01), 326–333. http://ejournal.seaninstitute.or.id/index.php/Ekonomi/article/view/250

Gerinata, G. (2021). The Effect of Loan To Deposit Ratio on Return On Assets at PT. Permata Bank, TBK Period 2010-2020. Kontigensi : Jurnal Ilmiah Manajemen, 9(2), 584–589. https://doi.org/10.56457/jimk.v9i2.212

Hasanudin, H., Awaloedin, D. T., & Apriyati, N. (2023). The Effect of LDR Ratio, CAR Ratio and BOPO Ratio on ROA in Conventional Banking on the Indonesia Stock Exchange Period 2015-2020. JMKSP (Jurnal Manajemen, Kepemimpinan, Dan Supervisi Pendidikan), 8(2), 560–571. https://doi.org/10.31851/jmksp.v8i2.11250

Hawaldar, I. T., Meher, B. K., Kumari, P., & Kumar, S. (2022). "Modelling the effects of capital adequacy, credit losses, and efficiency ratio on return on assets and return on equity of banks during COVID-19 pandemic." Banks and Bank Systems, 17(1), 115–124. https://doi.org/10.21511/bbs.17(1).2022.10

How, S. M., & Lee, C. G. (2021). Customer satisfaction and financial performance-linear or non-linear relationship: a case study of Marriot International. Current Issues in Tourism, 24(9), 1184–1189. https://doi.org/10.1080/13683500.2020.1735319

Indriani, E., Haryoso, P., & Choerudin, A. (2020). Is There a Trade-off Between Capital Adequacy and Profitability? (Empirical Study on Commercial Banks in Indonesia). Talent Development & Excellence, 12(1), 4580–4588. http://www.iratde.com

Jelli, R., & Dura, J. (2024). Analysis Of The Influence Of Green Banking And Operational Cost Efficiency On Return On Assets. International Journal of Educational Research & Social Sciences, 5(4), 747–752. https://ijersc.org/

Juniarti, W. (2021). The Effect of Capital Adequacy Ratio (CAR) And Loan To Deposit Ratio (LDR) To Return On Asset (ROA) on PT BJB Tbk. Indonesian Financial Review, 1(2), 133–146. https://doi.org/10.55538/ifr.v1i2.10

Kadek, N., Swandewi, M., & Purnawati, N. K. (2021). Capital Adequacy Ratio Mediates the Effect of Non-Performing Loan on Returns on Assets in Public Commercial Banks. American Journal of Humanities and Social Sciences Research, 5(1), 651–656. www.ajhssr.com

Liniarti, S. (2021). The Effect Of Financial Ratio On The Bank Profitability In Banks To Listed In The Indonesia Stock Exchange. Enrichment: Journal of Management, 12(1), 365–373. https://enrichment.iocspublisher.org/index.php/enrichment/article/view/236

Masmuna, H. T., Yuliani, Y., & Thamrin, K. M. H. (2024). The Influence of Financing Growth and CAR on ROA with NPF as a Moderating Variable. KnE Social Sciences, 2024, 743–759. https://doi.org/10.18502/kss.v9i14.16141

Murtiningsih, S., & Tohirin, A. (2023). the Influence of Some Bank Financial Ratios Characteristics. International Journal of Economic, Business and Accounting Research (IJEBAR), 7(1), 350–365.

Volume: 4, No: 1, pp. 1669 – 1675
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v4i1.5979
Rahmi, P. P., Herlina, L., & Novitasary, S. (2022). Effect of Capital Adequacy Ratio (Car), Net Interest Margin (Nim), and Loan To Deposits Ratio (Ldr) on Return on Asset (Roa) in Pt Bank Negara Indonesia Persero Tbk Period of 2011-2021. Journal of Business and Management Inaba, 1(1), 45–63. https://doi.org/10.56956/jbmi.v1i1.36

Randa, F., Herman, E. H., & Andewi, R. (2024). The effect of capital adequacy ratio, loan-to-deposit ratio, nonperforming loan, and operational efficiency on the rate of return on assets with allowance for impairment losses as moderating variable in conventional banks listed on the Indonesian stock ex. International Journal of Economic, Business and Applications, 9(1), 1–16. https://scholar.archive.org/work/eept3e2kundfvnawxkmdgh326m/access/wayback/https://ijeba.ejournal.unri.ac.id/index.php/IJEBA/article/download/7712/pdf

Salsabila, A., Sujadi, E., & Sarmigi, E. (2024). The Effect Of NPL, LDR, And CAR On ROA With NIM As A Mediation Variable In Conventional Bank Listed On The Indonesian Stock Exchange (BEI). Jurnal Ekonomi, 13(2), 1698–1710. https://doi.org/10.54209/ekonomi.v13i02

Spence, M. (1973). Job Market Signaling. The Quarterly Journal of Economics, 87(3), 355–374. https://doi.org/10.1055/s2004-820924

Sunaryo, D. (2020). The Effect Of Capital Adequacy Ratio On Return On Assets With Problem Credit Ratio Moderation. Ilomata International Journal of Tax and Accounting, 1(3), 145–151. https://doi.org/10.52728/ijtc.v1i3.99

Suroso, S. (2022). Analysis of the Effect of Capital Adequacy Ratio (CAR) and Loan to Deposit Ratio (LDR) on the Profits of Go Public Banks in the Indonesia Stock Exchange (IDX) Period 2016 – 2021. Economit Journal: Scientific Journal of Accountancy, Management and Finance, 2(1), 45–53. https://doi.org/10.33258/economit.v2i1.610

Tho'in, M. (2022). Effect of Financing to Deposit Ratio and Operational Efficiency on Profitability (ROA) with NPF as Intervening in Islamic Banks. Jurnal Ilmiah Ekonomi Islam, 8(02), 2020–2026.