

Volume: 3
Number: 4
Page: 437 - 445

Article History:

Received: 2025-02-04
Revised: 2025-03-02
Accepted: 2025-04-15

THE EFFECT OF CAPITAL ADEQUACY RATIO, NON-PERFORMING LOAN, NET INTEREST MARGIN, LOAN TO DEPOSIT RATIO, AND COST TO INCOME RATIO ON THE FIRM VALUE OF BANKS LISTED ON THE INDONESIA STOCK EXCHANGE FOR THE 2021-2024 PERIOD

Awen Alif ATHAYYA¹, Yulazri YULAZRI²

^{1,2}Accounting Study Program, Faculty of Economics and Business, Esa Unggul University, Indonesia

Corresponding author: Awen Alif Athayya

E-mail: awenalif07@gmail.com

Abstract:

This research investigates the influence of financial performance ratios on firm value within the banking industry listed on the Indonesia Stock Exchange (IDX). Firm value is assessed using the Tobin's Q metric, with the independent variables comprising the Capital Adequacy Ratio (CAR), Non-Performing Loans (NPL), Net Interest Margin (NIM), Loan-to-Deposit Ratio (LDR), and Cost-to-Income Ratio (CIR). A quantitative causal method employing multiple linear regression analysis is applied. The data were obtained from the financial reports of conventional banks registered on the IDX. Out of 45 banks considered as the study population, 41 met the sample criteria over the 2021-2024 period, resulting in 123 observations. Prior to regression, classical assumption tests were performed to validate the model. The findings reveal that CAR exerts a negative and significant impact on firm value, while NPL, NIM, and LDR show negative and significant relationships. Conversely, CIR demonstrates no significant influence. These outcomes imply that factors such as capital strength, asset quality, and credit distribution efficiency are key determinants shaping investors' evaluation of banking firm value.

Keywords: Firm Value, Capital Adequacy Ratio, Non-Performing Loan, Net Interest Margin, Loan to Deposit Ratio, Cost to Income Ratio

INTRODUCTION

Firm value represents an important measure of market perception regarding the performance, stability, and long-term prospects of a business entity, particularly in the banking sector. In the financial industry, firm value is often considered the primary reference point by investors to assess financial health and future growth potential (Burger & Moormann, 2008). An increase in firm value not only reflects the success of business strategies but also serves as an indicator of investor confidence in a bank's risk management and operational efficiency.

In line with growing market transparency and regulatory pressure, banks listed on the Indonesia Stock Exchange (IDX) face the challenge of maintaining their firm value. Several key financial ratios are believed to have a significant relationship with firm value, including the Capital Adequacy Ratio (CAR), Non-Performing Loan (NPL), Net Interest Margin (NIM), Loan to Deposit Ratio (LDR), and Cost to Income Ratio (CIR) (Jonardy & Avionita, 2024; Mustofa, 2023; Wangarry et al., 2023).

The Capital Adequacy Ratio (CAR) reflects a bank's ability to absorb potential losses through capital buffers. A high CAR indicates strong financial resilience, which can enhance investor trust and firm value (Jagirani et al., 2023). Meanwhile, the Non-Performing Loan (NPL) ratio reflects the quality of credit assets. High levels of NPL signify problematic loans that can undermine profitability and damage a bank's financial reputation (Simanjuntak & Hidayat, 2023).



This open-access article is distributed under a
Creative Commons Attribution (CC-BY-NC) 4.0 license

The Net Interest Margin (NIM) indicates the efficiency of banks in generating net interest income from their productive assets. A higher NIM may strengthen profitability and act as a positive catalyst for firm value (Priharta et al., 2022). Similarly, the Loan-to-Deposit Ratio (LDR) reflects the effectiveness of utilizing third-party funds in lending activities. An optimal LDR demonstrates sound liquidity management and the ability to channel financing productively (Mawarti et al., 2022). Finally, the Cost-to-Income Ratio (CIR) measures a bank's operational efficiency. A lower CIR indicates efficient cost management, which can improve market perceptions of a bank's competitiveness (Saputra et al., 2024).

Previous studies have confirmed the significant relationship between CAR, NPL, NIM, and CIR with firm value. However, the inclusion of LDR in one comprehensive model remains relatively limited, despite its critical role in reflecting a bank's liquidity management and financing capacity (Jagirani et al., 2023). Therefore, this study expands the model by incorporating LDR to provide a more comprehensive analysis of the determinants of firm value.

Based on this background, the objective of this research is to analyze the simultaneous influence of CAR, NPL, NIM, LDR, and CIR on firm value in the Indonesian banking sector during the 2021–2024 period. It is expected that the findings will contribute both academically and practically to the understanding of which financial indicators are most crucial in enhancing firm value in Indonesia's banking industry.

Signalling Theory. Signalling theory, introduced by Michael Spence (1973), explains how companies convey signals to the market through financial information to indicate their prospects and performance. In this context, financial ratios such as CAR, NPL, NIM, LDR, and CIR are considered signals to investors in assessing the quality and prospects of banks. Positive signals are expected to enhance firm value, while negative signals may reduce investor confidence.

Pecking Order Theory. The pecking order theory, first proposed by Donaldson (1961) and later popularized by Myers and Majluf (1984), states that companies prefer internal financing over external financing. In the banking sector, this has implications for capital structure, where ratios such as CAR and LDR reflect a bank's ability to utilize internal funds before resorting to external sources.

Firm Value Concept. Firm value represents the market value of a company as perceived by investors in relation to its potential profitability. In this study, Tobin's Q is used as the main indicator, as it combines market value with book value, providing a more comprehensive perspective compared to other measures such as Price to Earnings Ratio (PER) or Price to Book Value (PBV) (Tobin, 1969; Brigham & Houston, 2019; Sudiyanto et al., 2012).

Capital Adequacy Ratio (CAR). CAR is a measure of a bank's capital adequacy that reflects its ability to absorb potential losses from risky assets. This ratio is widely used to assess banking stability (Puspita et al., 2025; OJK, 2016). Previous studies, such as Anggriani & Widyawati (2024) and Putri (2023), emphasize that while a higher CAR demonstrates financial resilience, excessively high CAR may reflect inefficiency in capital utilization, potentially leading to a decline in firm value.

Non-Performing Loan (NPL). NPL measures the proportion of problematic loans in a bank's portfolio, indicating credit risk exposure. High NPL ratios indicate a greater risk of default and declining financial stability, which may lower a firm's value (Wardani et al., 2023; Murni & Sabijono, 2018; OJK, 2015).

Net Interest Margin (NIM). NIM reflects a bank's efficiency in generating net interest income from its productive assets. A higher NIM is generally associated with better profitability, though in some contexts, excessively high margins may indicate inefficiencies or elevated risk (Priharta et al., 2022; OJK, 2020; Yuniarsa & Annis, 2020).



Loan to Deposit Ratio (LDR). LDR indicates the proportion of third-party funds allocated to loans. An excessively high LDR indicates liquidity risks, while a low LDR suggests inefficiency in the utilization of funds. According to Mawarti et al. (2022), the optimal range for LDR is 78%–92%, as regulated by Bank Indonesia (PBI No. 13/10/PBI/2011).

Cost to Income Ratio (CIR). CIR measures a bank's operational efficiency by comparing operating expenses to operating income. Higher CIR values indicate inefficiency, which can reduce a firm's value. However, studies such as Saputra et al. (2024), Burger & Moormann (2008), and Hess & Francis (2004) suggest that the relationship between CIR and firm value is not always consistent across different contexts.

Previous Studies. Many previous studies have examined the relationship between financial ratios and firm value:

1. Capital Adequacy Ratio (CAR): Most studies, such as Jonardy & Avionita (2024), Jagirani et al. (2023), and Wangarry et al. (2023), reported a positive effect of CAR on firm value. However, other studies found different results, indicating that excessively high CAR may reflect inefficient capital utilization, thereby reducing firm value.
2. Non-Performing Loan (NPL): Research by Mustofa (2023) and Simanjuntak & Hidayat (2023) confirmed that higher NPL ratios have a significant negative impact on firm value, as they signal increased credit risk and deteriorating asset quality.
3. Net Interest Margin (NIM): Studies by Priharto et al. (2022) and Debora (2021) emphasize that higher NIM generally contributes positively to profitability and firm value. However, Olalere et al. (2020) found that excessively high NIM may be perceived as inefficient and carry an elevated risk.
4. Loan to Deposit Ratio (LDR): Findings by Bila & Sugandha (2022) and Mawarti et al. (2022) indicate that excessively high LDR increases liquidity risk, reduces investor confidence, and negatively affects firm value.
5. Cost-to-Income Ratio (CIR): Saputra et al. (2024) found that the CIR does not significantly influence firm value. In contrast, Twairesh & Alserhan (2025) reported a significant negative effect, particularly when cost efficiency fails to support profitability performance.

Research Hypotheses. Based on the theoretical framework and previous studies, the hypotheses of this research are formulated as follows:

H1: Capital Adequacy Ratio (CAR) positively affects firm value (Tobin's Q).

H2: Non-Performing Loan (NPL) negatively affects firm value.

H3: Net Interest Margin (NIM) positively affects firm value.

H4: Loan-to-Deposit Ratio (LDR) positively affects firm value.

H5: Cost-to-Income Ratio (CIR) negatively affects firm value.

METHODS

This study adopts a quantitative approach with a causal-associative method to examine the influence of Capital Adequacy Ratio (CAR), Non-Performing Loan (NPL), Net Interest Margin (NIM), Loan to Deposit Ratio (LDR), and Cost to Income Ratio (CIR) on firm value (Tobin's Q) among banks listed on the Indonesia Stock Exchange (IDX) during the 2021–2024 period.

The research sample was determined using purposive sampling, based on specific criteria such as the availability of complete financial statements and consistency of reporting during the observation period. Out of 45 banks forming the population, 41 banks met the criteria, resulting in a total of 123 observations after removing outliers.



The study uses secondary data collected from the annual financial reports of banking firms, the official IDX website, and the official websites of the respective banks. Firm value was measured using the Tobin's Q ratio, while the independent variables were calculated using standard financial ratio formulas commonly applied in the banking sector.

The data were analyzed using multiple linear regression with SPSS version 25. Prior to regression, classical assumption tests were conducted, including tests for normality, multicollinearity, heteroscedasticity, and autocorrelation, to ensure the validity of the model. The hypothesis testing employed the F-test to examine the simultaneous significance of all independent variables, the t-test to assess the partial effects of each variable, and the coefficient of determination (Adjusted R²) to measure the explanatory power of the model.

RESULT AND DISCUSSION

Descriptive Statistics. The descriptive statistics analysis was conducted to provide an overview of the research variables, including minimum, maximum, mean, and standard deviation values. A total of 123 observations from 41 banks, spanning 2021–2024, were analyzed after eliminating outliers to ensure representativeness.

Table 1. Descriptive Statistics

Descriptive Statistics					
Variable	N	Minimum	Maximum	Mean	Std. Deviation
CAR	123	10.50	94.38	30.9459	14.06502
NPL	123	0.03	9.56	2.6322	1.84553
NIM	123	0.41	8.88	3.9744	1.68602
LDR	123	20.53	170.48	85.4173	26.34235
CIR	123	22.85	583.40	72.4006	63.07220
TBNQ	123	0.59	0.99	0.8305	0.07779
Valid N (listwise)	123				

Source: SPSS Output (2025)

The results indicate that the average CAR is 30.95%, which is well above the minimum requirement set by OJK (8%). It suggests that banks, on average, have strong capital adequacy, although excessively high CAR may reflect idle capital. The mean NPL stands at 2.63%, which is below the 5% threshold, indicating good credit quality; however, the maximum value of 9.56% suggests credit risk in some banks. The average NIM is 3.97%, implying relatively strong interest income, although wide variations across banks suggest differences in intermediation efficiency. The mean LDR of 85.42% falls within Bank Indonesia's healthy range (78%–92%), though a maximum of 170.48% signals liquidity risk in certain banks. Lastly, CIR averages 72.40%, exceeding the ideal threshold of 60%, indicating that operational inefficiency remains a challenge. The dependent variable, Tobin's Q, averages 0.83, reflecting that banking firms are generally valued lower by the market compared to their book value.

Classical Assumption Tests. To ensure the validity of the regression model, classical assumption tests were conducted.

Table 2. Classical Assumption Test Results



This open-access article is distributed under a
Creative Commons Attribution (CC-BY-NC) 4.0 license

No	Test	Indicator	Result	Conclusion
1	Normality Test	Asymp. Sig. (2-tailed)	0,200	Data are normally distributed
2	Multicollinearity Test	VIF/Tolerance	1,054-1,276 > 0.1 0.784-0.936 < 10	No multicollinearity
3	Heteroscedasticity Test	Glejser Test	CAR = 0,476 > 0,05 NPL = 0,600 > 0,05 NIM = 0,267 > 0,05 LDR = 0,581 > 0,05 CIR = 0,147 > 0,05	No heteroscedasticity
4	Autocorrelation Test	Durbin-Watson	1,827	No autocorrelation

Source: SPSS Output (2025)

The results confirm that the residuals are normally distributed (Kolmogorov-Smirnov sig. = 0.200), no multicollinearity exists (VIF < 10), no heteroscedasticity is present (p-values > 0.05), and no autocorrelation is detected (Durbin-Watson = 1.827). These results confirm that the model satisfies the requirements for multiple regression analysis.

Multiple Regression Analysis. The multiple regression model tested the effect of CAR, NPL, NIM, LDR, and CIR on Tobin's Q.

Table 3. Regression Coefficients

Variable	Coefficient (B)	t-value	Sig.	Remark
(Constant)	1,085	50,879	0,000	-
CAR	-0,003	-10,871	0,000	Significant negative
NPL	-0,005	-2,268	0,025	Significant negative
NIM	-0,013	-4,602	0,000	Significant negative
LDR	-0,001	-6,330	0,000	Significant negative
CIR	-0,000025	-0,355	0,723	Not significant

Source: SPSS Output (2025)

Table 4. Model Summary

Model Statistic	Value
F-statistic	49.061
Sig. F	0.000
Adjusted R ²	0.663

Source: SPSS Output (2025)

Note: * significant at $\alpha = 0.05$

The regression equation obtained is:

$$TBNQ = 1,085 - 0,003(CAR) - 0,005(NPL) - 0,013(NIM) - 0,001(LDR) - 0,000025(CIR) + e$$

The adjusted R² of 0.663 indicates that 66.3% of the variation in firm value (Tobin's Q) is explained by the five independent variables, while the remaining 33.7% is influenced by other factors not included in the model. The F-test yields a significance value of 0.000, confirming that the independent variables collectively impact firm value.



This open-access article is distributed under a Creative Commons Attribution (CC-BY-NC) 4.0 license

Individually, CAR ($p = 0.000$), NPL ($p = 0.025$), NIM ($p = 0.000$), and LDR ($p = 0.000$) all have a significant negative effect on firm value, while CIR ($p = 0.723$) has no significant effect.

The results indicate that the Capital Adequacy Ratio (CAR) has a significant negative effect on firm value. Although CAR theoretically reflects the capital strength of banks in absorbing losses, excessively high CAR may suggest idle capital that is not effectively utilized for credit distribution or investment. This condition creates an impression of inefficiency among investors, ultimately reducing firm value. These findings are consistent with Refrayadi and Kufepaksi (2024), who emphasized that overcapitalization can reduce investor appeal. This concept can also be explained through the Pecking Order Theory, which emphasizes the importance of optimizing internal funds before resorting to external financing.

Furthermore, Non-Performing Loans (NPL) also exhibit a significant negative impact on firm value. An increase in NPL reflects deteriorating asset quality due to a higher proportion of non-performing loans. It weakens profitability, disrupts cash flow, and reduces investor confidence in the stability of banks. These findings align with those of Mustofa (2023) and Simanjuntak and Hidayat (2023), who confirmed that high NPL ratios negatively impact market perceptions of banks. Thus, maintaining credit quality is crucial for sustaining investor trust and firm value.

Contrary to much of the existing literature, which often highlights Net Interest Margin (NIM) as an indicator of profitability, this study finds that NIM has a negative and significant influence on firm value. A high NIM does not always indicate sound performance, as it may be achieved at the expense of a higher credit risk. Investors may perceive this as a signal of inefficiency and increased risk, thereby lowering the attractiveness of the bank. This finding is consistent with Jagirani et al. (2023) and Olalere et al. (2020), who argue that excessively high NIM can harm investor perceptions, as it is perceived to undermine long-term competitiveness.

Similarly, the Loan-to-Deposit Ratio (LDR) is found to have a significant negative impact on firm value. A high LDR indicates that most third-party funds are already channeled into loans, which increases liquidity risk and reduces financial flexibility. Investors may interpret this as a risk signal, which could lower long-term stability expectations. This finding aligns with Mawarti et al. (2022) and Tjahjadi & Munandar (2022), who argue that excessive LDR reduces firm value due to an increased risk of default.

On the other hand, the Cost-to-Income Ratio (CIR) does not significantly affect firm value. Although CIR theoretically measures operational efficiency, the results suggest that cost efficiency is not always a primary factor for investors when assessing bank firm value. Instead, external factors such as macroeconomic conditions, regulatory pressures, or growth strategies may play a more dominant role in shaping investor perceptions. This finding is consistent with Saputra et al. (2024), who noted that the impact of CIR on firm value is inconsistent across different contexts.

Overall, the findings reveal that nearly all examined banking ratios (CAR, NPL, NIM, and LDR) exert a significant negative influence on firm value, while CIR has no significant effect. It indicates that investors evaluate not only the magnitude of financial ratios but also the quality of capital management and the effectiveness of fund utilization. Therefore, banks must balance capital adequacy, asset quality, interest-based profitability, and liquidity management in order to strengthen investor confidence and sustain firm value.

CONCLUSION



This open-access article is distributed under a
Creative Commons Attribution (CC-BY-NC) 4.0 license

This study concludes that financial ratios have varying impacts on firm value in the Indonesian banking sector, as measured by Tobin's Q. The regression results reveal that Capital Adequacy Ratio (CAR), Non-Performing Loans (NPL), Net Interest Margin (NIM), and Loan to Deposit Ratio (LDR) significantly and negatively affect firm value. These findings suggest that although these ratios are commonly considered indicators of stability and profitability, excessively high levels may instead be perceived by investors as signals of inefficiency and increased risk. In contrast, the Cost-to-Income Ratio (CIR) shows no significant impact, implying that operational efficiency alone is insufficient to influence market valuation.

Overall, the results highlight that investors focus not only on the magnitude of financial ratios but also on how effectively banks manage capital, credit quality, and liquidity. Therefore, maintaining a balanced approach to capital adequacy, credit risk management, margin optimization, and liquidity management is crucial for enhancing investor confidence and achieving sustainable firm value.

REFERENCES

- Anggriani, R. S., & Widyawati, D. (2024). Pengaruh ukuran perusahaan dan kinerja keuangan terhadap nilai perusahaan. *Jurnal Ilmu dan Riset Akuntansi*, 10(2), 496. <https://doi.org/10.32493/inovasi.v10i2.p496-506.36304>
- Bila, A. S., & Sugandha. (2022). Pengaruh return on equity (ROE), loan to deposit ratio (LDR), biaya operasional pendapatan operasional (BOPO), dan non performing loan (NPL) terhadap nilai perusahaan pada subsektor perbankan. *Jurnal Ekonomi, Manajemen dan Perbankan*, 3(1), 1–12.
- Brigham, E., & Houston, J. F. (2019). *Fundamentals of financial management*. Cengage Learning.
- Burger, A., & Moormann, J. (2008). Productivity in banks: Myths & truths of the cost-income ratio. *Banks and Bank Systems*, 3(4), 85–94.
- Debora. (2021). Pengaruh kinerja keuangan terhadap nilai perusahaan perbankan yang terdaftar di Bursa Efek Indonesia. *Blantika: Multidisciplinary Journal*, 2(1). <https://doi.org/10.57096/blantika.v2i1.65>
- Donaldson, G. (1961). *Corporate debt capacity: A study of corporate debt policy*. Harvard University Press.
- Hess, K., & Francis, G. (2004). Cost income ratio benchmarking in banking: A case study. *Benchmarking: An International Journal*, 11(3), 303–319. <https://doi.org/10.1108/14635770410538772>
- Jagirani, T. S., Chee, L. C., & Kosim, Z. B. (2023a). Determinants of the firm value of listed banks in Pakistan: A panel data approach. *Asian Economic and Financial Review*, 13(4), 241–250. <https://doi.org/10.55493/5002.v13i4.4764>
- Jagirani, T. S., Chee, L. C., & Kosim, Z. B. (2023b). Relationship between financial risks and firm value: A moderating role of capital adequacy. *Investment Management and Financial Innovations*, 20(1), 293–303. [https://doi.org/10.21511/imfi.20\(1\).2023.25](https://doi.org/10.21511/imfi.20(1).2023.25)
- Jonardy, M. J., & Avionita, V. (2024). The effect of financial performance of banking on firm value (An empirical study on conventional banking companies listed on the Indonesia Stock Exchange for the period 2018–2022). *Accounting: Journal of Accounting and Finance*, 9(2), 189–204.
- Mawarti, B., Dimas, A. N., & Tantri, Y. S. (2022). The effect of financial ratios in determining company value: Empirical study on banking companies listed on the Indonesia Stock Exchange for the 2015–2019 period. *Budapest International Research and Critics Institute (BIRCI-Journal): Humanities and Social Sciences*, 5(1), 3001–3013.

- Murni, S., & Sabijono, H. (2018). Peran kinerja keuangan dalam menentukan nilai perusahaan. *JMBI UNSRAT (Jurnal Ilmiah Manajemen Bisnis dan Inovasi Universitas Sam Ratulangi)*, 5(2), 96–107. <https://doi.org/10.35794/jmbi.v5i2.20806>
- Mustofa, I. A. (2023). Faktor-faktor internal yang berpengaruh terhadap nilai perusahaan: Studi empiris pada Bank BUKU IV. *Jurnal Pendidikan Tambusai*, 7(1), 1506–1513.
- Myers, S. C., & Majluf, N. S. (1984). Corporate financing and investment decisions when firms have information that investors do not have. *Journal of Financial Economics*, 13(2), 187–221.
- OJK. (2015). *Peraturan OJK tentang transparansi dan publikasi laporan keuangan*.
- OJK. (2016). *POJK No. 11 tentang konversi kewajiban penyediaan modal minimum bank umum (KPMU)*.
- OJK. (2020). *Laporan profil industri perbankan*.
- Olalere, O., Islam, M. A., Junoh, M. Z. M., Yusoff, W. S., & Iqbal, M. M. (2020). Revisiting the impact of intrinsic financial risks on the firm value of banks in ASEAN-5 countries: A panel data approach. *Banks and Bank Systems*, 15(2), 200–213. [https://doi.org/10.21511/bbs.15\(2\).2020.18](https://doi.org/10.21511/bbs.15(2).2020.18)
- Peraturan BI. (2011). *Peraturan Bank Indonesia No. 13/10/PBI/2011 tentang Giro Wajib Minimum Bank Umum dalam Rupiah dan Valuta Asing*.
- Priharta, A., Buana, Y., Diana, D., & Sintarini, F. (2022). Corporate governance dan kinerja keuangan: Dampaknya pada nilai perusahaan. *Jurnal Akuntansi dan Governance*, 3(1), 16–28. <https://doi.org/10.24853/jago.3.1.16-28>
- Putri, A. A. (2023). Pengaruh capital adequacy ratio (CAR) terhadap nilai perusahaan dengan likuiditas dan BOPO sebagai variabel intervening pada bank umum syariah periode 2016–2020.
- Puspita, H. E., Shari, W., & Majid, N. H. A. (2025). Elements Influencing Company Value and the Role of Earnings Management as a Moderating Factor: Insights from Islamic Banking. *Journal of Asian Scientific Research*, 15(1), 147–161. <https://doi.org/10.55493/5003.v15i1.5336>
- Refrayadi, H. A., & Kufepaksi, M. (2024). Pengaruh kepemilikan manajerial, capital adequacy ratio (CAR), loan to deposit ratio (LDR), dan non-performing loan (NPL) terhadap nilai perusahaan pada perusahaan sektor perbankan yang tercatat pada Bursa Efek Indonesia periode 2003–2022. *Research Accounting and Auditing Journal*, 1(1), 1–20.
- Saputra, A., Gamayuni, R., & Sudrajad, S. (2024). The Impact of the Cost-to-Income Ratio on Firm Value with Net Interest Margin as a Mediating Variable in the Banking Sector of ASEAN-5 Countries. <https://doi.org/10.4108/eai.4-9-2024.2353785>
- Simanjuntak, G. T., & Hidayat, T. (2023). Analisis pengaruh pandemi Covid-19 terhadap nilai perusahaan perbankan di Indonesia. *Konferensi Ilmiah Akuntansi XI*, 1–25.
- Spence, M. (1973). Job market signaling. *The Quarterly Journal of Economics*, 87(3), 355–374. <https://doi.org/10.2307/1882010>
- Sudiyanto, B., Puspitasari, E., & Kartika, A. (2012). The company's policy, firm performance, and firm value: An empirical research on the Indonesia Stock Exchange.
- Tjahjadi, E., & Munandar, A. (2022). Analisis risiko kredit, NIM, dan LDR terhadap PBV pada bank BUKU 4 periode 2016–2020. *Jurnal Ilmiah Manajemen, Ekonomi, dan Akuntansi*, 6(2), 1387–1405.
- Tobin, J. (1969). A general equilibrium approach to monetary theory. *Journal of Money, Credit and Banking*, 1(1), 15–29.
- Twairesh, A. E., & Alserhan, H. F. (2025). The influence of capital adequacy, cost-to-income ratio, debt-to-equity ratio, loan-to-deposit ratio, and bank size on the performance of Jordanian banks. *International Journal of Applied Economics, Finance and Accounting*, 22(1), 31–39. <https://doi.org/10.33094/ijaefa.v22i1.2237>

- Wangarry, M., Maramis, J. B., & Mangantar, M. (2023). Pengaruh capital adequacy ratio, non-performing loan, operating expenses on operating income, loan to deposit ratio terhadap firm value perbankan yang terdaftar di Bursa Efek Indonesia. *Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis dan Akuntansi*, 11(4), 1408-1417.
<https://doi.org/10.35794/emba.v11i4.52377>
- Wardani, T., Putra, D., & Mahardika, K. (2023). The effect of net interest margin (NIM), non-performing loans (NPL), and capital adequacy ratio (CAR) on company value (Study of bank sub-sector companies listed on the Indonesia Stock Exchange for the 2018-2021 period). *Management Studies and Entrepreneurship Journal*, 4(4), 3840-3853.
- Yuniarsa, A., & Annis, B. (2020). Pengaruh non performing finance, net interest margin, gearing ratio, dan asset turn over terhadap nilai perusahaan. *JCA Ekonomi*, 1(1), 102-114.