



**STRENGTHENING BANK LIQUIDITY: ANTICIPATING POST-COVID-19
RELAXATION CESSATION WITH INSTITUTIONAL OWNERSHIP AND
CAPITAL STRUCTURE**

Made Ratih Nurmalasari¹, Putu Putri Prawitasari², Putu Diah Kumalasari³

^{1,2}Faculty of Economics and Business, Universitas Pendidikan Nasional

³Faculty of Economics and Business, Universitas Mahasaraswati Denpasar

ratihnurmalasari@undiknas.ac.id

ABSTRACT

This study aims to examine the impact of institutional ownership and capital structure on banking liquidity in Indonesia in the context of the impending cessation of relaxation measures by Bank Indonesia and the Financial Services Authority (OJK) post-COVID-19 pandemic. Using data collected from several banks in Indonesia and analyzed through multiple linear regression methods, this research investigates how institutional ownership and capital structure, measured by the Debt to Equity Ratio (DER), influence bank liquidity as measured by the Current Ratio. Additionally, this study proposes new innovations for optimizing institutional ownership to enhance banking liquidity, including increased financial transparency, the adoption of blockchain technology for asset management, and the development of sustainable financial products. The analysis results show that institutional ownership has a positive and significant impact on bank liquidity, where an increase in institutional ownership contributes to enhanced liquidity. Conversely, capital structure, as measured by DER, has a negative and significant impact on bank liquidity. This indicates that an increase in DER tends to reduce bank liquidity. Based on these findings, innovative recommendations are provided for banks to optimize their institutional ownership and capital structure.

Keywords: Institutional Ownership, Capital Structure, Liquidity, Post-COVID-19 Relaxation

A. INTRODUCTION

The COVID-19 pandemic has significantly impacted the global economy, and the banking sector in Indonesia is no exception. During the crisis, regulatory bodies worldwide, including Indonesia, introduced relaxation measures to support financial institutions in maintaining stability and liquidity. As the global economy gradually recovers and these relaxation measures are phased out, banks are faced with the challenge of strengthening their liquidity to withstand potential economic shocks. This study aims to investigate the influence of institutional ownership and capital structure, measured by the debt-to-equity ratio (DER), on the liquidity of banks in Indonesia, measured by the current ratio, and to provide policy recommendations to enhance liquidity management in the post-pandemic era. (Pratama & Anisa, 2022)

Institutional ownership refers to the shares owned by large entities such as mutual funds, pension funds, and insurance companies. These institutions typically have significant influence over corporate governance and decision-making processes. Research indicates that institutional investors can enhance corporate governance by closely monitoring management, thus potentially improving a firm's financial performance and liquidity (Shleifer & Vishny, 1997). In the banking sector, which is highly regulated and sensitive to market fluctuations, the role of institutional ownership becomes even more critical. Institutional investors can enforce better risk management practices, which is essential for maintaining liquidity, especially as regulatory relaxations come to an end (Ferreira & Matos, 2008).

The capital structure of banks, particularly the debt-to-equity ratio, is another crucial factor influencing liquidity. A high debt-to-equity ratio indicates a greater reliance on debt financing, which can lead to higher financial risk and potential liquidity challenges, particularly

during economic downturns. Diamond & Rajan (2005) argue that excessive leverage can exacerbate liquidity crises, as high debt levels increase the burden of interest payments and debt repayment obligations. Conversely, a balanced capital structure with lower leverage can enhance liquidity by reducing financial stress and ensuring that more funds are available for daily operations and unforeseen withdrawals (Acharya & Viswanathan, 2011).

The current ratio, a liquidity measure that compares a firm's current assets to its current liabilities, is a critical indicator of a bank's ability to meet its short-term obligations. Maintaining an optimal current ratio is vital for banks to ensure they can handle sudden cash demands and depositor withdrawals. Studies have shown that both institutional ownership and capital structure significantly impact liquidity ratios in financial institutions (Elyasiani & Jia, 2010; Vithessonthi & Tongurai, 2015). Therefore, understanding the interplay between these factors is crucial for enhancing the liquidity of Indonesian banks in the post-pandemic period. Several studies have focused on the relationship between institutional ownership and capital structure on firm liquidity, yielding varied results.

In the context of Indonesia, where the banking sector plays a pivotal role in the economic landscape, optimizing liquidity management is essential for financial stability and economic growth. The phasing out of pandemic-related regulatory relaxations presents both challenges and opportunities for banks to reassess and strengthen their liquidity positions. Institutional ownership can provide the necessary oversight and pressure for banks to adopt prudent liquidity management practices, while an optimal capital structure can mitigate risks associated with excessive leverage (Nguyen et al, 2015). By examining these factors, this study aims to offer insights and policy recommendations that can help Indonesian banks navigate the post-pandemic era with greater resilience.

This study seeks to explore the impact of institutional ownership and capital structure on the liquidity of Indonesian banks, measured by the current ratio. By analyzing these relationships and considering the impending cessation of regulatory relaxations according Zaman & Pratama, (2023), this research will provide valuable policy recommendations for banks to effectively manage their liquidity. This study also emphasizes the importance of optimizing institutional ownership and capital structure to enhance banking liquidity, while linking it to the preparation for the cessation of post-pandemic policy relaxations. As the title of the research, it can serve as a strong starting point for further investigation into how banks can prepare for the impact of the cessation of these policy relaxations. Whether through increasing institutional ownership, strengthening capital structure, or adopting new innovations in risk and liquidity management. The findings will contribute to the broader understanding of how banks can enhance their financial stability and readiness for future economic challenges, ensuring a robust banking sector in Indonesia's evolving economic landscape.

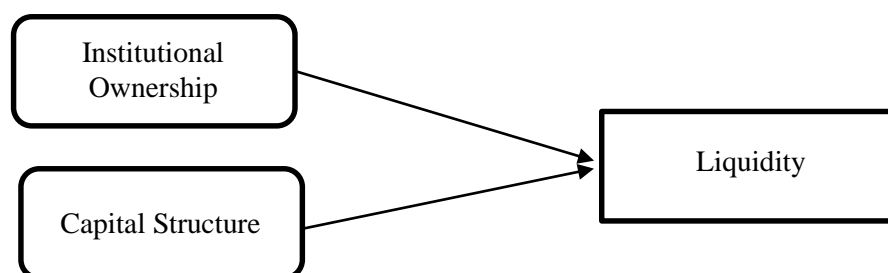


Figure 1. Conceptual Framework

So that, the formulation of the hypothesis of this study as follows:

H1: Institutional ownership has a significant negative effect on liquidity of bank companies listed on the Indonesia Stock Exchange during the period of 2020-2022.

H2: Capital Structure has a significant positive effect on liquidity of bank companies listed on the Indonesia Stock Exchange during the period of 2020-2022.

B. LITERATURE REVIEW

Agency theory, developed by Jensen and Meckling (1976), provides a robust framework for analyzing the relationships between various stakeholders in a corporation, particularly the principals (shareholders) and agents (management). This theory posits that conflicts of interest arise because the agents, who are responsible for the day-to-day management of the company, may not always act in the best interests of the principals. This misalignment of interests can lead to suboptimal decisions that affect the firm's overall performance, including its liquidity.

Institutional ownership can be understood through the lens of agency theory. Institutional investors, with their substantial shareholdings, have both the incentive and the means to monitor management closely and influence corporate decisions to align with shareholders' interests. By reducing agency costs and ensuring that management focuses on value-enhancing activities, institutional ownership can improve governance practices. This improved governance can lead to better liquidity management as institutions can enforce stricter oversight on financial policies and practices (Shleifer & Vishny, 1997). Therefore, institutional ownership plays a crucial role in mitigating agency problems, which in turn can positively affect the liquidity of banks.

Capital structure, specifically the Debt to Equity Ratio (DER), also relates to agency theory. The use of debt can serve as a disciplinary mechanism for management, as it requires regular interest payments, thereby reducing free cash flow and the potential for wasteful expenditures. However, excessive leverage increases financial risk and can lead to liquidity problems, as highlighted by Diamond & Rajan (2005). Agency theory suggests that a balanced capital structure, where the benefits of debt discipline are weighed against the risks of financial distress, is essential for maintaining liquidity. By optimizing their DER, banks can ensure sufficient liquidity to meet their short-term obligations while minimizing the risks associated with high debt levels. This balance supports the firm's ability to remain solvent and liquid, particularly in the post-pandemic economic environment.

Other several studies have highlighted the relationship between capital structure and liquidity. According to findings from Omoregie et al. (2019), higher debt in the capital structure tends to decrease corporate liquidity. In contrast, results from Sumani & Roziq (2020) indicate a significant positive reciprocal correlation between capital structure and liquidity policy for manufacturing companies in Indonesia.

Agency theory provides a comprehensive explanation for how institutional ownership and capital structure can influence a bank's liquidity. Institutional investors based on Nuryadi, Pratama, & Arifin, (2024) help mitigate agency conflicts, leading to better governance and improved liquidity management. Similarly, an optimal capital structure can balance the benefits of debt discipline with the risks of financial distress, ensuring that banks maintain adequate liquidity. By grounding this research in agency theory, we can better understand the mechanisms through which these variables interact and influence the liquidity of Indonesian banks in the post-COVID-19 era.

Institutional ownership has garnered significant attention in the financial literature due to its potential impact on corporate governance and firm performance. Numerous studies suggest that institutional investors, with their substantial shareholdings, possess the power to influence management decisions and promote more efficient operations. This influence is particularly crucial in the banking sector, where liquidity management is vital. According to Shleifer & Vishny (1997), institutional investors can play a pivotal role in monitoring management, thereby enhancing firm value and liquidity through improved governance practices. This monitoring is essential in emerging markets like Indonesia, where corporate governance standards may still be evolving (Claessens & Yurtoglu, 2013).

Several studies have examined the relationship between institutional ownership and liquidity, such as the research by Panda & Leepsa (2019), which suggests that institutional ownership can enhance liquidity because institutional investors are capable of more effective monitoring. Hunjra (2020) found that ownership concentration, institutional ownership, and earnings management significantly influence stock market liquidity. Sakawa & Watanabel (2020) also imply that institutional shareholders contribute to enhancing sustainable firm performance and building sustainable corporate governance mechanisms in stakeholder-oriented systems. Liu (2013) discovered that stocks with larger institutional investor bases tend to be more liquid compared to others, especially those with more severe information asymmetry. Further analysis revealed this effect is stronger for stocks with greater information asymmetry. Yeddou's (2015) findings highlight two aspects: first, they found that ownership concentration positively impacts liquidity creation, particularly noting that banks with controlling ownership above 65% generate more liquidity than others. Second, they analyzed the impact of owner characteristics on liquidity creation, finding that banks tend to create more liquidity when owned by other banks or governments, with ownership above 50%, 65% for non-financial corporations, 75% for families, and 85% for financial institutions.

Through a literature review conducted by Sudjinan et al. (2024), complexities and variations in findings are evident. While some studies support a positive correlation between institutional ownership and financial performance, conflicting results are also common in the literature. Thanatawee's (2019) study indicates that equity ownership by foreign institutional investors negatively impacts stock liquidity. Foreign institutional ownership can increase information asymmetry between foreign and local investors, and foreign institutional investors adopt buy-and-hold strategies after attaining high ownership in local companies. Both higher information asymmetry and inactive trading reduce liquidity. Conversely, Fadelia & Diyanti's (2023) research found that institutional ownership does not affect firm value as measured by its liquidity. Dwiyaniti & Handoko's (2023) study did not find differences in ownership, asset structure, or liquidity before and during the COVID-19 pandemic.

Liquidity, a critical aspect of banking operations, ensures that financial institutions can meet their short-term obligations and maintain depositor confidence. The relationship between institutional ownership and liquidity has been explored in various contexts. Studies by Chung & Zhang (2011) indicate that higher institutional ownership is associated with improved liquidity due to better oversight and reduced information asymmetry. In the Indonesian banking sector, similar dynamics can be expected, where institutional investors might mitigate risks associated with liquidity by enforcing stringent management practices and ensuring transparency in financial reporting.

Empirical evidence from international research underscores the significance of institutional ownership in enhancing liquidity. Ferreira & Matos (2008) found that banks with substantial institutional ownership tend to have better liquidity positions compared to those with lower institutional ownership. This finding is corroborated by Elyasiani & Jia (2010), who demonstrated that institutional investors, through their monitoring capabilities, can reduce liquidity risk in banks. Applying these insights to the Indonesian context, it is plausible that institutional ownership contributes to more robust liquidity management in Indonesian banks, fostering a more stable financial system. Further research tailored to Indonesia's unique market conditions is necessary to validate these assumptions and offer more precise recommendations for policymakers and stakeholders.

The relationship between capital structure and liquidity in the banking sector is a well-researched area in financial literature. Capital structure, often measured by the Debt to Equity Ratio (DER), reflects a firm's leverage and its approach to financing operations through debt or equity. Modigliani & Miller's (1958) foundational theory posits that in a frictionless market, capital structure is irrelevant to firm value. However, subsequent research highlights that in the

real world, capital structure significantly affects a firm's financial health and liquidity. For banks, which are highly leveraged institutions, maintaining an optimal capital structure is crucial to ensuring liquidity and solvency (Berger & Bouwman, 2009).

The Debt to Equity Ratio is a critical indicator of a bank's financial stability and liquidity. A higher DER indicates more debt relative to equity, which can lead to increased financial risk and potential liquidity problems, especially during economic downturns. Empirical studies suggest that excessive leverage can exacerbate liquidity crises, as seen during the 2008 financial crisis (Diamond & Rajan, 2005). On the other hand, maintaining a lower DER can enhance a bank's liquidity position by reducing the burden of debt repayments and interest obligations, thus ensuring more funds are available for day-to-day operations and unexpected withdrawals (Acharya & Viswanathan, 2011).

In the context of Indonesian banks, understanding the influence of capital structure on liquidity is vital, given the unique regulatory environment and market dynamics. Research by Nguyen et al (2015) indicates that banks with lower leverage tend to exhibit better liquidity management, thereby fostering greater stability in the financial system. Additionally, Vithessonthi & Tongurai (2015) found that in emerging markets, including Indonesia, prudent management of the debt-to-equity ratio can significantly enhance bank liquidity. These findings suggest that Indonesian banks should carefully balance their capital structures to maintain optimal liquidity levels, ensuring both financial stability and the ability to meet depositor demands.

C. RESEARCH METHODS

Data

The research utilized a purposive sampling method within a quantitative framework. Secondary data were collected from the financial reports of manufacturing companies available on their respective websites and the Indonesian Stock Exchange for the years 2020, 2021, and 2022. Initially, the study targeted a population of 45 banking companies. However, data for two companies were unavailable, and 12 companies lacked information on institutional ownership, leading to a final sample size of 31 companies. Data analysis was conducted using IBM SPSS Statistics 23.

Table 1. List of Companies

No	Code	Company's Name
1	AGRO	PT. Bank Raya Indonesia Tbk.
2	ARTO	PT. Bank Jago Tbk.
3	BABP	PT. Bank MNC Internasional Tbk.
4	BACA	PT. Bank Capital Indonesia Tbk.
5	BBCA	PT. Bank Central Asia Tbk.
6	BBHI	PT. Allo Bank Indonesia Tbk.
7	BBKP	PT. Bank KB Bukopin Tbk
8	BBNI	PT. Bank Negara Indonesia (persero) Tbk.
9	BBRI	PT. Bank Rakyat Indonesia (persero) Tbk.
10	BBSI	PT. Krom Bank Indonesia Tbk
11	BBTN	PT. Bank Tabungan Negara (persero) Tbk
12	BBYB	PT. Bank Neo Commerce Tbk
13	BCIC	PT. Bank JTrust Indonesia Tbk.
14	BDMN	PT. Bank Danamond Tbk.

15	BEKS	PT. Bank Pembangunan Daerah Banten Tbk.
16	BGTG	PT. Bank Ganesha Tbk.
17	BJBR	PT. Bank Pembangunan Daerah Jawa Barat dan Banten Tbk.
18	BJTM	Bank Pembangunan Daerah Jawa Timur Tbk
19	BKSW	PT. Bank QNB Indonesia Tbk.
20	BMRI	PT. Bank Mandiri (persero) Tbk.
21	BNBA	Bank Bumi Artha Tbk.
22	BNGA	PT. Bank CIMB Niaga Tbk.
23	BNII	PT. Bank Maybank Indonesia Tbk.
24	BSIM	Bank Sinarmas Tbk.
25	BSWD	Bank Of India Indonesia Tbk.
26	BVIC	Bank Victoria Internasional Tbk.
27	INPC	Bank Artha Graha International Tbk
28	MAYA	PT. Bank Mayapada Internasional Tbk.
29	MCOR	PT. Bank China Contruction Tbk.
30	MEGA	Bank Mega Tbk.
31	NISP	PT. Bank OCBC NISP Tbk.

Source: Indonesia Stock Exchange, 2023

Operational Definitions of Variables

The operational definitions utilized in this research are outlined below:

Dependent Variable

1. Liquidity

Liquidity in this study measured using current ratio. The current ratio is a financial metric used to evaluate a bank's ability to meet its short-term liabilities with its short-term assets. It is an important indicator of liquidity, reflecting the institution's capacity to cover its obligations that are due within a year. The current ratio is calculated using the following formula:

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

Independent Variables

The independent variable, also known as the explanatory variable, influences or explains other variables. In this study, it encompasses:

1. Institutional Ownership

Institutional ownership refers to the percentage of a corporation's stock that is held by significant financial institutions such as pension funds, investment funds, insurance companies, and other similar entities (Chung & Zhang, 2009). This metric quantifies the portion of a company's shares owned by these institutions in relation to the total number of outstanding shares. Therefore, the calculation employed is:

$$IO = \frac{\text{Number of institutional shares}}{\text{Total shares outstanding}}$$

2. Capital Structure

The variable associated with capital structure can utilize the Debt to Equity Ratio (DER) as a metric for evaluating the proportion of debt and equity within a company's capital

structure. DER is calculated as the ratio of a company's total debt to its total equity. This ratio offers a measure of how much debt a company uses compared to its equity. A higher DER indicates a higher proportion of debt relative to equity, whereas a lower DER indicates a higher proportion of equity compared to debt. Using DER as a variable in empirical analyses of capital structure can provide valuable insights into a company's financing strategies and its level of financial risk. The formula typically used is:

$$DER = \frac{\text{Total equity}}{\text{Total debt}}$$

Data Analysis Technique

Classical Assumption Testing

Classic assumption testing is used to validate the established model and demonstrate genuine relationships. This study employs four standard assumption tests: normality assessment, autocorrelation examination, multicollinearity analysis, and heteroscedasticity evaluation.

According to Montgomery (2021), multiple linear regression analysis is employed to assess the influence of independent variables on the dependent variable. In this technique, both types of variables are integrated into the regression equation model, which is outlined as follows:

$$CR = \alpha_0 + \alpha_1 IO + \alpha_2 DER + \varepsilon$$

Explanation:

CR = Current Ratio

α_0 = Constant

α_1 IO = Institutional Ownership

α_2 DER = Debt to Equity Ratio

ε = Error term

Simultaneous (F-test) and Partial (t-test)

The F-test evaluates the adequacy of the sample regression function in estimating actual values. This F-statistic is significant at the 0.05 level. A significance value below 0.05 indicates that the independent variables collectively impact the dependent variable within the model. (Arifin, Pratama, & Utomo, 2023)

On the other hand, the t-test assesses the degree to which an individual independent variable can explain variations in the dependent variable. The decision criterion is satisfied if the significance value is ≤ 0.05 , indicating that the independent variable significantly influences the dependent variable, and vice versa.

Coefficient of Determination (Adjusted R-square)

The coefficient of determination (R-squared) measures how well the regression model explains the variance in the dependent variable. A lower adjusted R-squared value indicates that the independent variables have limited ability to explain variance in the dependent variable. Conversely, a value close to one suggests that the independent variables provide almost all the necessary information to predict variations in the dependent variable.

D. RESEARCH RESULTS AND DISCUSSION

Classic assumption tests have been performed to validate the model. Based on these tests, it has been determined that the data distribution is normal, there is no evidence of positive or negative autocorrelation, multicollinearity is not present, and the residual variance is homoskedastic.

Subsequently, multiple linear regression analysis was performed and the results obtained are as follows:

Table 2. Multiple Linear Regression Analysis**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,741 ^a	,549	,539	,97481

a. Predictors: INSTITUTIONAL OWNERSHIP, DER

ANOVA^{a,b}

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	105,230	2	52,615	55,370	,000 ^b
	Residual	86,473	91	,950		
	Total	191,703	93			

a. Dependent Variable: CR (LIQUIDITY)

b. Predictors: IO (INSTITUTIONAL OWNERSHIP), DER (CAPITAL STRUCTURE)

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,765	,073		10,455	,000
	IO (INSTITUTIONAL OWNERSHIP)	1,882	,246	,972	7,635	,000
	DER (CAPITAL STRUCTURE)	-,070	,030	-,301	-2,360	,020

a. Dependent Variable: CR (LIQUIDITY)

Source: Processed Data

Simultaneous significance testing of multiple regression parameters indicates that the regression model effectively explains the influence of independent variables on the dependent variable, with a significance level of $0.00 < 0.05$ (alpha).

Upon conducting partial significance testing of multiple regression parameters, the following results were obtained:

1. Institutional ownership shows a significant positive impact on liquidity. According to the Coefficients table, the coefficient for the Institutional ownership variable is 1.882, with a significance level of $0.000 < 0.05$.

2. Capital Structure exhibits a significant negative effect on liquidity. As indicated in the Coefficients table, the coefficient for the Capital Structure variable is -0.070, with a significance level of $0.020 < 0.05$.

Consequently, the resulting linear regression equation is:

$$CR = 0.765 + 1.882 IO - 0.070 DER + \varepsilon$$

Based on the coefficient of determination (adjusted R-squared) value in the model summary table, which is 0.539, it can be explained that the independent variables account for 53.9% of the information needed to predict the variation in the dependent variable. The remaining 46.1% is explained by other independent variables not included in the model.

E. CONCLUSIONS AND SUGGESTIONS

Conclusion

This study demonstrates the significant influence of institutional ownership and capital structure on the liquidity of banks in Indonesia, particularly in light of the upcoming cessation of policy relaxations by Bank Indonesia and the Financial Services Authority (OJK) post-COVID-19 pandemic. The findings reveal that institutional ownership positively and significantly impacts bank liquidity. Banks with higher levels of institutional ownership tend to exhibit better liquidity positions, suggesting that institutional investors play a crucial role in enhancing governance and ensuring effective liquidity management.

Conversely, the study identifies a negative and significant relationship between capital structure, measured by the Debt to Equity Ratio (DER), and bank liquidity. Higher levels of debt relative to equity are associated with reduced liquidity, highlighting the risks of excessive leverage. These results underscore the importance for banks to carefully balance their capital structures to avoid financial distress and maintain sufficient liquidity to meet short-term obligations.

In light of these findings, the study proposes several innovative recommendations for banks. Establishing strategic partnerships with institutional investors can provide additional financial resources and support liquidity enhancement initiatives. Additionally, banks are encouraged to increase financial transparency, adopt blockchain technology for asset management, and develop sustainable financial products. By relying more on equity financing rather than debt, banks can better prepare for the end of policy relaxations and ensure long-term stability and operational continuity. These strategies will be crucial for Indonesian banks as they navigate the challenges of the post-pandemic economic landscape. This study is expected to provide valuable insights for the banking sector in managing institutional ownership and capital structure to achieve better liquidity in the post-pandemic era.

Suggestion

The first recommendation is to establish strategic partnerships with institutional investors. Companies can form strategic alliances with institutional investors who possess the expertise and resources to support banking liquidity. Optimization of institutional ownership can be achieved through increased financial transparency, adoption of blockchain technology for asset management, and development of sustainable financial products. Through these partnerships, institutional investors can provide additional financial resources and support initiatives aimed at enhancing liquidity.

The second recommendation is to rely more on equity financing rather than debt to maintain adequate liquidity levels. This approach is deemed crucial as banks prepare for the cessation of policy relaxations by Bank Indonesia and the Financial Services Authority (OJK) post-COVID-19 pandemic. By doing so, banks are expected to maintain their stability and operational continuity in the future.

F. REFERENCES

- Acharya, V. V., & Viswanathan, S. (2011). Leverage, moral hazard, and liquidity. *The Journal of Finance*, 66(1), 99-138.
- Arifin, S., Pratama, D. P. A., & Utomo, P. (2023). *Pengantar Statistika: Teori dan Metode Ekonomi Terapan*. Surabaya: CV. Pena Jaya Pers.
- Berger, A. N., & Bouwman, C. H. S. (2009). Bank liquidity creation. *The Review of Financial Studies*, 22(9), 3779-3837.
- Chung, K. H., & Zhang, H. (2011). Corporate governance and institutional ownership. *Journal of Financial and Quantitative Analysis*, 46(01), 247-273.
- Claessens, S., & Yurtoglu, B. B. (2013). Corporate governance in emerging markets: A survey. *Emerging Markets Review*, 15, 1-33.
- Diamond, D. W., & Rajan, R. G. (2005). Liquidity shortages and banking crises. *The Journal of Finance*, 60(2), 615-647.
- Dwiyanti, Rosalia Elsa & Jesica Handoko. (2023). Determinan Struktur Modal: Analisis Sebelum dan Pada Masa COVID-19. *Jurnal Studi Akuntansi dan Keuangan*, 6(2), 253-268.
- Elyasiani, E., & Jia, J. (2010). Distribution of institutional ownership and corporate firm performance. *Journal of Banking & Finance*, 34(3), 606-620.
- Fadelia, Andini & Ferry Diyanti. (2023). Pengaruh Kepemilikan Manajerial, Kepemilikan Institusional, Dan Kebijakan Dividen Terhadap Nilai Perusahaan Food And Beverage. *AKUNTABEL: Jurnal Akuntansi dan Keuangan*, 20(2), 258-264.
- Ferreira, M. A., & Matos, P. (2008). The colors of investors' money: The role of institutional investors around the world. *Journal of Financial Economics*, 88(3), 499-533.
- Hunjra, A. I., Perveen, U., Li, L., Chani, M. I., & Mehmood, R. (2020). Impact of ownership concentration, institutional ownership and earnings management on stock market liquidity. *Corporate Ownership & Control*, 17(2), 77-87.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305-360.
- Liu, Shuming. (2013). Institutional ownership and stock liquidity. *Investment Management and Financial Innovations*, 10(4), 18-26.
- Modigliani, F., & Miller, M. H. (1958). The cost of capital, corporation finance and the theory of investment. *The American Economic Review*, 48(3), 261-297.
- Montgomery, Douglas C., Elizabeth A. Peck, & G. Geoffrey Vining (2021). *Introduction to Linear Regression Analysis*. USA: Wiley & Sons.
- Nguyen, P., Locke, S., & Reddy, K. (2015). Does borrowing cost affect firm performance in New Zealand? An endogenous threshold analysis. *Applied Economics*, 47(33), 3451-3470.
- Nuryadi, Pratama, D. P. A., & Arifin, S. (2024). Increase Service Sales Turnover Through a Digital Marketing Approach: Effective? *International Journal of Global Accounting, Management, Education, and Entrepreneurship*, 4(2), 231-237. <https://doi.org/10.48024/ijgame2.v4i2.142>
- Omoregie, Osaretin Kayode, Sodik Adejonwo Olofin, Fredrick Ikpesu. (2019). Capital Structure and the Profitability-Liquidity Trade-off. *International Journal of Economics and Financial Issues*, 9(3), 105-115.

- Panda, B., & Leepsa, N. M. (2019). Does institutional ownership engagement matter for greater financial performance? Evidence from a developing market. *International Journal of Law and Management*, 61(2), 359-383.
- Pratama, D. P. A., & Anisa, N. A. (2022). Pendidikan Ekonomi : Kunci dalam Mengatasi Kemiskinan di Era Globalisasi. *Jurnal Ekodik : Ekonomi Pendidikan*, 10(02), 36–41.
- Sakawa, Hideaki & Naoki Watanabel. (2020). Institutional Ownership and Firm Performance under Stakeholder-Oriented Corporate Governance. *Sustainability* 2020, 12(1), 2-21.
- Shleifer, A., & Vishny, R. W. (1997). A survey of corporate governance. *The Journal of Finance*, 52(2), 737-783.
- Sudjinan, Loso Judijanto & I Ketut Kusuma Wijaya. (2024). The Influence Of Institutional Ownership On Company Financial. *Management Studies and Entrepreneurship Journal*, 5(1), 435-440.
- Sumani & Ahmad Roziq. (2020). Reciprocal Capital Structure and Liquidity Policy: Implementation of Corporate Governance toward Corporate Performance. *Journal of Asian Finance, Economics and Business*, 7(9), 085–093.
- Thanatawee, Yordying. (2019). Foreign Institutional Ownership And Liquidity: Evidence From Thailand. *ABAC Journal*, 39(4), 34-49.
- Vithessonthi, C., & Tongurai, J. (2015). The effect of firm size on the leverage–performance relationship during the financial crisis of 2007–2009. *Journal of Multinational Financial Management*, 29, 1-29.
- Yeddou, Nacera. (2020). Bank Liquidity Creation: Does Ownership Structure Matter?. *The Quarterly Review of Economics and Finance*, 78(1), 116-131.
- Zaman, K., & Pratama, D. P. A. (2023). Improving The Efficiency Of Payroll And Wage Processes In Surabaya’s Creative Industries: Could Management Accounting Information System Do It? *International Journal of Global Accounting, Management, Education, and Entrepreneurship*, 4(1), 22–31. Retrieved from <https://jurnal.stiepemuda.ac.id/index.php/ijgame2/article/view/87>