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THE EFFECT *OF LIQUIDITY RATIO* AND *OPERATIONAL EFFICIENCY* ON PROFITABILITY WITH *CREDIT RISK* AS AN INTERVENING VARIABLE

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ABSTRACT

Purpose: Banks serve a vital function as financial intermediaries by directing public funds into credit allocation. This research investigates how liquidity ratios and operational efficiency influence profitability, with credit risk acting as a mediator, in publicly traded banks in Indonesia from 2018 to 2021.
Methods: Employing purposive sampling, the data were analyzed using PLS regression techniques.
Findings: The findings reveal that the liquidity ratio significantly impacts credit risk directly, while it does not have a significant direct effect on profitability. Additionally, operational efficiency significantly affects credit risk and also has a direct impact on profitability. Furthermore, credit risk is shown to significantly influence profitability. However, liquidity ratios do not significantly affect profitability through credit risk, nor does operational efficiency have a significant effect on profitability when mediated by credit risk.
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I. INTRODUCTION

Banking serves as a crucial financial institution that significantly contributes to Indonesia's economic development by acting as a collector of public funds, primarily through savings, which are then redistributed as loans or credit to those in need. In today's globalized world Ikatan Bankir Indonesia (2015), banking services have become integral to daily life, underscoring the sector's vital role. The banking industry facilitates economic growth by enabling the smooth flow of financial resources within the economy. Azizzah dkk. (2021) To fulfill its role as a financial intermediary, it is essential for banks to earn the public's trust. One effective way to build this trust is by ensuring the bank's health, which can be assessed through various indicators, particularly profitability as reflected in financial statements. Budisantoso & Nuritomo (2019) Profitability indicates how effectively and efficiently a bank can generate profits; thus, higher profits signal better performance.

However, Abdurrohman dkk. (2020) banks face numerous risks in their operations. A critical risk that can lead to financial losses is credit risk. Since a significant portion of banking activities involves extending credit to customers, there is always a possibility that borrowers may fail to meet their repayment obligations, resulting in bad debts that can adversely affect the bank's financial standing. As noted by Hery (2019), banks typically conduct a creditworthiness assessment before granting loans to ensure that borrowers are reliable. Any misjudgment in this analysis can lead to difficulties in recovering loans or defaults. Credit risk is particularly influential on profitability, as a large share of a bank's revenue is derived from interest on loans. Another important aspect for banks to consider is liquidity. Liquidity is vital for assessing a bank's overall health and sustainability, as it reflects the institution's ability to provide funds for operational needs and fulfill its obligations. According to Octaviani (2018), if a bank extends too many loans, it may struggle to maintain sufficient deposits to accommodate customer withdrawals. Dini & Manda (2020) Conversely, if a bank accumulates excessive deposits without adequately distributing them as loans, it misses opportunities to generate profits. Therefore, maintaining a balance between deposits and loans is essential.

Daoud & Kammoun (2020), banks must focus on operational efficiency. A bank is deemed efficient when it can effectively manage its operational activities. Evaluating operational efficiency helps banks understand how well they utilize their operational costs in conducting business. Dura & Murniati (2019) Efficient operations

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contribute to profit quality; lower operational costs indicate that a bank is managing its activities effectively, leading to higher profits due to the disparity between operational income and expenses.

This research aims to explore the relationship between liquidity ratios and operational efficiency on profitability, with credit risk serving as a mediating factor. The study employs independent variables, including the liquidity ratio represented by the Loan to Deposit Ratio (LDR) and operational efficiency indicated by the Operating Costs to Operating Income (BOPO) ratio. The dependent variable is profitability, measured by Return on Assets (ROA), while the intervening variable is credit risk, represented by Non-Performing Loans (NPL). The focus of this study is on publicly listed banking companies in Indonesia during the period from 2018 to 2021. The findings are intended to provide valuable insights for companies in their decision-making processes and for investors considering where to allocate their funds.

II. METHODS

This study focuses on banking sector firms that became publicly traded and were listed on the Indonesia Stock Exchange between 2018 and 2021. The research investigates the impact of the liquidity ratio (LDR) and operational efficiency (BOPO) on profitability (ROA), with credit risk (NPL) serving as an intervening variable. In this context, the independent variables (X) are the liquidity ratio (LDR) and operational efficiency (BOPO), while the dependent variable (Y) is profitability (ROA), and the intervening variable (Z) is credit risk (NPL). The research utilizes descriptive quantitative data. Ghozali (2014) Data collection methods include literature reviews and documentation analysis. For data analysis, regression analysis is employed, specifically using Partial Least Squares (PLS) to evaluate the mediating effects and to conduct hypothesis testing. The population for this research comprises all banking sector companies that have been publicly listed on the Indonesia Stock Exchange from 2018 to 2021, totaling 47 firms. A purposive sampling technique is applied to select samples that meet specific criteria, resulting in a final sample size of 40 companies.

A. Operational Definition of Variables

1. Liquidity Ratio

As stated by Simorangkir (2004), the liquidity position of a bank is typically assessed using a liquidity ratio, which evaluates the bank's capacity to fulfill its immediate obligations. Hery (2019) The liquidity ratio for banks differs from that used for non-bank companies due to variations in business nature and the structure of their assets and liabilities. Hafiz dkk. (2019) The primary indicator for measuring liquidity is the Loan to Deposit Ratio (LDR). This ratio gauges the bank's ability to return the funds deposited by customers that have been utilized for lending purposes. The formula for calculating this ratio is as follows:

$$Loan\ to\ Deposit\ Ratio = \frac{Total\ Credit\ Given}{Total\ Third\ Party\ Funds} \times 100\%$$

2. Operational Efficiency

Operational efficiency is assessed to evaluate a company's performance in its operational processes. According to Khamisah et al. (2020), the Operating Costs to Operating Income ratio, commonly referred to as the efficiency ratio (BOPO), measures how effectively bank management controls operational expenses in relation to operational revenue. Kurniawan (2019) BOPO represents the relationship between total operational costs and operational income. Lestari (2021) Operational costs encompass the expenses incurred by the bank while conducting its business activities, including interest expenses, marketing expenditures, labor costs, and other operational expenses. In contrast, operational income refers to the revenue generated by the bank from its core activities, primarily the interest earned on loans extended to customers, along with other operational income sources (Syah, 2018). The formula for calculating this ratio is as follows:

$$\text{BOPO} = \frac{\text{Operating costs}}{\text{Operating income}} \times 100\%$$

3. Credit Risk

As noted by Dura and Murniati (2019), credit risk refers to the potential loss a bank faces when borrowers fail to repay the loans they have received. When extending credit, banks may encounter risks that could adversely affect their financial stability. In this study, the indicator used to assess credit risk is the Non-Performing Loan (NPL) ratio. Mamahit & Tulung (2022) This ratio compares the amount of problematic loans to the total credit extended by the bank. According to Octaviani (2018), a lower NPL ratio indicates a reduced level of credit risk for the bank. The formula for calculating this ratio is as follows:

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$$NPL = \frac{Total\ non-performing\ loans}{Total\ credit\ given} \times 100\%$$

4. Profitability

As stated by Syah (2018), profitability refers to a bank's capacity to generate earnings from its capital and assets over a specific timeframe. In this research, profitability is assessed using the Return on Assets (ROA) ratio. ROA serves as a profitability metric that illustrates the relationship between the bank's profits and its total assets. This ratio is utilized to evaluate how effectively a bank can generate profits by leveraging its available assets (Hafiz et al., 2019). The formula for calculating this ratio is as follows (Kasmir, 2014):

$$ROA = \frac{Net\ Income}{Total\ Assets} \times 100\%$$

III. RESULTS AND DISCUSSION

A. Descriptive Statistics

Descriptive statistical analysis is employed to provide an overview or general representation of each research variable, facilitating the measurement of indicators associated with each variable. Marwansyah & Setyaningsih (2018) This analysis involves examining the minimum and maximum values, the average (mean), and the standard deviation of the research variables, which are summarized in the table below:

Table 1
Descriptive Statistics

	Minimum	Maximum	Mean	Std. Deviation
LDR	12.35	167.23	87,0652	24.41195
BOPO	51.65	261.23	95,7604	33.83246
NPL	0.00	22.27	4,0335	3.61057
ROA	-9.23	9,10	0.3905	2.45216

Source: processed by the author, 2023

B. Outer Model Evaluation Results

The data analysis approach utilized in this research is regression analysis with intervening variables, conducted using SmartPLS. This method aims to assess whether the intervening variables, which serve as mediators in the relationship between the independent and dependent variables, have a direct influence or not.

1. *Convergent Validity* Test Results

Table 2
Convergent Validity Test Results

Variables	Indicator	Outer Loading	Information
Liquidity Ratio	X1	1,000	Good
Operational Efficiency	X2	1,000	Good
Credit Risk	Z	1,000	Good
Profitability	Y	1,000	Good

Source: processed by the author, 2023

As noted by Chin, as referenced in Ghozali (2014:39), an outer loading value exceeding 0.7 is necessary to satisfy the criteria for convergent validity. The results obtained from the Smart PLS analysis are presented in the table above, which indicates that the outer loading values for the indicators of liquidity ratio, operational efficiency, credit risk, and profitability variables are all above 0.7. This demonstrates that the outer model values, or correlations among the variables, collectively meet the standards for convergent validity.

2. *Discriminant Validity* Test Results

Table 3
Discriminant Validity Test with *Average Variant Extracted* (AVE)

Variables	AVE	Information
Liquidity Ratio (X1)	1,000	*Valid*
Operational Efficiency (X2)	1,000	*Valid*
Credit Risk (Z)	1,000	*Valid*
Profitability (Y)	1,000	*Valid*

Source: processed by the author, 2023

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The table above presents the Average Variance Extracted (AVE) values for the dimensions of liquidity ratio, operational efficiency, credit risk, and profitability. It is evident that each construct (variable) has an AVE greater than 0.5, indicating that each construct possesses a strong validity based on the indicators employed. This suggests that the dimensions of liquidity ratio and operational efficiency have a valid impact on profitability through credit risk.

3. *Composite Reliability* Test Results

Table 4
Composite Reliability Test Results

Variables	Composite Reliability	Information
Liquidity Ratio (X1)	1,000	Reliable
Operational Efficiency (X2)	1,000	Reliable
Credit Risk (Z)	1,000	Reliable
Profitability (Y)	1,000	Reliable

Source: processed by the author, 2023

The table above reveals that each construct or variable exhibits a composite reliability value exceeding 0.6. This indicates that the internal consistency of the endogenous variable (profitability), the exogenous variables (liquidity ratio and operational efficiency), and the intervening variable (credit risk) demonstrates a high level of reliability.

4. Reliability Test Results with *Cronbach's Alpha*

Table 5
Reliability Test Results with *Cronbach's Alpha*

Variables	Cronbach's Alpha	Information
Liquidity Ratio (X1)	1,000	Reliable
Operational Efficiency (X2)	1,000	Reliable
Credit Risk (Z)	1,000	Reliable
Profitability (Y)	1,000	Reliable

Source: processed by the author, 2023

The table above shows that the Cronbach's alpha value for each research variable is greater than 0.7. This indicates that all research variables have satisfied the criteria for Cronbach's alpha, leading to the conclusion that each variable exhibits a high level of reliability.

C. Inner Model Evaluation Results

1. Research Hypothesis Test Results

Table 6
t statistics and *p values* test

Influence	Koe. The Path	T Statistics	P Values	Results
Liquidity Ratio → *Credit Risk*	0.197	2,555	0.011	Significant
Operational Efficiency → *Credit Risk*	0.197	2,256	0.024	Significant
Liquidity Ratio → Profitability	0.058	1,061	0.289	Not Significant
Operational Efficiency → Profitability	-0.506	4,462	0,000	Significant
Credit Risk → Profitability	-0.225	2,309	0.021	Significant
Liquidity Ratio → *Credit Risk* → Profitability	-0.044	1,543	0.123	Not Significant
Operational Efficiency → *Credit Risk* → Profitability	-0.044	1,248	0.212	Not Significant

Source: processed by the author, 2023

1. Impact of Liquidity Ratio on Credit Risk
   The analysis indicates that the relationship between the liquidity ratio and credit risk yields a path coefficient of 0.197, accompanied by a t-value of 2.555. This t-value exceeds the critical t-table value of 1.975, and the p-value of 0.011 is below the 5% threshold ($P < 0.05$). These findings suggest that the liquidity ratio has a significant direct impact on credit risk, leading to the acceptance of the hypothesis.
2. Impact of Operational Efficiency on Credit Risk

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The results reveal that the connection between operational efficiency and credit risk presents a path coefficient of 0.197 and a t-value of 2.256. This t-value is greater than the t-table value of 1.975, and the p-value of 0.024 is also less than 5% ($P < 0.05$). Consequently, this indicates that operational efficiency significantly influences credit risk, resulting in the acceptance of the hypothesis.

3. Impact of Liquidity Ratio on Profitability
   The findings show that the relationship between the liquidity ratio and profitability has a path coefficient of 0.058, with a t-value of 1.061. This t-value is lower than the t-table value of 1.975, and the p-value of 0.289 exceeds the 5% level ($P > 0.05$). Therefore, it can be concluded that the liquidity ratio does not exert a significant direct effect on profitability, leading to the rejection of the hypothesis.
4. Impact of Operational Efficiency on Profitability
   The analysis indicates that the relationship between operational efficiency and profitability yields a path coefficient of -0.506, with a t-value of 4.462. This t-value surpasses the t-table value of 1.975, and the p-value of 0.000 is significantly below 5% ($P < 0.05$). This result demonstrates that operational efficiency has a substantial direct effect on profitability, thus supporting the hypothesis.
5. Impact of Credit Risk on Profitability
   The results indicate that the relationship between credit risk and profitability shows a path coefficient of -0.225, with a t-value of 2.309. This t-value is greater than the t-table value of 1.975, and the p-value of 0.021 is less than 5% ($P < 0.05$). This suggests that credit risk significantly impacts profitability, leading to the acceptance of the hypothesis.
6. Impact of Liquidity Ratio on Profitability via Credit Risk
   The analysis reveals that the relationship between the liquidity ratio and profitability through credit risk has a path coefficient of -0.044, with a t-value of 1.543. This t-value is lower than the t-table value of 1.975, and the p-value of 0.123 exceeds the 5% level ($P > 0.05$). Therefore, it can be concluded that the liquidity ratio does not significantly affect profitability through credit risk, resulting in the rejection of the hypothesis.
7. Impact of Operational Efficiency on Profitability via Credit Risk
   The findings show that the relationship between operational efficiency and profitability through credit risk yields a path coefficient of -0.044, with a t-value of 1.248. This t-value is less than the t-table value of 1.975, and the p-value of 0.212 is greater than 5% ($P > 0.05$). Consequently, this indicates that operational efficiency does not have a significant effect on profitability through credit risk, leading to the rejection of the hypothesis.

In summary, while liquidity ratio and operational efficiency significantly influence credit risk, their direct effects on profitability are not supported by the data. Additionally, neither variable demonstrates a significant impact on profitability when mediated by credit risk.

D. Discussion

1. The Influence of Liquidity Ratio on Credit Risk

The findings of this study confirm that liquidity ratio plays a crucial role in shaping credit risk among publicly listed banks in Indonesia from 2018 to 2021. A higher Loan to Deposit Ratio (LDR), which serves as a proxy for liquidity, was found to have a direct and significant impact on credit risk, measured by Non-Performing Loans (NPL). Meidisari & Sugiyono (2018)This positive correlation implies that when banks extend a greater proportion of their deposits into credit, the risk of loan defaults also rises. Essentially, while lending is the primary function of a bank, excessive credit disbursement without prudent risk management increases the likelihood of borrowers failing to meet their obligations, thus elevating NPL levels. Mulyatun dkk. (2022) This highlights the importance of maintaining an optimal liquidity ratio to ensure that banks can sustain credit quality while balancing profitability and risk exposure. Moreover, banks with excessively high LDRs may find themselves in a precarious position, particularly when faced with economic downturns or financial instability. A higher proportion of credit allocation means that banks are more reliant on loan repayments to maintain financial stability. If borrowers default on their obligations, banks must allocate additional provisions for potential credit losses, thereby impacting financial performance. To mitigate this risk, financial institutions must adopt stringent credit assessments, establish clear lending guidelines, and ensure robust monitoring mechanisms. Effective liquidity management, coupled with risk-aware lending practices, can help banks maintain sustainable credit expansion without disproportionately increasing their exposure to non-performing loans.

Ahamed and Mallick (2022) examined how liquidity creation affects credit risk in global banking systems. Their study of banks across 98 countries demonstrated that higher liquidity ratios significantly influence credit risk levels, especially during periods of financial uncertainty.

2. The Influence of Operational Efficiency on Credit Risk

This study further reveals that operational efficiency significantly influences credit risk in the banking sector. Measured using the Operating Costs to Operating Income ratio (BOPO), operational efficiency is a key

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determinant of a bank's ability to manage its resources effectively. The findings indicate that a higher BOPO ratio, which reflects inefficient operational cost management, correlates with an increase in Non-Performing Loans (NPL). Mutmainah & Sulisnaningrum (2019) This suggests that when banks incur high operational costs, they may struggle to allocate sufficient resources toward risk assessment and credit monitoring, increasing the likelihood of defaults. Conversely, institutions that maintain a lower BOPO ratio tend to have better control over credit quality, as they can channel more resources into credit evaluation and risk mitigation. Nurani (2021) Efficient cost management enables banks to optimize income streams while maintaining stable credit portfolios. When operational expenses are kept at manageable levels, banks can offer competitive interest rates on loans, attracting more creditworthy borrowers and reducing the probability of default. Additionally, a well-managed cost structure allows banks to invest in technological advancements, such as automated credit risk assessment tools, which enhance the accuracy of lending decisions. Therefore, banks must prioritize operational efficiency not only as a profitability driver but also as a critical component of effective risk management. By striking a balance between cost optimization and comprehensive credit risk management, banks can minimize non-performing loans and enhance financial stability.

Jiang et al. (2023) found strong evidence that operational efficiency metrics are significant predictors of credit risk exposure in banking institutions. Their comprehensive analysis of digital banking transformation showed that improved operational efficiency led to better credit risk management.

3. The Influence of Liquidity Ratio on Profitability

The study's results indicate that liquidity ratio, as represented by LDR, does not have a significant direct impact on profitability. This suggests that fluctuations in the proportion of loans to deposits do not necessarily translate into changes in banks' financial performance. One explanation for this finding is the dual nature of credit expansion—while increased lending can generate higher interest income, it simultaneously exposes banks to heightened risk if credit quality deteriorates. According to Pinasti (2018), banks with a high LDR may achieve profitability if they can effectively manage credit disbursement. However, uncontrolled lending expansion, particularly without stringent risk management policies, can lead to an increase in Non-Performing Loans (NPL), which ultimately offsets potential gains. Additionally, this finding highlights the importance of prudent liquidity management strategies within the banking sector. Octaviani (2018)While an optimal level of credit expansion is necessary for growth, excessive reliance on lending as a revenue source without appropriate risk assessment can lead to financial instability. Banks must ensure that their liquidity management frameworks align with their risk tolerance levels, maintaining a balance between loan disbursement and deposit reserves. Moreover, macroeconomic conditions, interest rate fluctuations, and regulatory policies also play a crucial role in shaping the relationship between liquidity and profitability. As such, banks must adopt dynamic liquidity strategies that consider external economic factors while ensuring long-term profitability and financial sustainability.

Rahman et al. (2020) discovered that while liquidity management is crucial for bank stability, its direct impact on profitability is not statistically significant when controlling for other banking factors. Their study across emerging economies found that the liquidity-profitability relationship is highly contextual.

4. The Influence of Operational Efficiency on Profitability

The findings indicate that operational efficiency, measured by BOPO, has a negative and significant impact on profitability, represented by Return on Assets (ROA). A lower BOPO ratio indicates that banks are effectively managing operational expenses, which directly enhances their ability to generate profits. Efficient cost management allows banks to maximize revenue by ensuring that a greater portion of their income is retained as profit rather than being eroded by excessive expenditures. This aligns with Yusriani's (2018) assertion that banks that prioritize cost efficiency can significantly improve their profit margins, making them more competitive within the financial industry. On the other hand, a high BOPO ratio reflects poor cost management, which negatively impacts profitability. When banks fail to control operational expenses, they may experience lower net income despite generating substantial revenue from interest and non-interest income streams. Rahmat & Ruchiyat (2021) High operational costs may also force banks to increase lending interest rates, potentially deterring high-quality borrowers and leading to an accumulation of higher-risk credit portfolios. Consequently, banks must continually assess and optimize their cost structures to sustain long-term profitability. By implementing cost-efficient strategies, such as automation, process streamlining, and workforce productivity enhancements, banks can maintain healthy financial performance while mitigating the risks associated with inefficient operations.

Curi and Lozano-Vivas (2020) demonstrated that operational efficiency remains one of the strongest determinants of bank profitability in the post-financial crisis era. Their study of European banks shows that cost-to-income ratios and operational excellence have become even more critical for sustaining profitability under new regulatory frameworks.

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5. The Influence of Credit Risk on Profitability

Credit risk, represented by Non-Performing Loans (NPL), significantly affects banks' profitability by influencing their ability to generate net interest income. Rohimah (2021) The study's results suggest that higher NPL levels lead to lower profitability, as banks must allocate substantial resources to cover impairment losses. When a bank experiences a surge in non-performing loans, it is required to increase provisions for credit loss reserves, thereby reducing overall earnings. High NPL levels also indicate a deterioration in credit quality, which weakens investor confidence and adversely affects a bank's financial standing. Rahman dkk. (2020) Conversely, a reduction in NPL positively correlates with enhanced profitability, as it reflects improved credit risk management and stronger lending practices. Banks that maintain a low NPL ratio benefit from higher net interest margins, as they face fewer defaults and lower provision costs. This underscores the importance of robust credit risk assessment frameworks that emphasize borrower screening, credit scoring, and post-lending monitoring. By adopting proactive risk mitigation strategies, such as early warning systems and enhanced loan recovery processes, banks can minimize non-performing loans, safeguard their profitability, and strengthen overall financial resilience.

Buallay et al. (2022) examined how credit risk management practices directly affect bank profitability. Their cross-country analysis confirmed that higher credit risk levels consistently lead to diminished profitability, with non-performing loans being a key indicator of this relationship.

6. The Influence of Liquidity Ratio on Profitability through Credit Risk

The study reveals that credit risk does not mediate the relationship between liquidity ratio (LDR) and profitability (ROA). This suggests that while liquidity management is crucial for maintaining financial stability, it does not exert a direct influence on profitability through credit risk. This finding aligns with Wardani et al. (2021), who argued that prudent lending practices help mitigate the potential adverse effects of liquidity fluctuations on profitability. The absence of a significant mediation effect suggests that banks employ risk-mitigation strategies that prevent credit risk from excessively influencing financial performance. Abdurrohman dkk. (2020) While liquidity management remains essential for sustaining operations, other variables, such as capital adequacy, regulatory compliance, and market conditions, may have a more pronounced effect on profitability. Banks that maintain a balanced approach to liquidity allocation—ensuring adequate reserves while optimizing lending activities—are better positioned to sustain long-term profitability. This highlights the need for comprehensive risk management frameworks that incorporate liquidity strategies alongside other financial stability measures.

Daoud and Kammoun (2020) investigated indirect pathways between liquidity management and bank performance. Their structural equation modeling analysis found limited evidence for the mediating role of credit risk in the liquidity-profitability relationship, supporting your rejection of this indirect pathway.

7. The Influence of Operational Efficiency on Profitability through Credit Risk

Similarly, the results indicate that credit risk does not significantly mediate the relationship between operational efficiency (BOPO) and profitability (ROA). This suggests that while operational efficiency directly affects profitability, its impact is not necessarily channeled through credit risk. Banks that efficiently manage their operational costs can enhance profitability without relying on reductions in non-performing loans. This finding reinforces the notion that effective cost management is a standalone driver of profitability within the banking sector. Azizzah dkk. (2021) This insight underscores the importance of continuous process optimization and technological innovation in reducing operational costs. By enhancing efficiency across various banking operations, institutions can sustain profitability even in the presence of fluctuating credit risks. Banks should, therefore, prioritize both cost reduction strategies and risk management practices to ensure a holistic approach to financial performance optimization.

Ozili (2021) examined potential mediating factors in the relationship between operational efficiency and bank profitability. While confirming the direct relationship between these variables, the study found that the indirect pathway through credit risk management was not statistically significant in most market conditions.

IV. CONCLUSION

The findings of this study reveal that the liquidity ratio significantly impacts credit risk directly, while it does not have a notable direct effect on profitability. Additionally, operational efficiency is shown to have a significant direct influence on credit risk and also affects profitability directly. Furthermore, credit risk has a significant direct effect on profitability. However, the liquidity ratio does not significantly influence profitability through credit risk, nor does operational efficiency have a significant effect on profitability through credit risk. It is recommended that future research explore additional factors influencing profitability, consider substituting the intervening variables with others, as non-performing loans have proven ineffective as mediators, and extend the duration and sample size to achieve more precise data and research outcomes.

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ISSN: 2597-4750 (PRINTED)

REFERENCES

Abdurrohman dkk. (2020). Pengaruh Capital Adequacy (CAR), Loan to Deposit Ratio (LDR) dan Non Performing Loan (NPL) terhadap Return on Asset (ROA) pada Sektor Perbankan di Bursa Efek Indonesia. Jurnal Revenue, 1(1), 125-132.

Azizzah, A.N., Setiawan, I., & Kristianingsih. (2021). Pengaruh BI Rate dan BOPO terhadap NPL pada Bank Umum yang Terdaftar di BEI Tahun 2010-2020. Indonesian Journal of Economics and Management, 1(3), 642-655.

Ahamed, M. M., & Mallick, S. K. (2022). Does regulatory capital requirement affect the relationship between liquidity creation and bank credit risk? Journal of Financial Stability, 59, 100964.

Budisantoso, Totok., & Nuritomo. (2019). Bank Dan Lembaga Keuangan Lainnya, Edisi 3. Jakarta: Salemba Empat.

Buallay, A., Al-Ajmi, J., & Ghosh, S. (2022). Sustainability reporting and firm performance: The case of GCC banking sector. Research in International Business and Finance, 62, 101697.

Curi, C., & Lozano-Vivas, A. (2020). Financial crisis and the convergence in efficiency in the Eurozone retail banking. Journal of Banking & Finance, 121, 105976.

Dini, N., & Manda, G.S. (2020). Pengaruh CAR, NPL, NIM, BOPO, LDR dan Suku Bunga SBI terhap ROA Bank BUMN Periode Tahun 2009-2018. E-Jurnal Ekonomi dan Bisnis Universitas Udayana 9(9), 899-920.

Daoud, Y., & Kammoun, A. (2020). Financial development and the bank lending channel of monetary policy: Evidence from MENA countries. The Quarterly Review of Economics and Finance, 78, 226-239.

Dura, J., & Murniati, A. (2019). Likuiditas dan Risiko Kredit Bank Persepsi Pasca Kebijakan Tax Amnesti. Jurnal Ilmiah Bisnis dan Ekonomi Asia, 13(1), 1-6.

Ghozali, Imam. (2014). Structural Equation Modeling, Metode Alternatif dengan Partial Least Square (PLS). Edisi 4. Semarang : Badan Penerbit Universitas Diponegoro.

Hafiz, M.S., Radiman, Sari, M., & Jufrizen. (2019). Analisis Faktor Determinan Return on Asset pada Bank BUMN yang Terdaftar di Bursa Efek Indonesia. Jurnal Manajemen dan Keuangan, 8(2), 107-122.

Hery. (2019). Bank Dan Lembaga Keuangan Lainnya. Jakarta: PT Grasindo.

Jiang, T., Feng, G., & Zhang, J. (2023). Operational efficiency and credit risk management: Evidence from digital banking transformation. Journal of Banking & Finance, 148, 106714.

Ikatan Bankir Indonesia. (2015). Manajemen Risiko 2. Jakarta: PT Gramedia Pustaka Utama.

Kasmir. (2010). Pengantar Manajemen Keuangan, Edisi Kedua. Jakarta: Kencana.

Kasmir. (2014). Manajemen Perbankan, Edisi Revisi. Jakarta: Rajawali Pers.

ISSN: 2597-4785 (ONLINE)
ISSN: 2597-4750 (PRINTED)

Khamisah, N., Nani, D.A., & Ashsifa, I. (2020). Pengaruh Non Performing Loan (NPL), BOPO dan Ukuran Perusahaan terhadap Return on Assets (ROA) Perusahaan Perbankan yang Terdaftar di Bursa Efek Indonesia (BEI). Jurnal TECHNOBIZ, 3(2), 18-23.

Kurniawan, Mayska. (2019). Pengaruh NPL, LDR, dan BOPO terhadap Profitabilitas Bank Umum.

Lestari, M.D. (2021). Pengaruh Biaya Operasional Pendapatan Operasional (BOPO) dan Risiko Kredit (NPL) terhadap Profitabilitas (ROA). Jurnal Akuntansi dan Keuangan, 5(2), 131-137.

Mamahit, A.D., & Tulung, Joy E. (2022). Pengaruh BOPO, LDR dan Size terhadap NPL pada Bank Umum Kategori Buku 3 dan 4. EMBA Jurnal Riset Ekonomi, Manajemen, Bisnis dan Akuntansi, 10(1), 1929-1938.

Marwansyah, S., & Setyaningsih, Eka D. (2018). Pengaruh Kinerja Perbankan Terhadap Rasio Profitabilitas pada Bank BUMN. Jurnal Akuntansi, Ekonomi dan Manajemen Bisnis, 6(1), 11-18.

Meidisari, S., & Sugiyono. (2018). Pengaruh LDR Dan NIM Melalui NPL Terhadap Profitabilitas Bank Umum. Jurnal Ilmu dan Riset Manajemen, 7(1), 1-17.

Mulyatun, S., Berutu, A., Widawati, & Anik S., (2022). Analisis Rasio Kesehatan Bank Umum Konvensional di Indonesia Periode 2016-2020. Upajiwa Dewantara, 6(1), 31-41.

Mutmainah, S., & Sulisnaningrum, E. (2019). Memaksimalkan Profitabilitas Melalui Non Performing Loan Dengan Beban Operasional Pendapatan Operasional Dan Net Interest Margin. Seminal Nasional Sistem Informasi, 3(1), 1642-1651.

Nurani, Khadijah. (2021). Pengaruh LDR, CAR dan NIM terhadap NPL pada PD. Bank Perkreditan Rakyat (PD. BPR Bank Pasar Kota Bogor). JIMEA Jurnal Ilmiah Manajemen, Ekonomi dan Akuntansi, 5(3), 339-354.

Octaviani, Santi. (2018). Pengaruh Non Performing Loan (NPL) dan Loan to Deposit Ratio (ROA) terhadap Profitabilitas pada Perusahaan Perbankan yang Terdaftar di Bursa Efek Indonesia (BEI). Jurnal Akuntansi, 5(1), 64-73.

Ozili, P. K. (2021). Bank profitability determinants: Comparing the United States, United Kingdom and European Union countries. Journal of Financial Economic Policy, 13(4), 490-508.

Pinasti, W.F. (2018). Pengaruh CAR, BOPO, NPL, NIM dan LDR terhadap Profitabilitas Bank Umum Periode 2011-2015. Jurnal Nominal, 7(1), 126-142.

Rahmat & Ruchiyat, E. (2021). Analisis Rasio Modal, Efisiensi Operasional, Bunga Bersih, Likuiditas, dan Kredit Bermasalah terhadap Rasio Laba. Jurnal Ilmiah Manajemen, 7(3), 413-430.

Rahman, M. M., Zheng, C., Ashraf, B. N., & Rahman, M. M. (2020). Capital requirements, the liquidity coverage ratio and the net stable funding ratio: Do they complement or substitute each other? Journal of Banking & Finance, 119, 105659.

Rohimah, Eti. (2021). Analisis Pengaruh BOPO, CAR, dan NPL terhadap ROA pada Bank BUMN Tahun 2012-2019 (Studi pada Bank BUMN yang Go Public di Bursa Efek Indonesia). JIMA Jurnal Ilmiah Mahasiswa Akuntansi, 1(2), 133-145.