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THE EFFECT OF CREDIT RISK, LIQUIDITY RISK, AND OPERATIONAL RISK ON PROFITABILITY
(A Study on Conventional Commercial Banks Listed on the Indonesia Stock Exchange)

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Abstract: Banks are institutions that function as financial intermediaries between parties with excess funds and those with a shortage of funds. The main objective of banks is to generate profit. Banks face various risks due to the involvement of public funds in their operational activities. These risks may lead to losses if not managed properly, and consequently affect the profits earned by the banks. This study aims to determine the effect of Credit Risk, Liquidity Risk, and Operational Risk on Profitability in Conventional Commercial Banks listed on the Indonesia Stock Exchange for the period 2021–2023. The data used is sourced from the financial data in each bank's annual report and the website www.idx.co.id. The population in this study includes 43 Conventional Commercial Banks. The sampling technique used is purposive sampling, resulting in a sample of 33 banks. The analytical model employed is multiple linear regression analysis with simultaneous testing (F-test) and partial testing (T-test) using IBM SPSS Statistics 25. The results show that Credit Risk, Liquidity Risk, and Operational Risk simultaneously affect Profitability. The partial test results indicate that Credit Risk, Liquidity Risk, and Operational Risk have an influence on Profitability.
Keywords: Credit Risk, Liquidity Risk, Operational Risk, Profitability

INTRODUCTION

A company's primary objectives are to ensure sustainability, promote growth, and maximize its value. The achievement of these goals depends on the company's ability to manage resources optimally and make sound business decisions (Hartati et al., 2024). Decisions related to investment, financing, and operational management must be carefully planned to enable companies to compete and survive in a business environment filled with challenges and uncertainties. Successful management of various financial aspects will impact the overall performance of the company.

Profitability is one of the main indicators used to assess a company's financial performance in generating profit from its operational activities (Lase et al., 2022). Profitability reflects the company's ability to manage its resources efficiently and effectively, thereby supporting sustainable business growth. A high level of profitability indicates the company's ability to conduct its business operations effectively, deliver returns to shareholders, and maintain the trust of stakeholders. Profitability assessment plays a crucial role because it is directly related to the company's survival and growth amid increasingly intense business competition (Musyafak et al., 2024).

Every company aims to maximize profits as a form of achievement through optimal business management. Profitability not only reflects the outcome of financial activities but also serves as a basis for management in making strategic decisions related to investment, financing, and dividend policy. A company with good profitability demonstrates its ability to manage assets, liabilities, and equity effectively to generate maximum profit. The evaluation of profitability is also closely tied to how the company manages its risks. Risk management theory explains that any uncertainty potentially hindering the achievement of corporate objectives must be systematically identified, measured, controlled, and monitored to maintain profitability and enhance company value.

According to the Circular Letter of the Financial Services Authority (OJK) Number 9/SEOJK.03/2020 on Transparency and Publication of Conventional Commercial Bank Reports, there are three key ratios used to measure bank profitability: Return on Assets (ROA), Return on Equity (ROE), and Net Interest Margin (NIM). This study uses profitability as an indicator to measure a bank's performance, proxied by ROA. This indicator is considered more appropriate as ROA measures the bank management's overall ability to generate profits (Putra & Rahyuda, 2021). Bank Indonesia, as the regulator and supervisor of the banking industry, emphasizes profitability measured by the management of assets sourced mostly from public savings (Ria, 2022).

Based on these considerations, ROA is chosen to measure bank profitability in this study. ROA is a ratio used in the banking industry to assess how much profit a bank can generate from its business activities (Kirana et al., 2021). The higher the profit generated from the same amount of assets, the higher the ROA, which implies that the company is more effective in utilizing its assets to generate profits (Izuddin, 2020). ROA is essential for banks as it indicates the effectiveness of asset utilization in generating earnings (Aulia & Anwar, 2021).

The Financial Services Authority Regulation (POJK) Number 18/POJK.03/2016 on Risk Management Implementation for Commercial Banks identifies eight primary risks faced by banks: operational risk, credit risk, market risk, liquidity risk, compliance risk, legal risk, reputational risk, and strategic risk. This study focuses on three variables affecting bank profitability: credit risk, liquidity risk, and operational risk. These variables are selected based on the consideration that they are internal factors within the control of bank management. Credit risk reflects the bank's ability to manage the quality of productive assets and anticipate potential defaults from borrowers. Liquidity risk indicates the bank's ability to meet short-term obligations by maintaining a balance between cash inflows and outflows. Operational risk relates to the effectiveness of systems, processes, and human resources involved in banking activities. These three variables are relevant not only to profitability but are also manageable and optimizable by bank management in improving financial performance and competitiveness in the banking industry.

The first factor that may affect profitability in this study is credit risk. According to Bank Indonesia Regulation Number 13/23/PBI/2011, credit risk is the risk arising from the failure of borrowers or other parties to fulfill their obligations to the bank as agreed. This risk includes several types: borrower default risk, counterparty credit risk, and settlement risk. In their operations, banks extend credit to customers, and if this is not done optimally, the distribution of credit may pose problematic credit risks (Hendriady de Keizer et al., 2022). Banks with non-performing loans exceeding Bank Indonesia's threshold of 5% will see a decline in profits, as a higher proportion of problematic credit reflects poor credit quality, resulting in operational losses and decreased profitability. Thus, Non-Performing Loans (NPLs) have a negative and significant impact on profitability (Saleh & Winarso, 2021).

In this study, credit risk is measured by the Non-Performing Loan (NPL) ratio. NPL is a ratio used to assess a bank's ability to manage the risk of loan default by borrowers (Susilawati & Nurulrahmatiah, 2021). High NPL levels increase costs and the likelihood of losses. The higher this ratio, the worse the credit quality, resulting in more non-performing loans, which leads to operational losses and decreased profits (Dwinanda & Sulistyowati, 2021).

Several studies have examined the effect of credit risk on profitability with varying results. Studies by Adhim (2019), Putri & Wahyudi (2023), and Juliantara & Darmayanti (2022) found that credit risk has a negative and significant effect on profitability. In contrast, a study by Ali et al. (2020) found that credit risk has a positive and significant effect on profitability.

Another factor influencing profitability is liquidity risk. Liquidity risk arises when banks are unable to meet their obligations or commitments related to their funding sources or liquid assets (Indrawan & Rikumahu, 2023). Liquidity risk may occur when banks cannot meet credit requests or fulfill withdrawals of funds by depositors at a given time (Dewi & Wartana, 2021). This risk occurs when loan disbursements exceed public deposits, creating exposure the bank must manage.

In this study, liquidity risk is measured using the Loan to Deposit Ratio (LDR), which compares the total loans disbursed by the bank to the total deposits received (Setiawan & Dana, 2024). A high LDR indicates that the bank is extending more credit relative to collected funds, which may boost profits if credit is effectively disbursed and risks are well managed. However, an excessively high LDR may lead to liquidity and default risks, while a very low LDR suggests underutilized funds and reduced efficiency (Manda, 2021).

Several studies have investigated the effect of liquidity risk on profitability, also with differing results. Research by Rahmawati (2020) and Sunaryo et al. (2020) found a negative and significant effect of liquidity risk on profitability. Conversely, studies by Cofitalan (2022) and Juliantara & Darmayanti (2022) found a positive and significant effect.

Operational risk is another factor affecting profitability. Financial Services Authority Regulation (POJK) Number 18/POJK.03/2016 defines operational risk as the risk arising from inadequate or failed internal processes, human error, system failures, or external events that may disrupt bank operations. Operational risk may also result from internal company issues due to weak internal controls (Parulian & Bebasari, 2024). It encompasses various operational aspects that may hinder smooth service delivery and the achievement of banking goals. In this study, operational risk is measured using the Operating Expenses to Operating Income (BOPO) ratio. This ratio is a primary indicator of operational efficiency, where a higher BOPO ratio indicates greater inefficiency and higher operational risk. Conversely, a lower BOPO ratio reflects more effective and efficient operational management. A lower BOPO enhances revenue and, consequently, profitability (Sunaryo et al., 2021).

Several studies on the effect of operational risk on profitability have yielded different findings. Studies by Eka Putri et al. (2022), Putri & Pardede (2023), and Sante et al. (2021) reported a negative and significant effect. In contrast, a study by Sunaryo et al. (2021) found a positive and significant effect of operational risk on profitability.

Based on the above phenomena and the inconsistency in prior research findings, this study aims to re-examine the effect of credit risk, liquidity risk, and operational risk on the profitability of Conventional Commercial Banks listed on the Indonesia Stock Exchange (IDX) for the 2021–2023 period.

METHOD

This study employs a quantitative approach with an associative design to analyze the influence of credit risk (NPL), liquidity risk (LDR), and operational risk (BOPO) on profitability (ROA) in conventional commercial banks listed on the Indonesia Stock Exchange (IDX) for the period 2021–2023. The research objects consist of 33 banks that recorded profits during the three-year period, selected using purposive sampling from a population of 43 banks. The data used are secondary data in the form of annual financial reports obtained from the official IDX website and other reliable sources, which were then analyzed using SPSS version 18 software (Sugiyono, 2019; Wiagustini, 2014).

The measurement of variables in this study was conducted using a financial ratio approach. Profitability is proxied by Return on Assets (ROA), credit risk by Non-Performing Loans (NPL), liquidity risk by Loan to Deposit Ratio (LDR), and operational risk by the BOPO ratio. Each variable is calculated based on formulas stipulated in Bank Indonesia Circular Letter No. 13/30/DPNP. The quantitative data in the form of financial ratios were processed to illustrate each bank's performance in managing risk toward profitability over the three-year observation period (Bank Indonesia Circular Letter No. 13/30/DPNP, 2011; Ghozali, 2013).

The data analysis technique used is multiple linear regression to examine both simultaneous and partial effects among variables. It is complemented by classical assumption tests, including tests for normality, multicollinearity, autocorrelation, and heteroscedasticity to ensure the validity of the regression model. The t-test was used to determine the partial influence of each independent variable on profitability, while the F-test assessed the model's feasibility as a whole. Additionally, the coefficient of determination (R^2) test was used to identify the extent to which the independent variables explain variations in the dependent variable. This research aims to provide empirical insights into how risk management affects the financial performance of banks, particularly their profitability (Ghozali, 2014; Wirawan, 2022).

RESULTS AND DISCUSSION

Multiple Linear Regression Analysis Results

Multiple linear regression analysis was used to analyze the influence of independent variables on the dependent variable. The results of the multiple linear regression can be seen in Table 1.

Table 1. Results of Multiple Linear Regression Analysis

Coefficientsa						
Model		**Unstandardized Coefficients**		**Standardized Coefficients**		
		B	**Std. Error**	**Beta**	**t**	**Sig.**
1	(Constant)	1,847	0.686		2,691	0.008
	Credit Risk	0.207	0.091	0.217	2,281	0.025
	Liquidity Risk	-0.867	0.405	-0.206	-2,142	0.035
	Operational Risk	-2,258	1,068	-0.202	-2,114	0.037

Source: Processed data, 2025

Based on the results of the multiple linear regression in Table 1, the regression equation that can be formed is as follows:

Y=1.847 + 0.207X^1– 0.867X^2– 2,258X^3

The regression equation can be explained as follows:

1) Constant (β_0)
   The obtained constant value is 1.847, which means that if the three independent variables—credit risk, liquidity risk, and operational risk—are assumed to be constant (valued at 0), then the dependent variable, namely profitability, will increase by 1.847.
2) The regression coefficient value of the credit risk variable is positive at 0.207, indicating a direct relationship. This means that if credit risk increases by one percent, the profitability variable will increase by 0.207 percent, assuming the other independent variables remain constant.
3) The regression coefficient value of the liquidity risk variable is negative at –0.867, indicating an inverse relationship. This means that if liquidity risk increases by one percent, the profitability variable will decrease by –0.867 percent, assuming the other independent variables remain constant.
4) The regression coefficient value of the operational risk variable is negative at –2.258, indicating an inverse relationship. This means that if operational risk increases by one percent, the profitability variable will decrease by –2.258 percent, assuming the other independent variables remain constant.

Classical Assumption Test

The classical assumption test is conducted before performing multiple linear regression analysis, which aims to determine the feasibility of the analysis model.

1) Normality Test

Table 2. Normality Test Results

One-Sample Kolmogorov-Smirnov Test		
Unstandardized Residual		
N		**99**
Normal Parametersa,b	Mean	0E-7
	Standard Deviation	0.37656186
Most Extreme Differences	Absolute	0.116
	Positive	0.047
	Negative	-0.116
Kolmogorov-Smirnov Z		1,156
Asymp. Sig. (2-tailed)		0.138

Source: Processed data, 2025

Table 2 shows that the Asymp. Sig. (2-tailed) value is 0.138, which exceeds the threshold of 0.05. Therefore, it can be concluded that the residuals follow a normal distribution.

2) Multicollinearity Test

Table 3. Multicollinearity Test Results

Coefficientsa

Model		**Tolerance**	**Collinearity statistics VIF**
1	Credit Risk	0.979	1,021
	Liquidity Risk	0.954	1,048
	Operational Risk	0.971	1,030

Source: Processed data, 2025

Based on the multicollinearity test results in Table 3, it can be explained that the tolerance values for each independent variable are greater than 10 percent, and all VIF values are less than 10. This indicates that there is no multicollinearity in the regression model.

3) Heteroscedasticity Test

Table 4. Results of Heteroscedasticity Test

Coefficients[a]

Model		**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**
		B	**Std. Error**	**Beta**		
1	(Constant)	-0.244	0.458		-0.533	0.595
	Credit Risk (X1)	-0.015	0.061	-0.026	-0.255	0.799
	Liquidity Risk(X2)	-0.013	0.270	-0.005	-0.048	0.962
	Operational Risk (X3)	0.824	0.713	0.119	1,156	0.251

Source: Processed data, 2025

Based on the results of the heteroscedasticity test in Table 4, the significance values for each variable are above 0.05. It can be concluded that the data in this study are free from heteroscedasticity.

4) **Autocorrelation Test**

Table 5. A Results of the Autocorrelation Test

Model Summary

Model	**R**	**R Square**	**Adjusted R Square**	**Standard Error of the Estimate**	**Durbin-Watson**
1	0.402a	0.161	0.135	0.38246	**1,757**

Source: Processed data, 2025

Based on the results in Table 5, the Durbin-Watson table value obtained is 1.757. This study uses 99 research data and the number of independent variables is

3. Based on the number of samples and independent variables, the value of dU = 1.713 is obtained through the Durbin-Watson table, resulting in the model dU < dW < (4 - dU) = 1.713 < 1.757 < (4 - 1.713) or 1.713 < 1.757 < 2.287. Based on this model, it indicates that the regression model in this study is free from autocorrelation.

Coefficient of Determination (Adjusted R^2)

Table 6. Results of the Coefficient of Determination Test

Model Summary[b]

Model	R	R Square	Adjusted R Square	Standard Error of the Estimate
1	0.402a	0.161	0.135	0.38246

Source: : Processed data, 2025

Based on Table 6, the Adjusted R Square value of 0.135 indicates that 13.5% of the variability in profitability (Y) can be explained by credit risk (X1), liquidity risk (X2), and operational risk (X3). Meanwhile, the remaining 86.5% is influenced by other factors outside of this regression model. The relatively low Adjusted R Square value suggests that there are additional factors beyond credit risk, liquidity risk, and operational risk that contribute to determining a company's profitability. Therefore, future research may consider incorporating additional variables to improve the accuracy of the regression model in explaining variations in profitability.

Model Feasibility Test (F Test)

Table 7. F Test Results

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2,673	3	.891	6,092	.001b
	Residual	13,896	95	.146		
	Total	16,570	98			

Source: Processed data, 2025

Based on the results of the F test (simultaneous test), the testing was conducted to determine whether the independent variables collectively have an effect on the dependent variable in the regression model. The ANOVA analysis results show that the F-count value is 6.092 with a significance level of 0.001. Since the significance value is less than 0.05, it can be concluded that credit risk (X1), liquidity risk (X2), and operational risk (X3) simultaneously have a significant effect on profitability (Y). Thus, the F test results prove that the regression model used is valid and can explain the relationship between the independent variables and the dependent variable. This means that credit risk, liquidity risk, and operational risk collectively contribute to determining the company's level of profitability.

Hypothesis Testing (t-Test)

Table 8. Hypothesis Testing (t-test)

Coefficients[a]

Unstandardized Coefficients	Standardized Coefficients

Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	1,847	0.686		2,691	0.008
	Credit Risk	0.207	0.091	0.217	2,281	0.025
	Liquidity Risk	-0.867	0.405	-0.206	-2,142	0.035
	Operational Risk	-2,258	1,068	-0.202	-2,114	0.037

Source: Processed data, 2025

Based on the results of the multiple linear regression analysis in Table 8, the t-test results can be interpreted as follows.

1) The significance value of the credit risk variable on profitability is 0.025, which is less than 0.05, with a coefficient value of 0.207. Therefore, the credit risk variable has a positive and significant effect on profitability in conventional commercial banks listed on the Indonesia Stock Exchange for the 2021–2023 period. This result indicates that the first hypothesis (H1) in this study is rejected, and the null hypothesis (H0) is accepted. Thus, it can be concluded that credit risk has a positive and significant effect on profitability.
2) The significance value of the liquidity risk variable on profitability is 0.035, which is less than 0.05, with a coefficient value of -0.867. Therefore, the liquidity risk variable has a negative and significant effect on profitability in conventional commercial banks listed on the Indonesia Stock Exchange for the 2021–2023 period. This result indicates that the null hypothesis (H0) in this study is rejected, and the second hypothesis (H2) is accepted. Thus, it can be concluded that liquidity risk has a negative and significant effect on profitability.
3) he significance value of the operational risk variable on profitability is 0.037, which is less than 0.05, with a coefficient value of -2.258. Therefore, the operational risk variable has a negative and significant effect on profitability in conventional commercial banks listed on the Indonesia Stock Exchange for the 2021–2023 period. This result indicates that the null hypothesis (H0) in this study is rejected, and the third hypothesis (H3) is accepted.

Discussion

The Effect of Credit Risk on Profitability

Credit risk in this study shows a positive and significant effect on profitability. The test results indicate that the credit risk variable has a positive and significant impact on the profitability of conventional commercial banks listed on the Indonesia Stock Exchange during the study period. This finding suggests that the first hypothesis is rejected and the null hypothesis is accepted, thus it can be concluded that credit risk has a positive and significant relationship with profitability.

An increase in credit risk reflects the bank's willingness to extend credit to sectors with the potential to generate higher returns. Although the loans provided carry a risk of default, effective risk management can generate substantial interest income, thereby enhancing bank profitability. Banks that are able to balance risk and potential credit returns will obtain optimal results from their intermediation activities.

This finding is supported by the principles of risk management, where risks are not avoided but are identified, measured, and managed to maximize value. In the context of credit risk, banks implement risk management strategies such as creditworthiness assessment, credit portfolio diversification, and loan loss provisioning to minimize losses and optimize returns, which ultimately positively affect profitability. A study by Fahru Rachman et al. (2023) found that credit risk has a positive and significant effect on the profitability of banks listed on the Indonesia Stock Exchange during the 2018–2020 period. In that study, credit risk was measured by the Non-Performing Loan (NPL) ratio and profitability by Return on Assets (ROA). The regression analysis results showed that the higher the credit risk management, the higher the profitability achieved. Furthermore, Kamaluddin (2023) also found that credit risk significantly contributes to banking profitability in Indonesia.

The Effect of Liquidity Risk on Profitability

Liquidity risk in this study shows a negative and significant effect on profitability. The test results indicate that the liquidity risk variable has a negative and significant impact on the profitability of conventional commercial banks listed on the Indonesia Stock Exchange during the study period. This finding indicates that the null hypothesis is rejected and the alternative hypothesis is accepted.

An increase in liquidity risk leads to a decline in the bank's ability to meet its short-term obligations. When liquidity pressure rises, banks are forced to seek more expensive additional funding sources, such as interbank loans or selling assets at a discount. These additional costs reduce profit margins, thereby decreasing profitability. This situation may also undermine customer confidence and further deteriorate the bank's overall financial condition.

These results are also in line with risk management principles, which emphasize the importance of adequate liquidity to ensure operational continuity and maintain public confidence in financial institutions. An imbalance between credit distribution and fund deposits, as reflected in a high Loan to Deposit Ratio (LDR), can worsen liquidity risk and directly affect the bank's financial performance. Therefore, sound liquidity risk management becomes a crucial aspect of maintaining profitability stability in the long term.

Research conducted by Rahmawati (2020) and Syarif Alamsyah et al. (2022) stated that liquidity risk has a negative and significant effect on profitability. Sunaryo et al. (2021) and Dewi & Wartana (2021) also found that liquidity risk negatively and significantly affects profitability. This means that an excessively high LDR indicates that the bank provides large amounts of credit compared to the deposits received, showing reliance on loan disbursement which risks lowering liquidity adequacy and potentially reducing bank profits.

The Effect of Operational Risk on Profitability

Operational risk in this study shows a negative and significant effect on profitability. The test results indicate that the operational risk variable has a negative and significant impact on the profitability of conventional commercial banks listed on the Indonesia Stock Exchange during the study period. This finding indicates that the null hypothesis is rejected and the third hypothesis is accepted. Thus, it can be concluded that the higher the level of operational risk faced by the bank, the more likely its profitability will decline.

Operational risk includes potential losses caused by internal system failures, human errors, ineffective processes, or unforeseen external events. The increase in such risks may lead to both direct and indirect losses, such as litigation costs, operational disruptions, and loss of customer trust, all of which can reduce profitability.

This finding is consistent with risk management principles, where the effectiveness of internal control systems is key to mitigating the negative impact of operational risks. Banks without adequate operational risk management tend to be more vulnerable to losses, thereby reducing overall financial performance. Therefore, implementing strong risk mitigation strategies is essential to maintain bank stability and profitability.

This finding is supported by studies conducted by Eka Putri et al. (2022), Anggraeni & Manda (2022), and Sante et al. (2021), which showed that operational risk has a negative and significant effect on profitability. Similar findings were also revealed in the studies by Astuti (2022), Ali et al. (2020), and Putri & Pardede (2023), which stated that operational risk can reduce a company's efficiency and financial stability, thereby lowering its level of profitability. Furthermore, studies by Wetapo et al. (2023), Antari & Baskara (2020), Parhusip & Cakranegara (2021), and Putra & Rahyuda (2021) support the same conclusion, namely that operational risk has a negative impact on banking profitability. These findings reinforce the empirical evidence that operational risks—such as internal process failures, system errors, and external events—significantly contribute to the decline in company profitability.

4. CONCLUSION

Based on the findings presented in the previous chapters, the conclusions drawn from this study are as follows:

1) Credit risk has a positive and significant effect on profitability. This indicates that an increase in credit risk, as long as it is managed effectively, can actually contribute to higher company profits. This finding supports the principle of risk management theory, which states that proper risk management can minimize potential losses and optimize opportunities to enhance financial performance.
2) Liquidity risk has a negative and significant effect on profitability. This means that the greater the liquidity risk faced by a company, the more likely its profitability will decline. This condition highlights the importance of sound liquidity management, so the company can smoothly fulfill its short-term obligations, thereby improving its profitability.
3) Operational risk also has a negative and significant effect on profitability. This shows that disruptions in operational processes—whether caused by human error, system failures, or other factors—can decrease the company's financial performance. The increased costs are reflected in the rising BOPO (Operating Expenses to Operating Income) ratio, which indicates declining operational efficiency. When the BOPO ratio increases, the profit margin shrinks because operational expenses consume a large portion of revenue, leading to a decline in company profitability.

5. REFERENCES

Adhim, C. (2019). Pengaruh Resiko Kredit, Resiko Likuiditas, Efisiensi Manajemen terhadap Profitabilitas: Studi pada Perbankan yang Terdaftar di Bursa Efek Indonesia. *Cendekia: Jurnal Pendidikan Dan Pembelajaran*, *13*(2), 141–152. https://doi.org/10.30957/cendekia.v13i2.604

Ali, M. S. Al, Awadhi, K. M. Al, & Shamali, N. M. Al. (2020). the Effects of Credit Risk , Operational Risk and Liquidity Risk on the Financial Performance of. *European Journal of Economic and Financial Research*, 1–9. https://doi.org/10.5281/zenodo.3605378

Anggraeni, S. W., & Manda, G. S. (2022). Pengaruh Risiko Kredit, Risiko Likuiditas, Dan Risiko Operasional Terhadap Profitabilitas Bank Umum Persero Periode 2013-2020. *Progress: Jurnal Pendidikan, Akuntansi Dan Keuangan*, 5(1), 66–77. https://doi.org/10.47080/progress.v5i1.1629

Anggriani, R., & Muniarty, P. M. (2020). The effect of non-performing loans (NPL) and capital adequacy ratio (CAR) on profitability (ROA) at PT. Bank Central Asia (BCA), TBK. *Ilomata International Journal of Management*, *1*(3), 121–126.

Antari, N. P. N., & Baskara, I. G. K. (2020). Pengaruh Ldr, Npl, Dan Bopo Terhadap Profitabilitas Pada Lpd Di Kabupaten Gianyar. *E-Jurnal Manajemen Universitas Udayana*, *9*(8), 2998. https://doi.org/10.24843/ejmunud.2020.v09.i08.p06

Astuti, R. P. (2022). Pengaruh CAR, FDR, NPF, Dan BOPO Terhadap Profitabilitas Perbankan Syariah. *Jurnal Ilmiah Ekonomi Islam*, *8*(3), 3213. https://doi.org/10.29040/jiei.v8i3.6100

Aulia, R., & Anwar, S. (2021). Pengaruh Biaya Operasional dan Pendapatan Operasional, Net Operating Margin, Dana Pihak Ketiga dan Capital Adequacy Ratio terhadap Profitabilitas Bank Syariah. *Bukhori: Kajian Ekonomi Dan Keuangan Islam*, *1*(1), 21–38. https://doi.org/10.35912/bukhori.v1i1.437

Bhattarai, B. P. (2020). *Effects of non-performing loan on profitability of commercial banks in Nepal*.

Cofitalan, J. M. L. (2022). Effect Of Credit Risk, Liquidity Risk, And Operational Risk On Profitability (Study On Banco Nasional De Comércio De Timor-Leste Bnctl-Dili). *ABM : International Journal of Administration, Business and Management*, 4(1), 52–73. https://doi.org/10.31967/abm.v4i1.577

Dewi, A. C. (2022). *Pengaruh Return On Assets (Roa) Dan Debt To Equity Ratio (DER) Terhadap Agresivitas Pajak Dengan Ukuran Perusahaan Sebagai Variabel Moderating Pada Perusahaan Manufaktur (Studi Empiris Pada Perusahaan Manufaktur Yang Terdaftar Di BEI Tahun 2019–2021)*. Universitas Mercu Buana Jakarta.

Dewi, N. K. C., & Badjra, I. B. (2020). the Effect of Npl, Ldr and Operational Cost of Operational Income on Roa. *American Journal of Humanities and Social Sciences Research*, *7*, 171–178. www.ajhssr.com

Dewi, & Wartana. (2021). Pengaruh Risiko Kredit, Risiko Tingkat Bunga Dan Risiko Likuiditas Terhadap Profitabilitas Bank Bumn Indonesia Periode 2016-2020. *Journal Research of Management*, *3*(1), 27–35. https://doi.org/10.51713/jarma.v3i1.57

Dwinanda, I. Z., & Sulistyowati, C. (2021). The Effect of Credit Risk and Liquidity Risk on Bank Stability. *Jurnal Ilmu Ekonomi Terapan*, 6(2), 255. https://doi.org/10.20473/jiet.v6i2.31144

Eka Putri, S., Ramli, & Sri Apriani, E. (2022). Pengaruh Risiko Kredit, Risiko Likuiditas Dan Risiko Operasional Terhadap Profitabilitas Pada Bank Umum Konvensional Yang Terdaftar Di Bursa Efek Indonesia Periode 2019-2021. *Jurnal Tugas Akhir Mahasiswa Akuntansi Poltekba (Jmap)*, 1–10.

Fahmi, I. (2015). *Manajemen Perbankan Konvensional & Syariah.* Mitra Wacana Media.

Fahru Rachman, Muslim, A., & Widiastuti, M. C. (2023). Analisa Faktor-Faktor Yang Mempengaruhi Profitabilitas Bank Di Indonesia Yang Dimoderasi Oleh Ukuran. *JMBI*

UNSRAT (Jurnal Ilmiah Manajemen Bisnis Dan Inovasi Universitas Sam Ratulangi)., *10*(3), 1741–1758. https://doi.org/10.35794/jmbi.v10i3.50410

Gayatri, N. W. P. D., Mahaputra, I. N. K. A., & Sunarwijaya, I. K. (2019). Risiko kredit, risiko likuiditas, risiko operasional dan profitabilitas. *Juara: Jurnal Riset Akuntansi*, *9*(1).

Ghozali, I., & Chariri, A. (2014). *Teori Akuntansi*. Badan Penerbit. Universitas Diponegoro.

Hanafi, M. B. . D. M. (2014). *Manajemen Risiko* (3rd ed.).

Hartati, L., Sos, S., & MM, C. R. P. (2024). *Manajemen Keuangan Nilai Perusahaan dengan Mediasi Manajemen Laba*. Selat Media.

Hendriady de Keizer, H., Gunardi, G., Sugiyanto, S., & Arisena, A. (2022). Analisis Kredit Bermasalah ditinjau dari Non Performing Loan (Npl) Pada PT Bank Mandiri (Persero) Tbk. *Jurnal Co Management*, *5*(1), 792–796.

Indrawan, I. B. A., & Rikumahu, B. (2023). Analisis Risiko Kredit, Risiko Pasar Dan Risiko Likuiditas Pada Bank Umum Bumn. *Jurnal Ilmiah Manajemen, Ekonomi, & Akuntansi (MEA)*, *7*(3), 287–303.

Iswandi, A. (2022). Analisis Rasio Profitabilitas sebagai Alat Penilaian Kinerja Keuangan Bank Syariah di Indonesia (Studi Kasus Laporan Tahun 2016-2018). *Al-Tasyree: Jurnal Bisnis, Keuangan Dan Ekonomi Syariah*, *14*(01), 22–34. https://doi.org/10.59833/altasyree.v14i01.712

Izuddin, M. (2020). Analisis pengaruh faktor fundamental terhadap return saham perusahaan konstruksi (studi pada saham perusahaan yang tercatat aktif dalam Lq-45 di Bei periode 2011-2018). *Jurnal Ilmiah Ekbank*, *3*(1).

Juliantara, I. K. J., & Darmayanti, N. P. A. (2022). Pengaruh Risiko Kredit, Risiko Operasional, Dan Risiko Likuiditas Terhadap Profitabilitas Lpd Di Kecamatan Bebandem. *E-Jurnal Manajemen Universitas Udayana*, *11*(7), 1317. https://doi.org/10.24843/ejmunud.2022.v11.i07.p03

Kamaluddin, A. I. ; (2023). Pengaruh risiko kredit, risiko pasar dan risiko likuiditas terhadap profitabilitas perusahaan perbankan yang terdaftar di Bursa Efek Indonesia. *Business Management Research*, *2*(1), 1–14.

Karim, R., Roshid, M., Shamme, F. B., & Hasan, M. (2022). Non-performing Loans and Bank Profitability: Evidence from Bangladesh. *International Journal of Finance & Banking Studies*, *11*(4).

Kasmir. (2019). *Analisi Laporam Keuangan*. Jakarta: PT. Raja Grafindo Persada.

Kirana, Y. G., Hariyani, D. S., & Sari, P. O. (2021). Pengaruh Makro Ekonomi dan Mikro Ekonomi Terhadap Profitabilitas Pada BPR Syariah di Indonesia. *Business Management Analysis Journal (BMAJ)*, *4*(2), 174–186.

Lase, L. P. D., Telaumbanua, A., & Harefa, A. R. (2022). Analisis kinerja keuangan dengan pendekatan rasio profitabilitas. *Jurnal Akuntansi, Manajemen Dan Ekonomi*, *1*(2), 254–260.

Manda, I. K. A. G. S. (2021). Pengaruh Risiko Kredit dan Risiko Likuiditas Terhadap Profitabilitas Pada Bank BUMN. *Jurnal Ilmiah Manajemen Kesatuan*, *6*(3), 131–138. https://doi.org/10.37641/jimkes.v6i3.294

Mosey, A. C., Tommy, P., & Untu, V. (2018). Pengaruh Risiko Pasar Dan Risiko Kredit Terhadap Profitabilitas Pada Bank Umum Bumn Yang Terdaftar Di Bei Periode 2012-2016. *Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis Dan Akuntansi*, *6*(3), 1338–1347.

Musyafak, Z. H., Atriani, D. M., Hasanah, D. U., Sari, A. Y., & Astarina, Y. (2024). Analisis akuisisi perusahaan menurut hukum persaingan usaha dan pengaruhnya terhadap profitabilitas perusahaan. *Indonesian Journal of Law and Justice*, *1*(4), 16.

Parhusip, G., & Cakranegara, P. A. (2021). The influence of NIM, BOPO, LDR, and size toward Return On Assets (ROA) and its relations with technical efficiency on banks (Buku 4) in Indonesia. *IDEAS: Journal of Management & Technology*, *1*(2), 47. https://doi.org/10.33021/ideas.v1i2.3426

Parulian, P., & Bebasari, N. (2024). Pengaruh Risiko Kredit, Risiko Likuiditas, Dan Risiko Operasional Terhadap Profitabilitas Perbankan. *Jurnal Ekonomi & Ekonomi Syariah*, *7*(1), 830–839. https://doi.org/10.36778/jesya.v7i1.1492

Peraturan Bank Indonesia. (2011a). *Peraturan Bank Indonesia Nomor 13/1/PBI/2011 tentang Penilaian Tingkat Kesehatan Bank Umum*.

Peraturan Bank Indonesia. (2011b). *Peraturan Bank Indonesia Nomor 13/23/PBI/2011 tentang Penerapan Manajemen Risiko bagi Bank Umum Syariah dan Unit Usaha Syariah*.

Peraturan Otoritas Jasa Keuangan. (2016). *Peraturan Otoritas Jasa Keuangan Nomor 18/POJK.03/2016 tentang penerapan manajemen risiko bagi bank umum*.

Putra, D. P. W. P., & Rahyuda, H. (2021). *Pengaruh NIM, LDR, NPL, BOPO Terhadap Roa Pada Bank Umum Swasta Nasional Devisa di Indonesia*. *10*(11), 1181–1200.

Putri, A. P. J., & Wahyudi, I. (2023). Pengaruh Risiko Kredit, Risiko Likuiditas, Modal Bank Dan Efisiensi Operasional Terhadap Profitibilitas Bank. *Jurnal Ilmiah Manajemen, Ekonomi, & Akuntansi (MEA)*, *7*(3), 79–94. https://doi.org/10.31955/mea.v7i3.3313

Putri, N. A., & Pardede, R. P. (2023). Pengaruh Risiko Kredit, Risiko Likuiditas Dan Risiko Operasional Terhadap Profitabilitas Bank BUMN Periode 2013-2020. *Jurnal Ilmiah Akuntansi Kesatuan*, *11*(2). https://doi.org/10.37641/jiakes.v11i2.1612

Rahmawati, A. (2020). Dampak risiko pembiayaan, risiko likuiditas dan permodalan terhadap profitabilitas perbankan syariah. *Jurnal Administrasi Kantor*, *8*(2), 185–198. https://ejournal-binainsani.ac.id/index.php/JAK/article/view/1455/1245

Ria, N. (2022). Analisis Faktor-Faktor yang Mempengaruhi Profitabiltas Bank Umum Syariah di Indonesia. *JEKSYAH Islamic Economics Journal*, *2*(02), 112–123.

Saleh, D. S., & Winarso, E. (2021). Analysis of Non-Performing Loans (NPL) and Loan to Deposit Ratio (LDR) towards Profitability. *International Journal of Multicultural and Multireligious Understanding*, *8*(1), 423–436.

Sante, Z. V., Murni, S., & Tulung, J. E. (2021). Pengaruh Risiko Kredit, Risiko Likuiditas dan Risiko Operasional Terhadap Profitabilitas Perusahaan Perbankan yang terdaftar di LQ45, buku III dan buku IV periode 2017-2019. *Emba*, *9*(3), 1451–1462.

Sartono, A. (2015). *Manajemen Keuangan: Teori dan Aplikasi* (Edisi Keem). BPFE.

SEOJK NOMOR 7 /SEOJK.05/2021 (2021). https://ojk.go.id/id/regulasi/Pages/Penerapan-Manajemen-Risiko-bagi-Perusahaan-Pembiayaan-dan-Perusahaan-Pembiayaan-Syariah.aspx

Setiawan, made & D. M. (2024). The Effect of LDR, NPL, and NIM on Profitability in Commercial Banks on IDX. *International Journal of Asian Business and Management (IJABM)*, *3*(4), 541–556.

Setiawan, I. M. K. I., & Dana, I. M. (2024). The Effect of LDR, NPL, and NIM on Profitability in Conventional Commercial Banks on IDX. *International Journal of Asian Business and Management*, *3*(4), 541–556.

Situmorang, D. J., & Riyanti, R. S. (2023). *Situmorang 2023*. *7*(2), 394–405.

Sudarmanto, E., Astuti, A., Kato, I., Basmar, E., Simarmata, H. M. P., Yuniningsih, Y., Irdawati, I., Wisnujati, N. S., & Siagian, V. (2021). *Manajemen Risiko Perbankan* (p. 153). Yayasan Kita Menulis.

Sugiyono. (2019). *Metode Penelitian Dan Pengembangan Research Dan. Development*. Bandung : Alfabeta.

Sunaryo, D., Kurnia, D., Adiyanto, Y., & Quraysin, I. (2021). Pengaruh Risiko Kredit, Risiko Likuiditas Dan Risiko Operasional Terhadap Profitabilitas Perbankan Pada Bank Umum Di Asia Tenggara Periode 2012-2018. *Jurnal Ilmu Keuangan Dan Perbankan (JIKA)*, *11*(1), 62–79. https://doi.org/10.34010/jika.v11i1.3731

Surat Edaran Bank Indonesia. (2011a). *SE BI No. 13/24/DPNP/2011 tentang Penilaian Tingkat Kesehatan Bank Umum*.

Surat Edaran Bank Indonesia. (2011b). *Surat Edaran BI No. 13/30/DPNP tanggal 16 Desember 2011.*

Surat Edaran Otoritas Jasa Keuangan. (2020). *Surat Edaran Otoritas Jasa Keuangan Nomor 9/SEOJK.03/2020 tentang Transparansi dan Publikasi Laporan Bank Umum Konvensional*.

Susilawati, S., & Nurulrahmatiah, N. (2021). Pengaruh Non-Performing Loan (NPL) dan Loan to Deposit Ratio (LDR) terhadap Return on Asset (ROA) dengan Net Interest Margin (NIM) sebagai Variabel Mediasi pada Bank BUMN yang Terdaftar di BEI. *Jurnal Maksipreneur: Manajemen, Koperasi, Dan Entrepreneurship*, *11*(1), 69. https://doi.org/10.30588/jmp.v11i1.833

Syarif Alamsyah, Disman, & Ikaputera Waspada. (2022). Pengaruh Risiko Kredit Dan Risiko Likuiditas Terhadap Profitabilitas (Studi Pada Bank Konvensional Di Bei Tahun 2016-2020). *Buana Ilmu*, *6*(2), 1–12. https://doi.org/10.36805/bi.v6i2.2336

Wetapo, U., Elisa, E., & Purnamasari, K. (2023). Pengaruh Kecukupan Modal, Risiko Kredit, Efisiensi, Dan Likuiditas Terhadap Profitabilitas Perbankan. *Jurnal Manajemen*, *11*(1), 82–90. https://doi.org/10.36546/jm.v11i1.870

Wiagustini, N. L. P. (2014). *Manajemen keuangan*. Denpasar: Udayana University Press.