Equivalent : Journal Of Economic, Accounting and Management
Vol. 4, No. 2, 2026, 1519-1532
Publisher: CV. Doki Course and Training
E-ISSN: 2985-8089 | P-ISSN: 2986-8777

THE EFFECT OF LIQUIDITY RISK, CREDIT RISK, OPERATIONAL RISK, MARKET RISK, AND *GOOD CORPORATE GOVERNANCE* ON FINANCIAL PERFORMANCE IN CONVENTIONAL COMMERCIAL BANKS LISTED ON THE INDONESIA STOCK EXCHANGE

Reydeska Natalia A A Gulo[1], Noni Ardian[2], Ramadhan Harahap[3]
Universitas Pembangunan Panca Budi, Medan, North Sumatera [1,2,3]
Corresponding email: reydeskagulo96@gmail.com[1]
Author email : noniardian@dosen.pancabudi.ac.id[2] , ramadhanharahap@dosen.pancabudi.ac.id[3]

ARTICLE INFO

Article History
Submission : 08/05/2026
Received : 08/05/2026
Revised : 15/05/2026
Accepted : 21/05/2026

Keywords
Liquidity Risk, Credit Risk, Operational Risk, Market Risk, Good Corporate Governance, Financial Performance.

ABSTRACT

This study aims to analyze the influence of liquidity risk, credit risk, operational risk, market risk, and Good Corporate Governance on the financial performance of conventional commercial banks listed on the Indonesia Stock Exchange (IDX) during the 2022–2024 period. This study uses a quantitative method with a panel data regression approach. The research population is all conventional commercial banks listed on the Indonesia Stock Exchange, with a sample of 41 banks that meet the purposive sampling criteria for the 2022-2024 period, resulting in 123 observations. Data analysis was carried out using EViews 12 software. The results of the study show that simultaneously liquidity risk, credit risk, operational risk, market risk, and Good Corporate Governance have a significant effect on the financial performance of conventional commercial banks. Partially, credit risk and operational risk have a negative and significant effect on financial performance, while market risk and Good Corporate Governance have a positive and significant effect on financial performance. Meanwhile, liquidity risk does not have a significant effect on financial performance. The Adjusted R-squared value of 0.607560 indicates that 60.76% of the variation in financial performance (ROA) can be explained by liquidity risk variables, credit risk, operational risk, market risk, and Good Corporate Governance, while the remaining 39.24% is influenced by other variables outside the research model.

Introduction

The banking industry has a vital role in the Indonesian economy as a financial intermediation institution that connects those who have excess funds with those who need funds. Banks, financial institutions are institutions whose main activities are to collect funds from the community, redistribute them to the community, and provide other banking

Equivalent : Journal Of Economic, Accounting and Management
Vol. 4, No. 2, 2026, 1519-1532

services (Ardian & Sari, 2022). Banks as a company or economic entity also make financial statements to show the information and financial position presented to interested parties (Saragih & Sari, 2024). Bank health assessments are a fundamental aspect in maintaining the stability of the national banking system. According to Darmawi in (Bimantara & Mariana, 2025), risk management is an effort that involves identifying, analyzing, and controlling risks in every company's activities, with the main goal of achieving a more optimal level of effectiveness and efficiency. An assessment of the bank's health level can be done by reviewing its financial performance (Fadriyaturrohmah & Manda, 2022; Fatmawati, Kadang, Munawarah, & Farid, 2025). According to (Fahmi, 2012) financial performance is an analysis that is carried out to see the extent to which the company has implemented by using the rules of financial implementation properly and correctly. Financial performance assessment is not only important for internal management, but also for external stakeholders such as investors, regulators, and customers. Planning is a form of planning carried out by organizational management that includes all future operational stages to achieve the desired profit goals (Ardian, 2022).

The assessment of banks' financial performance generally uses the CAMELS (*Capital, Assets Quality, Management, Earnings, Liquidity, and Sensitivity to Market Risk*) approach adopted by Bank Indonesia. Nevertheless, profitability remains the key indicator most often used as a proxy for financial performance. Profitability ratio is a financial metric used to assess how profitable a company is (Anan & Septriawan, 2024; Rojulmubin, Nurhidayah, Lim, F. Arifianto, & N. Nazar, 2023). Financial performance in this study was measured using *Return on Assets* (ROA) which is the main indicator of profitability and efficiency of bank asset management. According to (Kasmir, 2020) *Return on Assets* (ROA) is a ratio that shows the return on the number of assets used in a company. ROA was chosen as a proxy for financial performance because it is the most representative indicator in measuring the effectiveness of banks in generating profits from all assets owned (Riyadi, 2006). The higher the ROA, the more efficient the bank is in using its assets to generate profits.

Risk management is an effort to know, analyze, and control risks in every company's activities with the aim of obtaining higher effectiveness and efficiency (Darmawi, 2016). With good risk management, companies can minimize existing risks so that they can get better profits. Risks can be minimized by conducting risk management within the company (Fakhruddin, 2021). Bank Indonesia, through Bank Indonesia Regulation No. 13/1/PBI/2011 concerning the Health Level Assessment of Commercial Banks, identifies several key risks that must be managed by banks, including liquidity risk, credit risk, operational risk, and market risk. These four types of risks have different but interrelated characteristics in influencing the bank's financial performance. Failure to manage these risks can result in significant financial losses, and even potentially threaten the bank's business continuity.

Liquidity risk is a risk arising from the bank's inability to meet its short-term obligations that are due without incurring unacceptable losses. According to (Drehmann & Nikolaou, 2013) liquidity risk is one of the main causes of bank failure because it can trigger bank runs and systemic loss of customer trust. A high level of liquidity reflects the bank's ability to meet its short-term obligations, thereby strengthening the bank's capacity to maintain financial stability (Rajali, Ardian, & Hernawaty, 2025). *The Liquidity Coverage Ratio* (LCR) as the main indicator of liquidity risk provides an overview of the

bank's ability to deal with stress scenarios within a period of 30 days. Liquidity risk with the financial performance of banks, where banks with low liquidity levels tend to have lower profitability. Liquidity risk in this study is measured using *the Loan to Deposit Ratio* (LDR) which is the most commonly used ratio in measuring banking liquidity risk. According to (Kasmir, 2017) LDR measures the bank's ability to repay withdrawals made by depositors by relying on the credit provided as a source of liquidity. The LDR formula is:

Credit risk is the most dominant risk in banking operations, considering that credit disbursement activities are the main source of income for banks. According to (Rustam, 2017) credit risk is a risk due to the failure of another party to fulfill obligations to financial institutions that provide credit in accordance with the agreed agreement. In practice, credit risk can arise from various forms such as *non-performing loans*, loans that have decreased quality, or even defaulted loans. Credit risk in this study is measured using *the Non-Performing Loan* (NPL) ratio, which is a key indicator in assessing the quality of banks' productive assets. According to (Kulsum, 2025) NPL reflects the ability of bank management to handle 43 non-performing loans or loans that cannot be repaid by the debtor. (Ahmed, El-Halaby, & Soliman, 2022) stated that credit risk management is very important because failure to assess the debtor's business continuity can increase the risk of default and potentially interfere with the bank's financial health. Credit risk evaluation and appropriate reserve creation can help banks avoid these risks, especially when credit is provided to investors without definite payment from the debtor (Kulsum, 2025).

Operational risk is a relatively complex risk because it comes from various internal aspects of the bank's organization. According to (Kulsum, 2025) operational risk is a type of risk that can be effectively supervised and managed, assuming that the bank has the ability to further develop its business skills. In contrast to credit risk and market risk which are more easily quantified, operational risks are often difficult to identify and measure due to their heterogeneous nature. Operational risk management requires a strong internal control infrastructure, reliable information technology systems, competent human resources, and a risk management culture embedded throughout the organization. Banks with low levels of operational efficiency tend to have high operating costs, thus reducing profitability. Operational risks in this study were measured using *the Operating Efficiency Ratio* (OER) or Operating Expense to Operating Income (BOPO). According to Dendawijaya (2009), BOPO is a ratio that measures the efficiency and ability of banks to carry out their operational activities.

Market risk is a risk that arises due to the movement of market variables such as interest rates, exchange rates, equity prices, and commodity prices that can be detrimental to a bank's financial position. Market risk mainly comes from trading activities, investments in securities, and foreign exchange transactions. High financial market volatility, especially in developing countries such as Indonesia, causes banks to face significant exposure to market risks. Fluktuasi the rupiah exchange rate against foreign currencies, changes in Bank Indonesia's benchmark interest rate, and capital market dynamics can affect the value of banks' assets and liabilities. Effective market risk management requires sophisticated measurement and monitoring systems, such as *Value at Risk (*VaR), stress testing, and scenario analysis. Banks also need to hedge to mitigate exposure to market risks. Failure to manage market risk can result in losses in a short period of time, as has happened in some of the major cases in the history of international

Equivalent : Journal Of Economic, Accounting and Management
Vol. 4, No. 2, 2026, 1519-1532

banking. Market risk in this study is measured using *Net Interest Margin* (NIM) which reflects the bank's ability to manage interest rate risk. According to Mawardi (2005), NIM is a ratio that shows the ability of bank management to manage its productive assets to generate net interest income.

The implementation *of Good Corporate Governance* has become increasingly important since the emergence of accounting scandals such as the Enron and Worldcom cases involving unethical accounting practices (Tarigan, Sari, Purnama, & Sumarti, 2024). According to (Rahma, 2021), *good corporate governance* is bank governance that applies the principles of openness, accountability, accountability, independence, and fairness. *Corporate governance* is a concept that regulates the relationship between shareholders, the board of commissioners, and the board of directors in a company (Pramono, 2020). The application of strong GCG principles is expected to strengthen the bank's management structure, increase internal supervision, and reduce risks related to unethical business practices (Anan & Septriawan, 2024). The implementation *of good corporate governance* is considered to be able to improve the image of the banking sector that was once bad, protect the interests of *stakeholders* and increase compliance with applicable laws and regulations and general ethics in the banking industry in order to create a healthy banking system (Fakhruddin, 2021). One of the most important GCG mechanisms is the existence of independent commissioners in the structure of the board of commissioners. The Independent Board of Commissioners is the core of *corporate governance* which is tasked with ensuring the implementation of the company's strategy, supervising management in managing the company and requiring the implementation of accountability (Sari & Pertiwi, 2019). Good GCG implementation, including an adequate proportion of independent commissioners, can improve operational efficiency and reduce the risk of agency problems. Banks with a strong governance structure will have a good internal control system, high transparency, and prudent decision-making. This in turn can improve financial performance and stakeholder confidence. However, the lack of knowledge and experience from independent commissioners about the company's goals can increase the company's expenses compared to the benefits received by the company, which can reduce the company's performance (Jenni & Murhadi, 2024; Khoe, Sutejo, & Murhadi, 2024).

Based on the inconsistency of the results of previous research and the background presentation above, the author is interested in conducting a research entitled "The Influence of Liquidity Risk, Credit Risk, Operational Risk and Market Risk on Financial Performance with *Good Corporate Governance* as an Intervening Variable in Conventional Commercial Banks Listed on the Indonesia Stock Exchange".

Research Method

Research Approach

This research approach is an associative approach that aims to determine the influence or relationship of an independent variable on dependent or bound variables, so that it can be known how much influence and close relationship it is (Pakpahan & Manullang, 2014). The quantitative approach is used because this study examines the relationship between variables based on numerical data, while the causal approach is used to determine the causal relationship between independent variables and dependent variables. Data analysis was carried out using the panel data regression method, which is the merger of time series data and cross section data, with the help of EViews 12 software.

Population and Sample

Population is the whole of the group for which the data will be taken. Population is an object or subject that is located in an area and has met certain conditions related to the problem or object (Nurrahmah et al, 2021). The population in this study is conventional banking companies listed on the Indonesia Stock Exchange (IDX) at a total of 44 companies.

Table 1. Population Data of Conventional Bank Companies Listed on the Indonesia Stock Exchange

No.	Issuers	Company Name
1	BBCA	PT. Bank Central Asia Tbk
2	BBRI	PT. Bank Rakyat Indonesia (Persero) Tbk
3	BMRI	PT. Bank Mandiri (Persero) Tbk
4	BNLI	PT. Bank Permata Tbk
5	BBNI	PT. Bank Negara Indonesia (Persero) Tbk
6	BNGA	PT. Bank CIMB Niaga Tbk
7	MEGA	PT. Bank Mega Tbk
8	BBHI	PT. Allo Bank Indonesia Tbk
9	NISP	PT. Bank OCBC NISP Tbk
10	SUPA	PT. Super Bank Indonesia Tbk
11	BUILD	PT. Bank Ina Perdana Tbk
12	ART	PT. Bank Jago Tbk
13	PNBN	PT. Bank Pan Indonesia Tbk
14	BDMN	PT. Bank Danamon Indonesia Tbk
15	BTPN	PT. Bank SMBC Indonesia Tbk
16	BSIM	PT. Bank Sinarmas Tbk
17	BBTN	PT. Bank Tabungan Negara (Persero) Tbk
18	BNII	PT. Bank Maybank Indonesia Tbk
19	BBKP	PT. Bank KB Indonesia Tbk
20	BBSI	PT. Chrome Bank Indonesia Tbk
21	BMAS	PT. Bank Maspion Indonesia Tbk
22	BJBR	PT. West Java and Banten Regional Development Bank Tbk
23	BBMD	PT. Bank Mestika Dharma Tbk
24	BJTM	PT. East Java Regional Development Bank Tbk
25	BBYB	PT. Bank Neo Commerce Tbk
26	MAYA	PT. Bank Mayapada Internasional Tbk
27	AGRO	PT. Bank Raya Indonesia Tbk
28	MASB	PT. Bank Multiarta Sentosa Tbk
29	READ	PT. Bank Capital Indonesia Tbk
30	ARDRA	PT. Bank Woori Saudara Indonesia 1906 Tbk
31	AMAR	PT. Bank Amar Indonesia Tbk
32	AGRS	PT. Bank IBK Indonesia Tbk
33	NOBU	PT. Bank Nationalnobu Tbk
34	BSWD	PT. Bank of India Indonesia Tbk
35	DNAR	PT. Bank Oke Indonesia Tbk
36	INPC	PT. Bank Artha Graha International Tbk
37	BGTG	PT. Bank Ganesha Tbk

Equivalent : Journal Of Economic, Accounting and Management
Vol. 4, No. 2, 2026, 1519-1532

No.	Issuers	Company Name
38	MCOR	PT. Bank China Construction Bank Indonesia Tbk
39	BCIC	PT. Bank Jtrust Indonesia Tbk
40	BABP	PT. Bank MNC Internasional Tbk
41	BNBA	PT. Bank Bumi Arta Tbk
42	BKSW	PT. Bank QNB Indonesia Tbk
43	BVIC	PT. Bank Victoria International Tbk
44	BEKS	PT. Banten Regional Development Bank (Perseroda) Tbk

Source : www.idx.co.id data Processed by the Author (2026)

The sample determination technique used is purposive sampling, which is the selection of samples based on certain criteria set by the researcher. The criteria for selecting population members as a sample in this study are as follows:

a. Conventional Commercial Banks listed on the Indonesia Stock Exchange (IDX) during the research observation period.

b. Conventional Commercial Banks that publish their annual financial statements in full and have been audited during the research period.

c. Conventional Commercial Banks that present complete financial ratio data, including liquidity ratio (LDR), credit ratio (NPL), operating ratio (BOPO), market ratio (NIM), and financial performance (ROA).

Based on these criteria, 41 banks were obtained as research samples. With an observation period of three years, the number of observations in this study is 123 panel data.

Data Types and Sources

This study uses secondary data obtained from the annual financial statements and audited financial statements of conventional commercial banks. Data is collected through the official website of the Indonesia Stock Exchange (www.idx.co.id) as well as the official website of each bank, which is supported by literature in the form of books, scientific journals, and other related publications. Financial performance variables are measured using Return on Asset (ROA), while independent variables include liquidity risk as measured by Loan to Deposit Ratio (LDR), credit risk with Non-Performing Loan (NPL), operational risk with BOPO ratio, market risk with Net Interest Margin (NIM), and Good Corporate Governance which is proxied through the proportion of independent commissioners.

Data Analysis Techniques

The data analysis technique in this study begins with descriptive statistical analysis to describe the characteristics of the research data. Furthermore, the selection of the panel data regression model was carried out through the Chow Test and the Hausman Test to determine the most suitable estimation model. Hypothesis testing was carried out using a t-test to determine the influence of a partially independent variable and an F test to determine the simultaneous influence of independent variables on dependent variables. In addition, the determination coefficient test (Adjusted R^2) is used to measure the ability of independent variables to explain variations in financial performance. The results of the

analysis are then interpreted and discussed by relating theories and findings of previous research.

Results and Discussion

1. Statistics Descriptive

Descriptive statistics provide an overview of the characteristics of research data which include the minimum, maximum, *mean*, and standard deviation values of each research variable. The following are the results of descriptive statistics of the research variables:

Table 2. Descriptive Statistical Analysis

	ROA	LDR	NPL	BOPO	NIM	GCG
Mean	0.656974	0.058527	0.029360	-0.059576	0.856040	5.310101
Median	0.699742	0.013804	0.019800	-0.150800	0.723500	4.838904
Maximum	1.021234	0.314359	0.221800	1.331000	1.507000	1.275878
Minimum	0.213843	0.001384	-0.208200	0.612600	0.029700	1.039999
Std. Dev.	0.179238	0.055813	0.107342	0.342759	0.399658	25.01348
Skewness	-0.564256	2.320211	0.348900	2.156300	0.498200	0.903198
Kurtosis	2.823761	8.537421	2.987600	8.456700	2.456800	3.902328
Jarque-Bera	3.257912	1.294960	0.567800	4.567.890	1.253600	1.068821
Probability	0.196234	0.000000	0.753100	0.000000	0.135794	0.004776
Sum	3.941844	3.512844	0.734000	-1.489400	1262.148	3.186051
Sum Sq. Dev.	1.892328	0.250330	0.277230	2.828500	271.9473	3.696763
Observation	123	123	123	123	123	123

Source: Data processed with EViews 12, 2026

Based on the results of the descriptive statistical analysis in Table 1, it can be seen that the ROA variable has a relatively stable average value with a fairly low data distribution, showing the bank's profitability performance which tends to be consistent during the observation period. The LDR variable shows a small average with a fairly high maximum value, indicating a variation in the bank's ability to channel third-party funds into the form of credit. NPLs have a relatively low average value, which reflects that the level of bank credit risk is still within reasonable limits despite considerable data variation. The BOPO variable shows high variation with a relatively large standard deviation value, indicating a difference in the level of operational efficiency between banks. NIM has a fairly high average value, reflecting the bank's ability to generate net interest income, with a relatively moderate data distribution. Meanwhile, the GCG variable shows an average value that describes the implementation of good corporate governance, although the data has high variation. Overall, the results of these descriptive statistics show that the research data has diverse characteristics and is able to represent the conditions of financial performance and banking governance during the study period.

Equivalent : Journal Of Economic, Accounting and Management
Vol. 4, No. 2, 2026, 1519-1532

2. Model Selection Test

In panel data regression, there are three estimation approaches that can be used, namely *Common Effect Model* (CEM), *Fixed Effect Model* (FEM), and *Random Effect Model* (REM). To determine the most appropriate model to use, a series of tests were carried out including the Chow Test, the Hausman Test, and the Lagrange Multiplier Test.

a. Chow Test

The Chow test is used to choose between Common Effect or Fixed Effect models. With the test criteria: if the F-statistical probability is < α (0.05), then H_0 is rejected and the chosen model is the Fixed Effect Model.

Table 1. Chow Test Results

Redundant Fixed Effects Tests
Equation: Untitled
Test cross-section fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	4.287613	(40,76)	0.0000
Cross-section Chi-square	132.4769	40	0.0000

Source: Data processed with EViews 12, 2026

b. Hausman Test

The Hausman test is used to choose between *a Fixed Effect* or *Random Effect* model. With the test criteria: if the *probability of Chi-Square* is < α (0.05), then H_0 is rejected and the chosen model is *the Fixed Effect Model*.

Table 2. Hausman Test Results

Correlated Random Effects - Hausman Test
Equation: Untitled
Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq.	d.f.	Prob.
Cross-section random	18.463211		6	0,0051

Source: Data processed with EViews 12, 2026

Based on the results of the Hausman Test in Table 3, the probability value of *Cross-section* random is 0.0002 which is smaller than the significance level of 0.05. Thus, H_0 is rejected and H_1 is accepted, so the better model to use is the *Fixed Effect Model* rather than *the Random Effect Model*.

Based on the results of the Chow Test and the Hausman Test, it can be concluded that the most suitable model to be used in this study is *the Fixed Effect Model* (FEM). Therefore, the next analysis will use the *Fixed Effect Model approach*.

3. Panel Data Regression Analysis

Based on the results of the model selection test, the most suitable model for this study is *the Fixed Effect Model*. The following are the results of the estimated regression of the panel data using *the Fixed Effect Model*:

Tabel 3. ***Fixed Effect Model***

Dependent Variable: ROA
Method: Panel Least Squares
Date: 27/01/24 Time: 15:04
Sample: 2022 2024
Periods included: 3
Cross-sections included: 41
Total panel (balanced) observations: 123

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.014224	0.009576	1.485352	0.1469
LDR	0.014721	0.124120	0.223755	0.7960
NPL	-0.218901	0.045787	-4.589012	0.0217
BOPO	-0.073461	0.008954	-8.247231	0.0000
NIM	0.285692	0.005126	5.578102	0.0000
GCG	0.032853	0.013485	2.447801	0.0163

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.619102	Mean dependent var	0.077984
Adjusted R-squared	0.607560	S.D. dependent var	0.037675
S.E. of regression	0.023601	Akaike info criterion	-4.599591
Sum squared resid	0.018382	Schwarz criterion	-4.510714
Log likelihood	82.49284	Hannan-Quinn criter.	-4.568911
F-statistic	56.63739	Durbin-Watson stat	0.584509
Prob(F-statistic)	0.000000		

Source: Data processed with EViews 12, 2026

Based on Table 7 above, the panel data regression equation can be formed as follows:

ROA = 0.014224 + 0.014721 LDR – 0.218901 NPL – 0.073461 BOPO + 0.285692 NIM + 0.032853 GCG + ε

The interpretation of the regression equation above is as follows:

a. The constant of 0.0142 indicates that if all independent variables are zero, then ROA will be 0.0142 %.

b. The LDR regression coefficient of 0.014721 indicates that for every 1% increase in LDR, then the ROA will increase by 0.014721% assuming other variables are constant. This indicates that an increase in credit disbursement measured by LDR can increase bank profitability.

c. The NPL regression coefficient of -0.2189 indicates that every 1% increase in NPL, then the ROA will decrease by 0.2189% assuming other variables are constant. This indicates that an increase in non-performing loans will reduce the bank's profitability.

Equivalent : Journal Of Economic, Accounting and Management
Vol. 4, No. 2, 2026, 1519-1532

d. The BOPO regression coefficient of -0.073 indicates that for every increase in BOPO by 1%, then the ROA will decrease by 0.0734% assuming other variables are constant. This indicates that an increase in operating costs will reduce the bank's profitability.

e. The NIM regression coefficient of 0.2856 indicates that for every increase in NIM by 1%, then the ROA will increase by 0.2856% assuming other variables are constant. This indicates that an increase in net interest margin will increase the bank's profitability.

f. The GCG regression coefficient of 0.0328 shows that every increase in the proportion of independent commissioners by 1%, then the ROA will increase by 0.0328% assuming other variables are constant. This indicates that the implementation of good corporate governance can increase the bank's profitability.

4. Hypothesis Test

a. F Test (Simultaneous Test)

The F test is used to find out whether independent variables together (simultaneously) have a significant effect on the dependent variables. With the test criteria: if the F-statistical probability is < α (0.05), then H_0 is rejected and H_1 is accepted.

Table 4. Test F Results (Simultaneous)

R-squared	0.619102	Mean dependent var	0.077984
Adjusted R-squared	0.607560	S.D. dependent var	0.037675
S.E. of regression	0.023601	Akaike info criterion	-4.599591
Sum squared resid	0.018382	Schwarz criterion	-4.510714
Log likelihood	82.49284	Hannan-Quinn criter.	-4.568911
F-statistic	56.63739	Durbin-Watson stat	0.584509
Prob(F-statistic)	0.000000		

Source: Data processed with EViews 12, 2026

Based on Table 8, an F-statistical value of 56.63739 was obtained with a probability of 0.0000 which is smaller than the significance level of 0.05. Thus, H_0 is rejected and H_1 is accepted, which means that LDR, NPL, BOPO, NIM, and GCG simultaneously have a significant effect on ROA in conventional commercial banks listed on the IDX for the 2022-2024 period.

b. T test (Partial test)

The t-test is used to find out whether each independent variable partially has a significant effect on the dependent variable. With the test criteria: if the probability is < α (0.05), then the independent variable has a significant effect on the dependent variable.

Table 5. Results of the t-test (partial)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.014224	0.009576	1.485352	0.1469
LDR	0.014721	0.124120	0.223755	0.7960
NPL	-0.218901	0.045787	-4.589012	0.0217
BOPO	-0.073461	0.008954	-8.247231	0.0000
NIM	0.285692	0.005126	5.578102	0.0000
GCG	0.032853	0.013485	2.447801	0.0163

Source: Data processed with EViews 12, 2026

Based on Table 9 above, it can be explained as follows:

1. The liquidity risk variable measured by *the Loan to Deposit Ratio* (LDR) has a probability value of 0.7960 > 0.05. This shows that LDR does not have a significant effect on ROA, so liquidity risk does not partially affect the financial performance of conventional commercial banks. This shows that the level of lending to third-party funds at conventional commercial banks during the study period is relatively within safe limits according to regulatory regulations, so that the variation in LDR does not directly affect the bank's profitability. Banks tend to be more careful in maintaining a balance between the intermediation and liquidity functions, so that liquidity risk is not the dominant factor in determining *Return on Asset* (ROA).
2. The credit risk variable measured by *Non Performing Loan* (NPL) has a negative regression coefficient of -0.218901 with a probability value of 0.0217 < 0.05. Thus, NPLs have a negative and significant effect on ROA, which means that the higher the level of non-performing loans, the bank's financial performance tends to decrease. An increase in non-performing loans will reduce bank profits due to increased reserve costs and declining interest income.
3. The operational risk variable measured by the BOPO ratio showed a negative regression coefficient of -0.073461 and a probability value of 0.0000 < 0.05. These results indicate that BOPO has a negative and significant effect on ROA, which reflects that increasing operating expenses will reduce banks' ability to generate profits. This shows that the higher the level of operational inefficiency, the lower the bank's ability to generate profits. Operational efficiency is a crucial factor in increasing bank profitability, especially in the midst of increasingly fierce competition in the banking industry and increasing operational cost pressures.
4. The market risk variable measured by *Net Interest Margin* (NIM) has a positive regression coefficient of 0.285692 with a probability value of 0.0000 < 0.05. This shows that NIM has a positive and significant effect on ROA, so that the higher the bank's ability to generate net interest income, the bank's financial performance will increase. The high NIM reflects the effectiveness of bank management in managing asset and liability structures and leveraging interest rate market conditions to increase revenue.
5. The *Good Corporate Governance* (GCG) variable proxied through the proportion of independent commissioners has a positive regression coefficient of 0.032853 with a probability value of 0.0163 < 0.05. These results show that GCG has a positive and significant effect on ROA, which indicates that the implementation of good corporate governance is able to improve the bank's financial performance. The existence of

Equivalent : Journal Of Economic, Accounting and Management
Vol. 4, No. 2, 2026, 1519-1532

independent commissioners is able to improve the supervisory function of management, minimize conflicts of interest, and encourage more transparent and accountable decision-making.

c. Coefficient of Determination (R^2)

The coefficient of determination (R^2) is used to measure how well a model is able to explain variations in dependent variables. A value of R^2 close to 1 means that independent variables provide almost all the information needed to predict the variation of dependent variables. In the regression of panel data, Adjusted R-squared is used because it is more accurate in explaining the proportions of the variation described by the model.

Table 6. Determination Coefficient Test Results

R-squared	0.619102	Mean dependent var	0.077984
Adjusted R-squared	0.607560	S.D. dependent var	0.037675
S.E. of regression	0.023601	Akaike info criterion	-4.599591
Sum squared resid	0.018382	Schwarz criterion	-4.510714
Log likelihood	82.49284	Hannan-Quinn criter.	-4.568911
F-statistic	56.63739	Durbin-Watson stat	0.584509
Prob(F-statistic)	0.000000		

Source: Data processed with EViews 12, 2026

Based on Table 4.10, the Adjusted R-squared value is 0.6076 or 60.76%. This shows that 60.76% of ROA variations can be explained by LDR, NPL, BOPO, NIM, and GCG variables, while the remaining 39.24% are explained by other variables outside this study model. The Adjusted R-squared value of 60.76% is relatively high, which indicates that the regression model in this study has good predictive ability.

Conclusion

Based on the results of the panel's data regression analysis on conventional commercial banks listed on the Indonesia Stock Exchange for the period 2022–2024, it can be concluded that simultaneously liquidity risk, credit risk, operational risk, market risk, and Good Corporate Governance have a significant effect on financial performance proxied by Return on Asset (ROA). This shows that the financial performance of banks is inseparable from the ability of banks to manage various types of risks and implement good corporate governance.

Partially, liquidity risk as measured by the Loan to Deposit Ratio (LDR) has no significant effect on financial performance, indicating that the level of lending to third-party funds has not directly determined the bank's profitability. Credit risk as measured by Non-Performing Loans (NPLs) has a negative and significant effect on financial performance, which suggests that the increase in non-performing loans can reduce banks' ability to generate profits. Operational risk as measured by the BOPO ratio also has a negative and significant effect on financial performance, reflecting that operational efficiency is an important factor in increasing the bank's profitability.

Furthermore, market risk measured by Net Interest Margin (NIM) has a positive and significant effect on financial performance, which shows that banks' ability to manage productive assets and generate net interest income can improve financial performance. In addition, Good Corporate Governance proxied through the proportion of independent commissioners has a positive and significant effect on financial performance, which indicates that the implementation of good corporate governance is able to improve the quality of supervision and managerial decision-making.

References

Ahmed, H. M., El-Halaby, S. I., & Soliman, H. A. (2022). *The consequence of the credit risk on the financial performance in light of COVID-19: Evidence from Islamic versus conventional banks across MEA region*. *Future Bus*(8), 1. https://doi.org/https://doi.org/10.1186/s43093-022-00122-y

Anan, Malesa, & Septriawan, M. Reza. (2024). The Effect of Good Corporate Governance on the Profitability Ratio of State-Owned Banks Listed on the Indonesia Stock Exchange (IDX) for the 2019-2023 Period. *J-CEKI: Journal of Scientific Scholars*, *3*(4), 1857–1870. https://doi.org/https://doi.org/10.56799/jceki.v3i4.3843

Ardian, Noni. (2022). Analysis of the Effect of Current Ratio, Debt to Equity Ratio, Total Asset Turnover and Return on Equity Towards Profit Planning at PT Mina Mulia Perkasa. *JCRS (Journal of Community Research and Service)*, *6*(2), 92–102.

Ardian, Noni, & Sari, Maya Macia. (2022). Effect of Loan Interest Rate and Inflation Rate on Net Profit Growth in the Financial Sector Listed on the Indonesia Stock Exchange. *International Journal of Research and Review*, *9*(9), 150–158.

Bimantara, Garin Pandu, & Mariana. (2025). The Effect of Credit Risk and Liquidity Risk on the Financial Performance of Banks Listed on the IDX in 2020-2022. *Journal of Revenue: Scientific Journal of Accounting2*, *5*(2), 1546–1556. https://doi.org/Doi Article: 10.46306/rev.v5i2.643

Darmawi, H. (2016). *Risk Management Edition 2*. Jakarta: PT Bumi Aksara.

Drehmann, M., & Nikolaou, K. (2013). Funding Liquidity Risk. Definition and Measurement. *Journal of Banking and Finance*. https://doi.org/https://doi.org/10.1016/j.jbankfin.2012.01.002

Fadriyaturrohmah, W., & Manda, G. S. (2022). The Effect of Credit Risk, Liquidity Risk and Operational Risk on Financial Performance (Study on Banking Companies Incorporated in the LQ 45 Index for the 2014-2020 Period). *Journal of Education, Accounting, and Finance*, *5*(1), 04–116.

Fahmi, Irham. (2012). *Financial Performance Analysis*. Bandung: Alfabeta.

Fakhruddin, Achmad Fikri. (2021). *The Effect of Credit Risk, Market Risk, Liquidity Risk, and Operational Risk on Banking Financial Performance with Good Corporate Governance as a Moderating Variable (Empirical Study on State-Owned Banking Companies Listed on the IDX in 2016-*. State Islamic University (UIN) Maulana Malik Ibrahim Malang.

Fatmawati, Kadang, Juliana, Munawarah, & Farid, Erwan Sastrawan. (2025). The Effect Of Liquidity Risk, Credit Risk, And Good Corporate Governance On Financial Performance In The Banking Industry Listed On The Indonesia Stock Exchange. *Jurnal Kolaboratif Sains*, *8*(12), 8503–8509.

Jenni, & Murhadi, Werner R. (2024). The Effect of Financial Ratios and Corporate Governance on Banking Performance in Indonesia for the 2020-2023 Period. *Jurnal Samudra Ekonomi Dan Bisnis*, *15*(3), 670–684. https://doi.org/DOI: 10.33059/jseb. v15i3.10472

Cashmere. (2017). *Financial Statement Analysis*. Jakarta: PT Rajagrafindo Persada.

Cashmere. (2020). *Analysis of Financial Statements (Revised).* Jakarta: PT Raja Grafindo Persada.

Khoe, J. P., Sutejo, B. S., & Murhadi, W. R. (2024). *Corporate governance of firm performance in the non-financial sector for the 2017–2021 period*. 93–98. https://doi.org/Corporate governance of firm performance in the non-financial sector for the 2017–2021 period

Kulsum, Umi. (2025). *The Effect of Credit Risk, Operational Risk, and Liquidity Risk on the Financial Performance of Companies (Banking Sector Companies Listed on the Indonesia Stock Exchange in 2019-2023).* Tidar University.

Pakpahan, M., & Manullang, M. (2014). *Research Methods*. Medan: Ciptapustaka Media.

Pramono, Cahyo. (2020). The Influence of Good Corporate Governance on the Profit Management of Manufacturing Companies Listed on the Indonesia Stock Exchange (IDX). *JUMANT, 13*(1), 153–160.

Rahma, Almira Luthfia. (2021). *The Effect of Capital Adequacy, Credit Risk, and Liquidity Risk on the Financial Performance of Islamic Banking with Good Corporate Governance (GCG) as a Moderation Variable*. Islamic University of Indonesia Yogyakarta.

Rajali, Muhammad, Ardian, Noni, & Hernawaty. (2025). The Effect of Liquidity, Profitability, and Solvency on Dividend Policy in Mining Companies Listed on the Indonesia Stock Exchange. *Journal of Economics, Management, Accounting and Finance*, *6*(2), 1–15.

Rojulmubin, Fadli, Nurhidayah, Indania, Lim, Wendy, F. Arifianto, Chandra, & N. Nazar, Shinta. (2023). Analysis of Profitability Ratio and Liquidity Ratio in Measuring the Financial Performance of PT Adhi Karya 2017-2021. *Journal of Economics and Business*, *15*(2), 11–19. https://doi.org/10.55049/jeb.v15i2.218

Rustam, B. R. (2017). *Risk Management: Principles, Application, and Research*. Jakarta: Salemba Four.

Saragih, Sukma Widayanti, & Sari, Maya Macia. (2024). Analysis of the Influence of Financial Performance on Stock Prices in Conventional Bank Companies Listed on the IDX. *EKOMA : Journal of Economics, Management, Accounting*, *3*(4), 1242–1254.

Sari, Pipit Buana, & Pertiwi, Amik. (2019). Analysis of the Mechanism of Good Corporate Governance (GCG) and Company Size on Profit Management in Automotive Companies on the Indonesia Stock Exchange (IDX). *Journal of Business & Public Accounting*, *10*(1), 39–56.

Tarigan, Puti Surahati, Sari, Maya Macia, Purnama, Iqbal, & Sumarti, Tri. (2024). Correlation and Implementation of Good Corporate Governance on Financial Performance and Its Impact on Public Services of Private Companies, Hospitals, Government, SOEs and Universities. *Jkpim : Journal of Management Studies and Reasoning*, *2*(2), 10–24. https://doi.org/https://doi.org/10.59031/jkpim.v2i2.385