What Factors Affect Profitability?
(Case Study on Conventional National Private Bank Listing on Indonesian Stock Exchange Period 2019-2022)

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ABSTRACT

This research aims to determine the effect of Net Interest Margin, Operating Cost with Operating Income (OCOI), Loan to Deposit Ratio, Non-Performing Loans and Capital Adequacy Ratio on Profitability in conventional national private banking companies. The population for this research is conventional national private banking companies listed on the Indonesia Stock Exchange for the 2019-2022 period. The sampling technique used was the Purposive Sampling technique with 19 companies and the total data processed during 4 years of observation was 76 data. This research method uses panel data regression analysis using the Eviews-10. The results of this research are that Net Interest Margin, Loan to Deposit Ratio and Capital Adequacy Ratio have no effect on Return on Assets, while Operating Costs with Operating Income and Non-Performing Loans have a negative effect on Return on Assets.

Keywords: *Capital Adequacy Ratio; Loan to Deposit Ratio; Net Interest Margin; Non-Performing Loans; Operating Costs with Operating Income; profitability; Return on Assets.*

INTRODUCTION

In a country's economy, banking financial institutions have a very important role in increasing a country's economic growth. Banking is also considered to be the driving force of a country's economy because the function of the bank itself is very vital. Banking activities are to bring together parties who experience a shortage or need funds (borrowers) with parties who have excess funds (saver). Through credit activities, banks try to meet the community's needs for the smooth running of their business, while with fund storage activities, banks try to offer the community the security of their funds with other services that can be obtained. As time goes by, the functions and services provided by banks have become very diverse and make it increasingly easy to carry out transactions. This is intended so that banks can attract as many customers as possible (Fauzan & Sutiono, 2017). The continuous development of banks requires every bank to improve its quality both in terms of service and business performance so that it can continue to be trusted in serving customer needs, carrying out banking activities and competing with other banking industries. The performance of a bank can determine whether or not the bank is able to compete in intense competition between banks.

Realizing the crucial role of banks, financial institutions are expected to always be in a healthy condition. Based on Bank Indonesia Regulation no. 13/1/PBI/2011, "Bank health is a reflection of the condition and performance of the bank as a means for supervisory authorities in determining the strategy and focus of supervision of banks". The Financial Services Authority (OJK) in the Indonesian Banking Statistics Report revealed that Bank Performance indicators in Indonesia can be reflected through several

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ratios. These ratios include Non-Performing Loans (NPL), Capital Adequacy Ratio (CAR), Net Interest Margin (NIM), Loan to Deposit Ratio (LDR).

Every company, including banking companies, which are registered on the Indonesia Stock Exchange will publish their annual financial reports through their respective company websites or can be viewed through the Indonesia Stock Exchange website. From the published financial reports, information can be obtained regarding the financial performance of each company. Information regarding the company's financial performance is very useful for parties who need it such as shareholders, management, lenders and external parties who need it such as the government.

Measuring the financial performance of a bank can be done by looking at the bank's level of profitability. Return on Assets (ROA) is one of the indicators used to measure profitability. ROA is a ratio used to assess bank management's ability to obtain operating profits (Moorcy, 2020) . The development of banking financial performance in Indonesia, seen from Return on Assets (ROA), and the number of banks according to Indonesian Banking Statistics December 2022 published by the Financial Services Authority of the Republic of Indonesia can be seen in table 1.

Table 1. Obtaining Return on Assets (ROA) and the Number of Conventional Banks in Indonesia

Bank Type	Period	ROA	Number of Banks in Indonesia
Conventional Persero Commercial Bank	2019	2,81%	4
	2020	1,43%	
	2021	2,16%	
	2022	3,05%	
Conventional Regional Development Bank	2019	2,15%	26
	2020	2,04%	
	2021	2,03%	
	2022	2,12%	
Conventional National Private Bank	2019	2,11%	57
	2020	1,56%	
	2021	1,59%	
	2022	2%	

Source: Statistik Perbankan Indonesia Desember (2022), www.ojk.go.id

The highest average ROA value in the last four (4) years was obtained by Conventional Public Private Banks, followed by Conventional Regional Development Bank and lastly by Conventional National Private Banks. The average ROA value obtained in the last four years obtained by Conventional National Private Banks shows the lowest results between State-Owned Commercial Banks and Conventional Regional Development Bank. However, if we look at the number of banks in Indonesia based on the official website of the Financial Services Authority, Conventional National Private Commercial Banks have the largest number of banks compared to Persero Commercial Banks and Conventional Regional Development Bank. The second business phenomenon is a decrease in the average ROA of Conventional National Private Commercial Banks in 2020 by 0.55% from 2019. The existence of these two business phenomena makes this sector very interesting to research further.

Research conducted by Yulita (2020) states that NIM has a positive and significant effect on the Return on Assets (ROA) value. The higher the NIM value, the more effective the bank will be in placing productive assets in the form of credit. Productive assets themselves are assets that are capable of

generating income which will also influence the profitability obtained by the bank. Research conducted by Dewi (2017) states that Net Interest Margin (NIM) has a negative effect on Return On Assets (ROA). One of the reasons is that the interest income obtained from lending is lower than the interest expense, resulting in a negative NIM value.

The higher the OCOI ratio value indicates the more inefficient the operational costs incurred by the banking company (Setyarini, 2020). Therefore, the OCOI value is expected to have a low value so that the company can be said to be efficient in carrying out its business activities. If the company can carry out its business activities efficiently, the higher the chance the company can make the desired profit (Putra & Rahyuda, 2021). The results of research conducted by Nanda et al. (2019) showed that the OCOI ratio partially had a positive effect on the performance of banking companies, in this case the ROA value. This is due to the standard OCOI ratio set by Bank Indonesia, namely 83-90%. These standards cause companies to have to make efforts to ensure that the company's OCOI ratio is within the set standards and the ROA ratio continues to increase from year to year.

The results of research conducted by Giri & Purbawangsa (2022) say that the Loan to Deposit Ratio (LDR) has a significant positive effect on Return on Assets (ROA). The increase in the value that occurs in the LDR will also increase the ROA value, in other words, the greater the LDR, the greater the ROA of a banking company. Banks that are able to channel credit obtained from public funds will be able to encourage an increase in company profits. Research conducted by (Moorcy, 2020) states that the Loan to Deposit Ratio (LDR) has a negative influence on Return on Assets (ROA). The greater the credit distribution, the greater the risk that must be borne. A high level of Loan to Deposit Ratio (LDR) will reflect a low level of liquidity and a high risk of bad credit. So even though the LDR value is high but there are bad loans, it will result in the LDR value not affecting the ROA value (Moorcy, 2020)

Based on research conducted by Grilseda & Riyadi (2021), Non-Performing Loans (NPL) have a positive and insignificant effect on Return on Assets (ROA). When NPL increases in value, ROA will also increase in value. In contrast to research conducted by Griselda and Riyadi (2022), research conducted by Giri & Purbawangsa (2022) shows the results that Non-Performing Loans (NPL) have a negative effect on Return On Assets (ROA). If the NPL value increases, it will cause the ROA value to decrease. The greater the NPL value, the worse the quality of banking credit will be, which will cause the number of bad loans to also increase and result in a decrease in company profits.

Research conducted by Giri & Purbawangsa (2022) obtained results that the Capital Adequacy Ratio (CAR) had a significant positive effect on profitability, in this case the Return on Assets (ROA) ratio. These results indicate that a high CAR value will have an impact on increasing the ROA value of banking companies. A high CAR reflects the higher bank capital's ability to safeguard the possibility of risks arising from the company's business activities. High bank capital can also mean that the bank is able to expand its business well. Another research conducted by Pinasti (2018), showed the results that the Capital Adequacy Ratio (CAR) had a negative effect on profitability, in this case the Return on Assets (ROA) value. The results shown are due to regulations from Bank Indonesia which require banking companies to obtain a minimum CAR value of 8%. As a result, banking companies must provide reserve funds to meet the minimum requirements from Bank Indonesia.

Agency theory is a theory that deals with the contractual relationship between members of a company or organization. The most widely used model focuses on two individuals - the principal (or boss) and the agent (or subordinate). Agency theory was first proposed by Jensen and Meckling in 1976. In this case, customers and shareholders or investors act as owners of deposit funds and act as principals. Meanwhile, those who act as agents are the management of banking companies. If based on the agency

theory above, the management of banking companies (as agents) has a responsibility to customers and shareholders or investors (principals) (P. I. Ghozali, 2020)

One method of agent responsibility to the principal is the disclosure of company performance as outlined in the financial statements in a clear and transparent manner. Information about company performance is very important as a consideration for customers and investors (principals) in making decisions that affect the continuity of the company in the future. The separation of functions related to management and ownership makes the agent, in this case the company management, more aware of various information related to the company than the principal, in this case customers and investors, and has more ease in accessing company information (P. I. Ghozali, 2020)

This study was conducted at conventional national private banking companies listed on the Indonesia Stock Exchange (IDX) during the 2019-2022 period, with the aim of testing and confirming the effect of Net Interest Margin, Operating Costs with Operating Income, Loan To Deposit Ratio, Non Performing Loan and Capital Adequacy Ratio on profitability (ROA). This study collected data on profit before tax, total assets, net interest income, average earning assets, total operating costs, total operating income, total loans, total third-party funds, non-performing loans, capital and weighted assets according to the ratio. Thus, researchers try to provide an overview of the research conceptual framework that will result in a better understanding of the relationship between the variables studied.
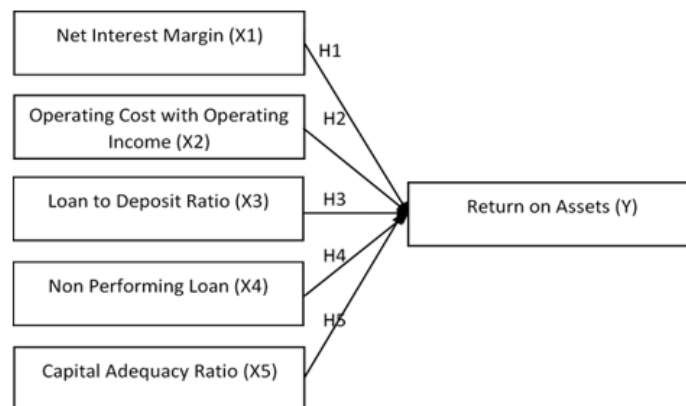

Figure 1: Conceptual Framework

Hypotheses Development

Return On Assets (ROA)

Measuring the financial performance of a company can be done using various financial ratios. One of the financial ratios that is often used is the profitability ratio. Return on Assets (ROA) is one part of the profitability ratio which is used to measure how efficient the company's activities are and the company's ability to gain profits using the assets it owns (Nanda et al., 2019). If the company obtains a high Return on Assets (ROA) value, it will be a good sign or signal for investors. A high Return on Assets (ROA) value means that the company's financial performance is in good condition and will make investors interested in investing (Rifansa et al., 2022).Based on Bank Indonesia Regulation no. 13/1/PBI/2011 in (Rohmiati et al., 2019) the minimum Return on Assets (ROA) value that a company must obtain is 1.5%. This aims to fulfill obligations towards investors and to increase the attractiveness of investors and customers to invest capital. Obtaining a high ROA value will result in banking companies being able to provide credit to generate income (Riadi, 2018).

The Effect of Net Interest Margin on Profitability

Net Interest Margin (NIM) is one of the ratios in calculating the profitability of a banking company which is calculated by comparing net interest income to average productive assets. This net interest income is calculated by the difference between the interest debt given to customers and the interest income received by the bank through credit activities (Ishak et al., 2022). In determining bank interest rates for both funding and lending, banking companies must set interest rates competitively and appropriately. A funding interest rate that is too low will reduce customers' interest in saving their money in the bank. On the other hand, if the funding interest rate is too high, it is also an inappropriate decision for the bank considering that the bank does not yet know for sure the interest income that the bank can obtain through transactions. lending. In determining lending interest rates, if the bank sets the interest rate too high it will reduce customers' interest in taking out credit at the bank concerned, on the other hand if the lending interest rate is too low it will also make it difficult for the bank to pay interest costs such as savings interest and deposit interest. The results of research conducted by Giri & Purbawangsa (2022) has a positive and significant effect on the financial performance of banking companies, which in this case is measured through the return value. on Assets (ROA).

H_1: Net Interest Margin has a positive effect on Return on Assets

The Effect of Operating Costs with Operating Income on Profitability

Operational Costs with Operating Income (OCOI), which is an efficiency ratio, is one of the ratios used to analyze the performance of a company. This ratio is used to measure the level of comparison of operational expenses to operating income. This measurement aims to determine the level of efficiency and ability of the bank in carrying out its operational activities (Yulita, 2020). If a company's OCOI value is low, it shows that the management of the banking company has efficiently managed its operational activities. Efficient management of company activities is considered to be able to increase the profits of a banking company. Research conducted by Lestari & Setianegara (2020)shows the results that Operational Costs with Operating Income (OCOI) have a negative effect on a company's Return on Assets (ROA).

H_2: Operational Costs and Operational Income have a negative effect on Return on Assets

The Effect of Loan to Deposit Ratio on Profitability

Loan to Deposit Ratio (LDR) is one of the ratios used in banking companies to monitor the company's liquidity level. The liquidity referred to is the availability of cash funds to fulfill banking obligations such as withdrawing deposits or other operational activities. This ratio is used to measure the optimal amount of credit that a banking company can provide compared to the amount of customer deposits and own capital so that bank liquidity remains in good condition (Giri & Purbawangsa, 2022). The higher the Loan to Deposit Ratio (LDR) value indicates that the value of credit distributed to the public is also higher. The high level of credit distribution will open up opportunities for banking companies to earn income through credit interest given to customers and increase company profits. Apart from that, the Loan to Deposit Ratio (LDR) is one of the ratios used to assess the level of profitability of a banking company. If the LDR value of a banking company is high, it indicates that the bank's profitability level is also good. A good level of banking profitability will make the level of public trust in a banking company also high so that people will entrust their money to be deposited in the bank and can increase the profit of the banking company. The results of research conducted by Giri & Purbawangsa (2022) shows the results that the Loan to Deposit Ratio (LDR) has a positive influence on the company's Return on Assets (ROA).

H_3: Loan to Deposit Ratio has a positive effect on Return on Assets

The Effect of Non-Performing Loan on Profitability

The main activities of banking companies are funding (collecting funds) and lending (distributing funds). In lending activities, banking companies face a risk, namely credit risk. According to Fahmi in (Mosey et al., 2018) credit risk is the risk resulting from the customer's failure or inability to repay the loan amount obtained from the company along with the interest according to the agreed time period. Credit distribution carried out by banking companies has one aim, namely earning income through credit interest given to customers which will later increase the profit or profits of banking companies. If the NPL ratio shows a high figure, indicating that the problem loans experienced by the bank are also high, this will result in the company's profit not being maximized. The results of research conducted by Giri & Purbawangsa (2022) show that Non-Performing Loans (NPL) have a negative influence on the company's Return on Assets (ROA).

H_4: Non-Performing Loans have a negative effect on Return on Assets

The Effect of Capital Adequacy Ratio on Profitability

The Capital Adequacy Ratio (CAR) or also commonly referred to as the Minimum Capital Adequacy Ratio (KPMM) is a ratio that describes how a banking company is able to finance its operational activities with the capital it has (Yulita, 2020). The higher the Capital Adequacy Ratio (CAR) of a banking company, it indicates that the better the capital adequacy the company has to carry out its operational activities. If the CAR value is high, it indicates that the banking company has a greater opportunity to generate profits. This is because if the company has sufficient capital, the company management can freely place its funds into investment activities which will later increase the company's profits. Apart from that, with sufficient capital, company management can expand products and services with the aim of increasing profits.

H_5: Capital Adequacy Ratio has a positive effect on Return on Assets

METHOD, DATA, AND ANALYSIS

The type of research in this research is quantitative research. This research uses the dependent variable profitability is calculated using Return on Assets (Y), with independent variables Net Interest Margin (X_1), Operational Costs and Operating Income (X_2), Loan to Deposit Ratio (X_3), Non-Performing Loan (X_4) and Capital Adequacy Ratio (X_5).

This research uses secondary data in the form of annual reports of national foreign exchange private banking companies listed on the IDX for the 2019-2022 period. Population that taken, namely all 57 national foreign exchange private banking companies listed on the IDX for the 2019-2022 period company. The sampling technique used is purposive sampling with the following criteria:

1. Conventional National Private Bank registered with the Financial Services Authority for the 2019-2022 period
2. Conventional National Private Banks listed on the Indonesia Stock Exchange for the 2019-2022 period
3. The Conventional National Private Bank publishes an annual report for the 2019-2022 period.
4. The Conventional National Private Bank made a profit during the 2019-2022 period.

From the results of these criteria, 19 companies were obtained with an observation period of 4 years so the amount of data processed is 76 companies. Data analysis methods use descriptive statistics, model selection tests, classical assumption tests, panel data regression analysis and hypothesis testing. In this study, the authors used the EViews 10 program to process the data.

Table 2. Operational Definition Of Variables

Variable	Definition	Formula
Return on Assets	The profitability measurement which is used to measure how efficient the company's activities are and the company's ability to gain profits using the assets it owns. (Nanda et al., 2019)	$ROA = \dfrac{Profit\ Before\ Tax}{Total\ Assets}\ X\ 100\ \%$
Net Interest Margin	Net Interest Margin (NIM) is a ratio in calculating the profitability of a banking company which is calculated by comparing net interest income to average productive assets. (Ishak et al., 2022)	$NIM = \dfrac{Net\ Interest\ Income}{Average\ Productive\ Assets}\ X\ 100\ \%$
Operational costs and Operating income	A ratio used to measure the level of comparison of operational expenses to operating income. This measurement aims to determine the level of efficiency and ability of the bank in carrying out its operational activities. (Yulita, 2020)	$OCOI = \dfrac{Total\ Operational\ Costs}{Total\ Operating\ Income}\ X\ 100\ \%$
Loan to Deposit Ratio	Loan to Deposit Ratio (LDR) is one of the ratios used in banking companies to monitor the company's liquidity level. The liquidity referred to is the availability of cash funds to fulfill banking obligations such as withdrawing deposits or other operational activities. (Giri & Purbawangsa, 2022)	$LDR = \dfrac{Total\ Credit}{Total\ Third\ Party\ Funds}\ X\ 100\ \%$
Non Performing Loan	Non-Performing Loans (NPL) is a ratio between total non-performing loans and total credit provided by the bank. Obtaining this ratio shows the bank management's ability to manage problem loans. (Rohmiati et al., 2019)	$NPL = \dfrac{Problematic\ Credit}{Total\ Credit}\ X\ 100\ \%$
Capital Adequacy Ratio	The Capital Adequacy Ratio (CAR) or also commonly referred to as the Minimum Capital Adequacy Ratio (KPMM) is a ratio that describes how a banking company is able to finance its operational activities with its capital ownership.(Yulita, 2020)	$CAR = \dfrac{Capital}{Risk\ Weighted\ Assets}\ X\ 100\ \%$

Source: Processing researcher data (2023)

RESULTS AND DISCUSSION

Descriptive Statistics

Descriptive statistics are used to analyze data by summarizing or describing the collected data as it is, without the intention of making conclusions or generalizations(Sugiyono, 2020). Descriptive statistics provide an overview or description of data seen through the average value (mean), standard deviation value, maximum value and minimum value (I. Ghozali, 2018). The following are the results of descriptive statistical tests:

Table 3. Descriptive Statistical Test

Variabel	N	Minimum	Maksimum	*Mean*	*Std. Deviation*
NIM	76	1,8100	81,9900	29,7967	14,0492
OCOI	76	37,1300	135,4300	80,4732	17,6350
LDR	76	29,6700	163,0600	83,8784	25,7449
NPL	76	0,1400	8,1600	2,6800	1,7102
CAR	76	11,1300	106,1000	28,3746	13,6835
Profitabilitas (ROA)	76	0,0400	4,1600	1,3692	1,1195

Source: Secondary data processed with Eviews 10 application (2024)

Based on the results of descriptive statistics, it shows that the minimum Net Interest Margin (NIM) variable was obtained by PT Bank Mayapada Internasional, Tbk in the 2020 period of 1.8100 and the maximum value was also obtained by PT Bank Mayapada Internasional, Tbk in the 2022 period of 81.9900. In the Operating Costs with Operating Income (OCOI) variable, the minimum was obtained by PT Bank Central Asia, Tbk in the 2022 period of 37.1300 and the maximum value obtained by PT Bank Danamon Indonesia, Tbk in the 2021 period of 135.4300.In the minimum Loan to Deposit Ratio (LDR) variable obtained by PT Bank Ina Perdana, Tbk in the 2021 period of 29.6700 and the maximum value obtained by PT Bank BTPN Tbk in the 2019 period of 163.0600.The minimum Non Performing Loan (NPL) variable obtained by PT Bank OCBC NISP Tbk in the 2022 period was 0.1400 and the maximum value obtained by PT Bank Sinarmas, Tbk. in the 2022 period was 8.1600. The minimum Capital Adequacy Ratio (CAR) variable obtained by PT Mayapada Internasional, Tbk in the 2022 period amounted to 11.1300 and the maximum value obtained by PT Bank Ganesha, Tbk. in the 2022 period amounted to 106.1000. In the minimum Return on Assets (ROA) variable obtained by PT Mayapada Internasional, Tbk in the 2022 period of 0.0400 and the maximum value obtained by PT Mestika Dharma, Tbk in the 2021 period of 4.1600.

The average value of the dependent and independent variables is greater than the standard deviation, which means that the distribution of data is homogeneous, indicating that the data between banking companies is not much different from one another.

Panel Data Regression Analysis

According to Alghifari (2021), panel data is a combination of time series data symbolized T and cross-section data symbolized N. To determine the panel data regression model, we must first select the type of estimation regression model. The selection of the estimated regression model serves to test the

research hypothesis and the selection of the estimated regression model is carried out through several tests.

Model Selection Tests

Chow Test

Table 4. Chow Test Results

Effects Test	Statistics	Prob.
Cross-section F	10,7559	0,0000

Source: Secondary data processed with Eviews 10 application (2024)

Based on the chow test results, the probability value of the F statistic is 0.0000, which means <0.05 significance level. So from these results it can be concluded that the right model to choose is the fixed effect model.

Hausman Test

Table 5. Hausman Test Results

Effects Test	Chi-Square Statistics	Prob.
Cross-section random	10,1678	0,0706

Source: Secondary data processed with Eviews 10 application (2024)

Based on the results of the Hausman test, the probability value of the Chi-Square statistic is 0.0706, which means> 0.05 significance level. So from these results it can be concluded that the right model to choose is the random effect model.

Breusch-Pagan Lagrange Multiplier Test

Table 6. Breusch-Pagan Lagrange Multiplier Test Results

	Period One-Sided	Both
Breusch-Pagan	0,3383 (0,5608)	37,4196 (0,0000)

Source: Secondary data processed with Eviews 10 application (2024)

Based on the Breusch-Pagan Lagrange Multiplier Test results, it shows that the Breusch-Pagan Lagrange Multiplier probability value is 0.0000, which means <0.05 significance level. So from these results it can be concluded that the right model to choose is the random effect model.

Classical Assumption Test

The normality test used is Jarque-Bera. The probability value is 0.0138 <0.05 significance level, it means that the data in this study are not normally distributed. Research data that is not normally distributed can be treated by transforming the data. The data transformation used by researchers is natural logarithm,. The Jarque-Bera probability value becomes 0.0528 > the significance level of 0.05, meaning that the data in the study is normally distributed.

Heteroscedasticity test is conducted if in the model selection test, the selected model is common effect or fixed effect. In this study, the selected model is a random effect model so that no heteroscedasticity test is required.

Panel Data Regression Analysis

From the test results to choose the right estimation regression model, the results show that the random effect model is the right estimation regression model to use in this study. The following is the panel data regression equation formula:

$$Y = 3{,}7640 + 0{,}0021\ (X1) - 0{,}0291\ (X2) + 0{,}0023\ (X3) - 0{,}1113\ (X4) - 0{,}0004\ (X5)$$

Hypothesis Testing

Test Coefficient of Determination (R²)

Table 7. Determination Coefficient Test Results

Adjusted R Squared	0,3609

Source: Secondary data processed with Eviews 10 application (2024)

It can be seen from table 7 that the coefficient of determination test results show that the Adjusted R Squared value is 0.3609 or 36.09%. This can be used as an indication that the independent variables, namely Net Interest Margin (NIM), Operating Costs with Operating Income (OCOI), Loan to Deposit Ratio (LDR), Non Performing Loan (NPL) and Capital Adequacy Ratio (CAR) can explain the dependent variable, namely profitability which in this study is measured using Return on Assets (ROA) by 36.09%. Meanwhile, the remaining 63.91% is influenced by other variables not explained in this study. Meanwhile, the remaining 63.91% is influenced by other variables not explained in this study.

F Test

Table 8. F Test Results

F-Statistic	9,4719
Prob (*F-Statistic)*	0,0000

Source: Secondary data processed with Eviews 10 application (2024)

It can be seen from table 8 of the F test results that the value of the F-Statistic is 9.4719 and the probability value (F-Statistic) is 0.0000. The probability value (F-Statistic) is smaller than the significance level of 0.05 so that it can be concluded that simultaneously the independent variables, namely Net Interest Margin (NIM), Operating Costs with Operating Income (OCOI), Loan to Deposit Ratio (LDR), Non Performing Loan (NPL) and Capital Adequacy Ratio (CAR) have a significant effect on the dependent variable, namely profitability which in this study is measured using Return on Assets (ROA). In addition, from the results of the F test, another conclusion can be drawn that all independent variables in this study can be said to be feasible to be used as a predictive function of the dependent variable.

T Test

Table 9. T Test Results

Hypothesis	Coefficients (β)	Prob.	Description
H_1 : Net Interest Margin has a positive effect on Return on Assets	0,0021	0,6702	rejected
H_2: Operating Expenses with Operating Income has a negative effect on Return on Assets	-0,0291	0,0000	accepted
H_3 : Loan to Deposit Ratio has a positive effect on Return on Assets	0,0023	0,5427	rejected
H_4 : Non Performing Loan has a negative effect on Return on Assets	-0,1113	0,0285	accepted
H_5 : Capital Adequacy Ratio has a positive effect on Return on Assets	-0,0004	0,9248	rejected

Source: Secondary data processed with Eviews 10 application (2024)

From the T Test results in table 9 can be explained as follows:

It can be seen that the NIM variable obtained a positive coefficient value of 0.0021 with a probability value of 0.6702> 0.05 so it can be concluded that the NIM variable has no effect on profitability and the first hypothesis is rejected. Net Interest Margin has no effect on profitability. This means that any increase or decrease in the value of the NIM variable, will not affect the profitability of the company which in this study is measured using Return on Assets (ROA).

It can be seen that the variable obtained a negative coefficient value of 0.0291 with a probability value of 0.0000 <0.05 so it can be concluded that the Operating Expenses to Operating Income variable has a negative effect on profitability and the second hypothesis is accepted. Operating Costs with Operating Income have a negative effect on profitability. This means that any increase in the value of the OCOI variable will cause a decrease in profitability, which in this study is measured using Return on Assets (ROA)

It can be seen that the LDR variable obtained a positive coefficient value of 0.0023 with a probability value of 0.5427> 0.05 so it can be concluded that the LDR variable has no effect on profitability and the third hypothesis is rejected. Loan to Deposit Ratio has no effect on profitability. This means that any increase or decrease in the value of the LDR variable will not affect the profitability of the company which in this study is measured using Return on Assets (ROA)

It can be seen that the NPL variable obtained a negative coefficient value of 0.1113 with a probability value of 0.0285 <0.05 so it can be concluded that the NPL variable has a negative effect on profitability and the fourth hypothesis is accepted. Non Performing Loan has a negative effect on profitability. This means that any increase in the value of the NPL variable will cause a decrease in profitability, which in this study is measured using Return on Assets (ROA)

It can be seen that the CAR variable obtained a negative coefficient value of 0.0004 with a probability value of 0.9248> 0.05 so it can be concluded that the CAR variable has no effect on profitability and the fifth hypothesis is rejected. Capital Adequacy Ratio has no effect on profitability. This means that any increase or decrease in the value of the CAR variable, will not affect the profitability of the company which in this study is measured using Return on Assets (ROA)

The Effect of Net Interest Margin on Profitability

Net Interest Margin has no effect on profitability. This means that any increase or decrease in the value of the NIM variable, will not affect the profitability of the company which in this study is measured using Return on Assets (ROA). This happens because the acquisition of good net interest income, but not balanced by reducing operating expenses outside of interest expense and optimizing operating income outside of interest income will result in NIM not affecting the acquisition of ROA of banking companies.

Agency theory itself is a theory that explains the relationship between agents and principals (stakeholders in this case). Since NIM has no bearing on profitability and cannot be used as a benchmark in the successful acquisition of profitability by company management as a means of accountability to shareholders and clients who entrust their money to these banking institutions, this research does not align with agency theory. As long as the management of the company is unable to optimize operating income outside of interest income and reduce operating expenses outside of interest expense, the management's decision to manage and set interest rates has no bearing on the company's level of profitability.

The results of this study are in line with research conducted by Ishak et al. (2022), Moorcy (2020), and Setya et al. (2021) which state that NIM has no effect on profitability. This happens because the acquisition of good net interest income, but not balanced by reducing operating expenses outside of interest expense and optimizing operating income outside of interest income will result in NIM not affecting the acquisition of ROA of banking companies. This study is not in line with research conducted Giri & Purbawangsa (2022), Lestari & Setianegara (2020), and Rimawan & Mithaqain (2021) which state that Net Interest Margin has a positive effect on profitability which in this study is measured using Return on Assets.

The Effect of Operating Costs with Operating Income on Profitability

Profitability is negatively impacted by operating costs relative to operating income. This implies that any rise in the OCOI variable's value will result in a fall in profitability, which is determined in this study by Return on Assets (ROA). This is due to the fact that a company's net profit will rise in proportion to the extent to which its management can lower the operational expenses that the business must incur. This study is consistent with agency theory since OCOI has a detrimental impact on profitability, making it a benchmark for achieving profitability that management of the company successfully achieves as a duty to shareholders and clients who trust the banking institution with their money. The choices made by the company's management in overseeing the agents in this case will try to increase profits and reduce costs

The results of this study are in line with research conducted by Lestari & Setianegara (2020) and Putra & Rahyuda (2021) which state that OCOI has a negative effect on profitability. This is because the more the company's management is able to reduce the operational costs that the company must incur, it will increase the company's net profit. This research is not in line with research conducted by Nanda et al. (2019) which states that Operating Costs with Operating Income have a positive effect on profitability, which in this study is measured using Return on Assets.

The Effect of Loan to Deposit Ratio on Profitability

Profitability is unaffected by the loan to deposit ratio. This implies that changes in the LDR variable's value won't have an impact on the company's profitability, which is determined in this study

by Return on Assets (ROA). This is because Bank Indonesia has established the minimum and maximum LDR limitations that the company must meet in order to comply with these regulations. Additionally, the total assets of the firm are determined by a number of factors, so as long as the company is able to maximize its other assets, the quantity of credit funnelled by financial institutions has no bearing on its total assets. This research is not in accordance with agency theory because LDR has no effect on profitability so that LDR is not able to become a benchmark in obtaining profitability that is successfully obtained by company management as accountability to shareholders and customers who entrust their funds to the banking company. The amount of credit provided by company management has not been able to affect the high and low level of profitability that will be obtained by banking companies.

The results of this study are in line with research conducted by Lestari & Setianegara (2020) and Putra & Rahyuda (2021) which state that LDR has no effect on profitability. This is because the maximum and minimum LDR limits that must be obtained by the company have been set by Bank Indonesia so that the company must fulfill these provisions. In addition, there are many components in calculating the company's total assets so that whatever the amount of credit channelled by banking companies has no effect on the company's total assets as long as the company is able to optimize other company assets. This research is not in line with research conducted by Giri & Purbawangsa (2022) and Sukmadewi (2020) which states that the Loan to Deposit Ratio has a positive effect on profitability which in this study is measured using Return on Assets.

The Effect of Non-Performing Loan on Profitability

Profitability is negatively impacted by non-performing loans. This implies that any rise in the NPL variable's value will result in a fall in profitability, which is determined in this case by Return on Assets (ROA). This occurs because a large acquisition of non-performing loans (NPLs) suggests that banking firms' non-performing loans are likewise high, which prevents the company's profitability from being maximized.

This study supports agency theory since a rise in non-performing loan acquisitions would suggest that management of the company is less effective at handling non-performing loans, which would lower company profitability. Consequently, NPL can establish itself as a standard for achieving profitability, which is accomplished via. The results of this study are in line with research conducted by Giri & Purbawangsa (2022) and Rimawan & Mithaqain (2021) which state that NPL has a negative effect on profitability, which in this study is measured by Return on Assets. This happens because if the acquisition of NPL is high, it indicates that the non-performing loans of banking companies are also high, which results in the company's profitability not being maximized. This research is not in line with research conducted by Sunaryo (2020) which states that Non Performing Loan has a positive effect on profitability which in this study is measured using Return on Assets.

The Effect of Capital Adequacy Ratio on Profitability

Capital Adequacy Ratio has no effect on profitability. This means that any increase or decrease in the value of the CAR variable, will not affect the profitability of the company which in this study is measured using Return on Assets (ROA). This is because regardless of the acquisition of CAR obtained by banking companies as long as banking companies cannot optimally and effectively manage their capital, which will increase profitability, the acquisition of CAR has no effect on the profitability of banking companies.

This research is not in accordance with agency theory because CAR has no effect on profitability so that CAR is not able to become a benchmark in the acquisition of profitability that is successfully obtained by company management as accountability to shareholders and customers who entrust their funds to the banking company. The capital owned by the company has not been able to be optimized by company management properly for an activity that can affect the company's profitability.

The results of this study are in line with research conducted by Grilseda & Riyadi (2021) and Rifansa et al. (2022) which state that CAR has no effect on profitability, whichin this study is measured by Return on Assets (ROA). This is because regardless of the CAR obtained by banking companies as long as banking companies cannot optimally and effectively manage their capital, which in turn will increase profitability, the CAR gain has no effect on the profitability of banking companies. This study is not in line with research conducted by Giri & Purbawangsa (2022), Setya et al. (2021), and Sukmadewi (2020) which state that the Capital Adequacy Ratio has a positive effect on profitability, which in this study is measured using Return on Assets.

CONCLUSIONS AND SUGGESTION

Net Interest Margin has no effect on profitability. This means that any increase or decrease in the value of the NIM variable, will not affect the profitability of the company which in this study is measured using Return on Assets (ROA). This happens because the acquisition of good net interest income, but not balanced by reducing operating expenses outside of interest expense and optimizing operating income outside of interest income will result in NIM not affecting the acquisition of ROA banking companies.

Operating Costs with Operating Income have a negative effect on profitability. This means that any increase in the value of the OCOI variable will cause a decrease in profitability, which in this study is measured using Return on Assets (ROA). This is because the more the company's management is able to reduce the operational costs that the company must incur, it will increase the company's net profit.

Loan to Deposit Ratio has no effect on profitability. This means that any increase or decrease in the value of the LDR variable, will not affect the profitability of the company which in this study is measured using Return on Assets (ROA). This is because the maximum and minimum LDR limits that must be obtained by the company have been set by Bank Indonesia so that the company must fulfill these provisions. In addition, there are many components in calculating the company's total assets so that whatever the amount of credit channeled by banking companies does not affect the company's total assets as long as the company is able to optimize other company assets.

Non Performing Loan has a negative effect on profitability. This means that any increase in the value of the NPL variable will cause a decrease in profitability, which in this study is measured using Return on Assets (ROA). This happens because if the acquisition of NPL is high, it indicates that the non-performing loans of banking companies are also high which results in the acquisition of company profitability is not maximized.

Capital Adequacy Ratio has no effect on profitability. This means that any increase or decrease in the value of the CAR variable, will not affect the profitability of the company which in this study is measured using Return on Assets (ROA). This is because regardless of the CAR obtained by banking companies as long as banking companies cannot optimally and effectively manage their capital, which in turn will increase profitability, the acquisition of CAR has no effect on the profitability of banking companies.

The limitation in this research is that the independent variable only influences the dependent variable by 36.09%. Because below 50% means it is still in the category of low or weak influence. Based on the limitations of the research above, the suggestions that can be conveyed are for future researchers to add other research variables that are likely to affect the profitability of banking companies in a positive direction such as inflation and BI rate (Dithania & Suci, 2022)

REFERENCES

Alghifari. (2021). *Pengolahan Data Panel untuk Penelitian Bisnis dan Ekonomika dengan EViews 11* (Pertama).

Dewi, A. S. (2017). Pengaruh CAR, BOPO, NPL, NIM, dan LDR terhadap ROA pada Perusahaan di Sektor Perbankan yang Terdaftar di BEI Periode 2012-2016. *Jurnal Pundi*, *1*(3), 223–236. https://doi.org/10.31575/jp.v1i3.55

Dithania, N. P. M., & Suci, N. M. (2022). Pengaruh Inflasi Dan Bi Rate Terhadap Profitabilitas Bank Umum Yang Terdaftar Di Bursa Efek Indonesia. *Bisma: Jurnal Manajemen*, *8*(3), 638–646.

Fauzan, H., & Sutiono, F. (2017). Perbandingan Model Altman Z-Score, Zmijewski, Springate, dan Grover Dalam Memprediksi Kebangkrutan Perusahaan Perbankan (Studi Kasus Pada BEI Tahun 2011 - 2015). *Jurnal Online Insan Akuntan*, *2*(1), 49 – 60.

Ghozali, I. (2018). *Aplikasi Analisis Multivariate dengan Program IBM SPSS 25*. Universitas Diponegoro.

Ghozali, P. I. (2020). *25 Grand Theory*. Yoga Pratama.

Ghozali, P. I., & Ratmono, D. (2017). *Analisis Multivariat dan Ekonometrika; Teori, Konsep, dan Aplikasi dengan EViews 10* (Edisi 2). Badan Penerbit Universitas Diponegoro.

Giri, I. G. T. M., & Purbawangsa, I. B. A. (2022). Pengaruh Non-Performing Loan, 'Loan To Deposit Ratio', Net Interest Margin, 'Capital Adequacy Ratio' Terhadap Profitabilitas". *E-Jurnal Ekonomi Dan Bisnis Universitas Udayana*, *11*(08), 885. https://doi.org/10.24843/eeb.2022.v11.i08.p02

Grilseda, N., & Riyadi, S. (2021). Pengaruh CAR, LDR, KAP dan NPL terhadap ROA Bank Go Public yang terdaftar di BEI. *Jurnal Ilmu Manajemen*, *11*(1), 53. https://doi.org/10.32502/jimn.v11i1.3252

Ishak, F., Dungga, M. F., & Amali, L. M. (2022). Pengaruh Kualitas Aktiva Produktif (KAP) Dan Net Interest Margin (NIM) Terhadap Profitabilitas Pada Bank Umum Swasta Nasional Devisa Yang Terdaftar Di BEI Periode 2016-2020. *JAMBURA: Jurnal Ilmiah Manajemen Dan Bisnis*, *5*(1), 89–97. https://doi.org/10.37479/jimb.v5i1.14246

Lestari, W. D., & Setianegara, R. G. (2020). Analisis Pengaruh NIM, BOPO, LDR, dan NPL Terhadap Profitabilitas (Studi Kasus Pada Bank Umum Yang Listed Di Bursa Efek Indonesia Periode 2014-2018). *Keunis*, *8*(1), 82. https://doi.org/10.32497/keunis.v8i1.2136

Moorcy, N. H. (2020). Pengaruh Capital Adequacy Ratio, Net Interest Margin, dan Loan To Deposit Ratio Terhadap Return On Assets Pada PT. Bank BNI (Persero), Tbk. *Jurnal GeoEkonomi*, *11*(1), 164–175.

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.

Nanda, A. S., Hasan, A. F., & Aristyanto, E. (2019). Pengaruh CAR dan BOPO Terhadap ROA pada Bank Syariah pada Tahun 2011-2018. *Perisai : Islamic Banking and Finance Journal*, *3*(1), 19–32. https://doi.org/10.21070/perisai.v3i1.2160

Pinasti, W. F. (2018). Pengaruh CAR, BOPO, NPL, NIM dan LDR Terhadap Profitabilitas Bank Umum Periode 2011-2015. *Jurnal Nominal*, *VII*(1).

Prof. Dr. Sugiyono. (2020). *Metode Penelitian Kuantitatif, Kualitatif dan Kombinasi (Mixed Methods)* (Sutopo (ed.); 2nd ed.). CV Alfabeta.

Putra, D. P. W. P., & Rahyuda, H. (2021). Pengaruh NIM, LDR, NPL, BOPO Terhadap ROA Pada Bank Umum Swasta Nasional Devisa Di Indonesia. *E-Jurnal Manajemen*, *10*(11), 1181–1200.

Riadi, S. (2018). The effect of Third Parties Fund, Non Performing Loan, Capital Adequacy Ratio, Loan to Deposit Ratio, Return On Assets, Net Interest Margin and Operating Expenses Operating Income on Lending (Study in Regional Development Banks in Indonesia). *Proceedings of the International Conference on Industrial Engineering and Operations Management*, *2018-March*, 1015–1026.

Rifansa, M. B., Aisyah, N., & Pulungan, F. (2022). The Effect of Capital Adequacy Ratio (CAR), Non-Performing Loan (NPL), Net Interest Margin (NIM), Loan to Deposit Ratio (LDR) and Operational Costs and Operational Revenue (BOPO) On Return on Assets (ROA) in Bank IV Indonesia. *Budapest International Researchand Critics Institute-Journal (BIRCI-Journal*, *5*(2), 15723–15737.

Rimawan, M., & Mithaqain, D. (2021). Pengaruh Net Interest Margin dan Non Performing Loan terhadap Return On Asset pada PT Bank Rakyat Indonesia (Persero) Tbk. *Global Financial Accounting Journal*, *5*(1), 84. https://doi.org/10.37253/gfa.v5i1.4721

Rohmiati, E., Winarni, W., & Soebroto, N. W. (2019). Analisis Pengaruh Bopo, Npl, Nim, Dan Ldr Terhadap Profitabilitas Pada Bank Umum Di Indonesia Periode 2012-2017. *Keunis*, *7*(1), 34. https://doi.org/10.32497/keunis.v7i1.1531

Setya, M., Sari, P., Afriansyah, R., Icmd, D., Efek, B., & Populasi, I. (2021). Pengaruh car , ldr , nim , bopo terhadap roa pada sektor perbankan go public di bei 2016-2018 to Deposit Ratio), NIM (Net Interest Margin), BOPO (Beban Operasional Pendapatan. *Jurnal Akuntansi Dan Keuangan*, *17*(1), 118–126.

Setyarini, A. (2020). Analisis Pengaruh CAR, NPL, NIM, BOPO, LDR Terhadap ROA (Studi Pada Bank Pembangunan Daerah Di Indonesia Periode 2015-2018). *Research Fair Unisri*, *4*(1), 282–290. https://doi.org/10.33061/rsfu.v4i1.3409

Sukmadewi, R. (2020). The Effect of Capital Adequacy Ratio, Loan to Deposit Ratio, Operating-Income Ratio, Non Performing Loans, Net Interest Margin on Banking Financial Performance. *ECo-Buss*, *2*(2), 1–10. https://doi.org/10.32877/eb.v2i2.130

Sunaryo, D. (2020). The Effect Of Capital Adequacy Ratio (CAR), Net Interest Margin (NIM), Non-Performing Loan (NPL), and Loan To Deposit Ratio (LDR) Against Return On Asset (ROA) In General Banks In Southeast Asia 2012-2018. *Ilomata International Journal of Management*, *1*(4), 149–158. https://doi.org/10.52728/ijjm.v1i4.110

Yulita, D. (2020). Pengaruh Capital Adequacy Ratio (CAR), Non Performing Loan (NPL), Net Interest Margin (NIM), Biaya Operasional dan Pendapatan Operasional (BOPO) Serta Loan to Deposit Ratio (LDR) Terhadap Return On Assets (ROA). *Journal of Chemical Information and Modeling*, *53*(9), 1689–1699.