

THE EFFECT OF FINANCIAL RATIOS AND SHARE OWNERSHIP ON PROFITABILITY IN INDONESIA BANKING INDUSTRY

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ABSTRACT

Banking activities must be managed effectively and efficiently to achieve profit targets, as one indicator to measure bank performance. If one bank experiences losses or is even liquidated, it will disrupt the rest of the banking system. The purpose of this study was to analyze and examine the effect of financial ratios and share ownership on profitability of banking industry in Indonesia. The financial ratios variables in this study are Capital Adequacy Ratio (CAR), Loan to Deposit Ratio (LDR), Operating Expenses Operating Income (BOPO), Non Performing Loan (NPL), Net Interest Margin (NIM). While the share ownership is proxied by managerial ownership, institutional ownership, and public ownership. The dependent variable is profitability measured by Return on Asset (ROA). The type of research used is quantitative which is causal associative, then uses panel data regression analysis techniques. The population used in this study is conventional banking registered with the Financial Services Authority, and there are 36 banks that meet the sampling criteria from 2018-2022. The results showed that LDR, NIM and institutional ownership had a positive effect on profitability. The next result showed that BOPO, CAR, and NPL had a negative effect on profitability. While, managerial ownership and public ownership have no influence on banking profitability. The findings indicates that financial ratios are still powerful to influence the profitability of banking. Institutional ownership has some expert that could advice to the bank how to increase the profitability.

Keywords: Banking Financial Ratios, Profitability, Share Ownership

ABSTRAK

Kegiatan perbankan harus dikelola secara efektif dan efisien untuk mencapai target laba, sebagai salah satu indikator untuk mengukur kinerja bank. Apabila salah satu bank mengalami kerugian atau bahkan dilikuidasi, maka akan mengganggu sistem perbankan lainnya. Tujuan dari penelitian ini adalah untuk menganalisis dan menguji pengaruh rasio keuangan dan kepemilikan saham terhadap profitabilitas industri perbankan di Indonesia. Variabel rasio keuangan dalam penelitian ini adalah Capital Adequacy Ratio (CAR), Loan to Deposit Ratio (LDR), Biaya Operasional Pendapatan Operasional (BOPO), Non Performing Loan (NPL), Net Interest Margin (NIM). Sedangkan kepemilikan saham diproksikan dengan kepemilikan manajerial, kepemilikan institusional, dan kepemilikan publik. Variabel dependennya adalah profitabilitas yang diukur dengan Return on Asset (ROA). Jenis penelitian yang digunakan adalah kuantitatif yang bersifat asosiatif kausal, kemudian menggunakan teknik analisis regresi data panel. Populasi yang digunakan dalam penelitian ini adalah perbankan konvensional yang terdaftar di Otoritas Jasa Keuangan, dan terdapat 36 bank yang memenuhi kriteria pengambilan sampel dari tahun 2018-2022. Hasil penelitian menunjukkan bahwa LDR, NIM dan kepemilikan institusional berpengaruh positif terhadap profitabilitas. Hasil selanjutnya menunjukkan bahwa BOPO, CAR, dan NPL berpengaruh negatif terhadap profitabilitas. Sementara itu, kepemilikan manajerial dan kepemilikan publik tidak memiliki pengaruh terhadap profitabilitas perbankan. Temuan ini mengindikasikan bahwa rasio keuangan masih kuat untuk mempengaruhi profitabilitas perbankan. Kepemilikan institusional memiliki beberapa ahli yang dapat memberikan saran kepada bank untuk meningkatkan profitabilitas.

Kata kunci: Rasio Keuangan Perbankan, Profitabilitas, Kepemilikan Saham



INTRODUCTION

Banking is a financial institution playing an important role in maintaining economic stability in macro system. Indonesia Regulation, UU Nomor 10 Year 1998 stated that banks have a role in upgrading standard live of citizen with raising funds such as deposits and channeling in the form of credits, loans or other forms (Otoritas Jasa Keuangan, 2013). The banking activities has to be managed effectively and efficiently for achieving target profit, as an indicator of measuring bank performance. If one bank experiences losses or even liquidates, it will disrupt other banking systems. This domino effect would affect the country's financial stability (Khomsatun et al., 2021; Zulfikar, 2021).

The significant role of banking industry in the economy system, both internal and external parties such as shareholders, need to conduct various analyzes instruments that allow to detect problems, prevent failure and maintain banking stability. One of analyzing tools is from financial ratios as an indicator of financial performance. The potential problems could be anticipated by managed the financial ratio such as capital ratio, liquidity ratios, efficiency ratio, and asset quality ratio. If banking managements could manage better these ratios, it would increase profitability that one of financial ratios that used by stakeholder for decision making.

One of the ratios to profitability ratio is used *Return on Asset* (ROA) or *Return on Equity* (ROE) (Kasmir, 2019). Figure 1 shows the statistical data of the banking profitability as of December 2022 that sourced from the Otoritas Jasa Keuangan (OJK) and shows the percentage of indicators each year.

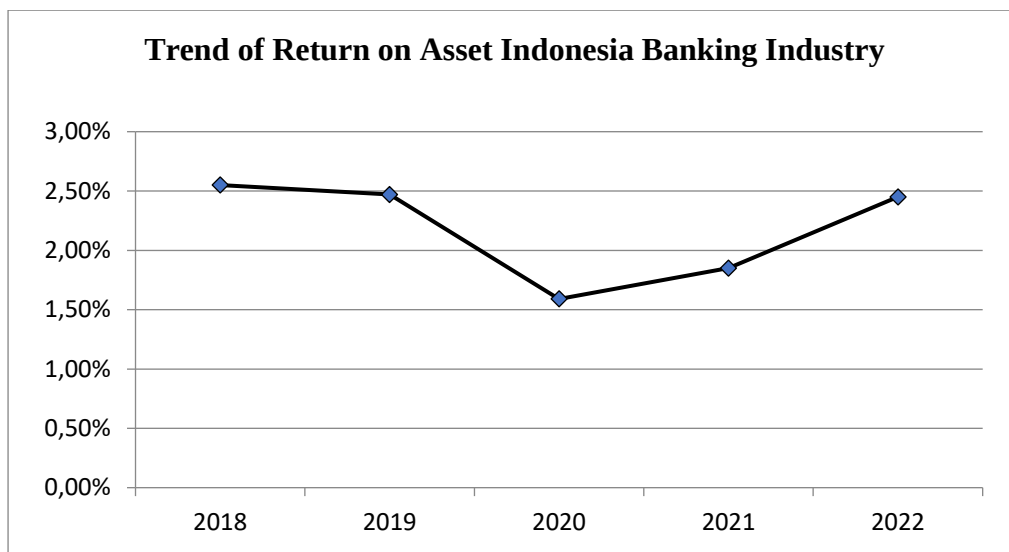


Figure 1 Profitability/ROA Growth

Source: Otoritas Jasa Keuangan (OJK) Processed by the Author

Figure 1 present that banks were able to generate ROA of 2.55% as of December 2018 but decreased in 2019 by 0.8% from the acquisition of ROA of 2.47% in 2019 (Sitanggang, 2019). Then in 2020, the Covid-19 pandemic has spread widely to almost all countries, and the resulting impact is that the performance and stability of banking in various countries has decreased (Shabir et al., 2023).



Indonesia government first detected a Covid-19 case in March 2020. The Covid-19 has a major impact on various groups, including banks. The most vulnerable to liquidity risk are small banks and will be difficult to get markets and capital problems that are still in the small category (Ulya & Setiawan, 2020). One of the impacts of the pandemic for banks is their performance, especially the profitability ratio or ROA. Figure 1 shows that the level of banking ROA was 1.59% in December 2020. It was decreased from the previous years, where in 2019 the ROA was reached 2.47%. The decreasing of bank profitability is also stated by (Sidik, 2020).

After pandemic period, banking profitability has also started to show an increasing from the previous year. However, the increase in banking profitability still could not pass the 2018 profitability amounting to 2.55%, while in 2022 it was 2.45%. The profitability in 2022 increased from 2021, but not all banks were successful in increasing their profitability. Bank Raya Indonesia Tbk (AGRO) experienced a decrease in net profit of 41.34% in the second quarter/2022 period. Bank Raya Indonesia Tbk's performance is considered unsatisfactory, this is reflected in the net profit which decreased by 41.34% (Kartika, 2022).

Profitability is a ratio that estimates the company's ability to generate profits and ensure the economic sustainability (Kasmir, 2019). A benchmark of maintaining the business is analyzed from persistence of profitability. Profitability is important for maintaining the company's long-term survival, because it could show whether the company has good future prospects or not (Siregar, 2021). The high and low profitability of a bank greatly affects public trust. Banks with high profitability reflect good bank performance.

In general, the factors used in analyzing the effect on profitability are through financial ratios such as *Capital Adequacy Ratio* (CAR), *Loan to Deposit Ratio* (LDR), *Operating Costs Operating Income* (BOPO), *Non Performing Loan* (NPL), *Net Interest Margin* (NIM). Previous research also proved that these ratios affect bank profitability, such as the CAR ratio, LDR ratio, BOPO ratio, NPL ratio, and NIM ratio. The following is figure 2 that present the financial ratios in before, during and after the Covid-19 pandemic year.

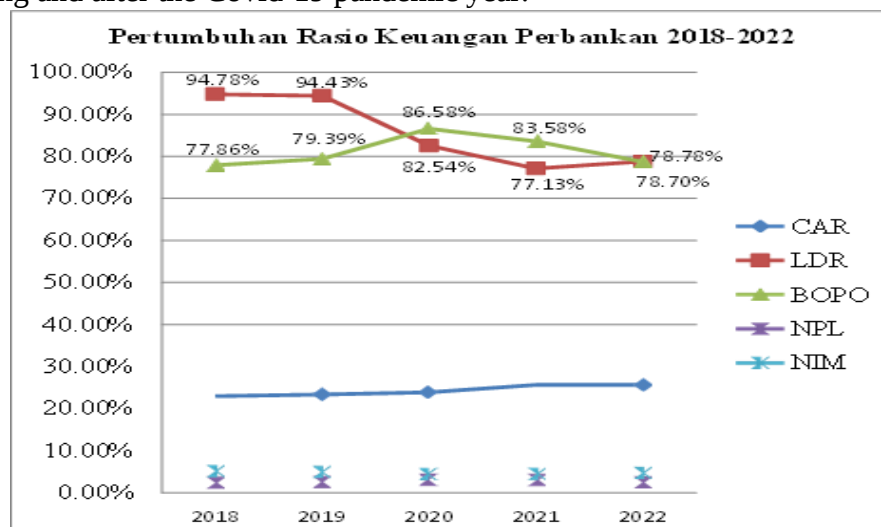


Figure 2 Banking Financial Ratio Growth 2018-2022

Source: OJK Processed by the Author



Figure 2 presents the growth of some financial ratios, where LDR is a sharp decline in 2020. In the same year, banking profitability was also decreased. LDR decreased in 2020, which means that banks provided less credit/ loan due to the pandemic. Then, BOPO was increased in 2020, indicating that banks were less efficient in managing their operating costs. Figure 2 for other financial ratios such as CAR, NPL, and NIM in 2020 the graph is not too significant a change from the previous year (2019). However, NIM experienced a slight decrease and NPL experienced a slight increase during the Covid-19 pandemic. In the research of (Susanti et al., 2023) shows that there are significant differences in financial ratios such as CAR, BOPO, LDR from before the pandemic and after the pandemic.

According to (Sudarmanto et al. (2021) CAR ratio is the capital adequacy ratio of banks and can affect the profitability of a bank. CAR can be used as a tool in measuring the capital of a bank and can bear losses from receivables that fail to be collected, especially the risks arising from uncollected interest (Kasmir, 2019). A low CAR reflects a low level of bank capital. Low capital levels can cause banks to be unable to cover losses which are difficult to avoid (Imamah & Munif, 2018). These conditions can affect the bank's ability to maintain its operations and will also affect banking profitability. This is in line with research conducted by M. S. Pratama (2021a) and Suroso (2022) which found that the CAR variable had a significant positive effect on profitability.

Another factor affecting profitability is LDR. When the credit provided decreases, income from credit also decreases and the bank's ability to earn profits also decreases (Pratama et al., 2021). With the large amount of credit provided, the bank will earn large interest income. In research by Sumbayak & Manda (2020) and Mukaromah & Supriono (2020), the results showed that LDR had a significant positive effect on profitability/ROA. In contrast to this research, research by Nuryanto et al. (2020) found that LDR has a negative effect on profitability.

BOPO (operating expense per operating income) is a financial ratio that could affect banking profitability. A low BOPO indicates that the bank manages its operation efficiently. Operational costs that have been managed efficiently would have an impact on operating expense that decreased, while the operating income increase. Nuryanto et al. (2020), Sumbayak & Manda (2020), Fadhilah & Masdjojo (2023) and Sante et al. (2021) found that BOPO had a negative and significant influence on profitability. This means that the smaller the BOPO, the more efficiently the company will manage costs, which will have an effect on increasing banking profitability.

Next, NPL also has an influence on profitability. According to (Hutabarat, 2020) non-performing loan is a condition in which credit provided by banks cannot be returned on time so that it has an impact on banks that experience losses. The lower the NPL, the more profitable the bank will be, on the other hand, the high NPL level the bank will experience losses due to the level of bad credit returns. NPL or often referred to as non-performing loans must be a concern for management, because it could affect higher of credit risk, and in consequence the bank will not get a return. Then, research by Fadhilah & Masdjojo (2023) and Sumbayak & Manda (2020) shows that the NPL variable has a negative influence on banking profitability. This means that, when the credit risk is decreased, the company could get higher profits.



NIM can also affect profitability. A high NIM can produce high profits and can influence bank profitability which also increases. The higher the NIM, the higher the contribution of income from credit and the lower the risk of bad debts and shows the effectiveness in managing third party funds (Septiyani et al., 2022). This is proven by research by Fadhilah & Masdjojo (2023) and Sumbayak & Manda (2020) with the results that NIM has a significant effect on profitability.

In Addition to financial ratios, investor share ownership could also affect banking profitability. According to the structure and measurement of ownership in banking is divided into two, namely internal shareholders and external shareholders. Internal shareholders are people who own shares and are included in the company's organizational structure, meaning that these people also carry out their functions as executors of operations (Managers or Directors) or as supervisors of company operations (Board of Commissioners). Meanwhile, external shareholders are shareholders from outside parties who are not included in the company's organizational structure, or only function as owners. According to (Sudarno et al., 2022a) there are various forms of company share ownership as a measure of corporate governance including managerial ownership, institutional ownership, public ownership, and others. The existence of share ownership can monitor and encourage companies to work better in increasing their profitability (Marsinah, 2021).

Managerial ownership is part of the company's internal shareholders or share ownership owned by management (Directors and Commissioners) who actively participate in company decision making (Sudarno et al., 2022b). Managerial ownership has a very important role for banks to achieve profitability for the company. Management who own shares in banking will improve their performance with the aim of getting high profits because that way management also feels or gets a portion of these profits (Melati, 2020). Managerial share ownership can be aligned between the interests of shareholders and managers, because managers directly benefit from the decisions taken and managers who bear the risk if there are losses arising as a consequence of the manager's wrong decision making. Therefore Managerial Ownership has a positive influence on profitability. Subiyanti & Zannati (2019) found that managerial ownership variables have a significant positive influence on profitability.

Institutional ownership is shares owned by government agencies, financial institutions, other institutions or share ownership owned by external parties to the company (Sudarno et al., 2022b). According to (Sudarno et al., 2022a) institutional ownership has the ability to monitor and discipline managers so that it can affect company performance in achieving company goals. Companies with large institutional ownership can identify their ability to monitor management. The greater the institutional ownership, the more efficient the utilization of company assets and it is hoped that it can also act as a prevention against waste by management. Institutional ownership can supervise and control more tightly because it has more resources and experience in analyzing finances. Thus, institutional ownership can influence profitability. Ali (2019) proves that the institutional ownership variable has a positive effect on profitability.

Public share ownership is shares owned by the public (external to the company). Share ownership held by the public is a source of financing from outside the company (Ulupui et al., 2021). The percentage of public ownership shares in a company can oversee the company with large public ownership, the more supervision is carried out and the company must also be able to disclose or be transparent about all information required by shareholders. Therefore, public share



ownership has an influence on banking profitability. Ali (2019) research results show that public share ownership has a positive influence on profitability.

The difference between this research and previous research is the research period, population and variables. The research period used was from 2018 to 2022, this year covering three conditions, namely before the pandemic, the Covid-19 pandemic, to post-pandemic, where these three conditions had an impact on economic and social changes. Meanwhile, previous research only used a research period that covered the year before the Covid-19 pandemic. The population in this research is banks registered with the OJK and is different from previous research. The population used is banks registered on the Indonesia Stock Exchange. The difference with other previous research lies in the independent variables used more than previous research, namely using financial ratios which include CAR, LDR, BOPO, NPL, NIM as well as ownership variables (Managerial Ownership, Institutional Ownership, Public Share Ownership).

Based on previous arguments, problem phenomena and the results of previous research, this research aims to prove the influence of financial ratios and share ownership on banking profitability in Indonesia for the period 2018 - 2022. The financial ratios studied are Capital Adequacy Ratio (CAR), Loan to Deposit Ratio (LDR), Operating Costs Operating Income (BOPO), Non-Performing Loans (NPL), Net Interest Margin (NIM). The share ownership studied is managerial ownership, institutional ownership and public ownership.

RESEARCH METHODS

The type of research used is quantitative research with a causal associative. The population in this study are banking companies registered with the OJK for the 2018-2022 period. The sampling technique in this research uses a purposive sampling technique, sampling is not random and the sample is adjusted to certain targets/objectives/criteria. The criteria and sampling steps are explained in the results section. The type of data in this research is secondary data. The data used is in the form of annual reports that have been published on the OJK and official banking websites.

This study uses panel data regression analysis. According to (Nuryanah & Maulana, 2016) panel data is data consisting of several samples and several observation periods. This model was chosen because this study uses data in the form of financial reports from several banks (*cross section*) with a research period from 2018 to 2022 (time series). The following is the equation model of this study:

$$ROA_{it} = \alpha_0 + \beta_1 CAR_{it} + \beta_2 LDR_{it} + \beta_3 BOPO_{it} + \beta_4 NPL_{it} + \beta_5 NIM_{it} + \beta_6 KM_{it} + \beta_7 KI_{it} + \beta_8 KP_{it} + \varepsilon_{it} \dots \dots \dots (1)$$

- ROA : Profitability, measured by *Return on Asset*
- CAR : *Capital Adequacy Ratio*
- LDR : *Loan to Deposit Ratio*
- BOPO : Operating Expenses per Operating Income
- NPL : *Non-Performing Loan*
- NIM : *Net Interest Margin*



KM : Managerial Ownership
KI : Institutional Ownership
KP : Public Ownership
 ε :Error

The dependent variable of this research is profitability measured by Return on Asset. According to (Kasmir, 2019) profitability is a ratio that estimates the company's ability to generate profits. According to (Hutabarat, 2023) there are various types of profitability ratios including ROA, Return on Equity (ROE), Return On Investment (ROI), and others. In this study profitability measured by Return on asset (Ersyafdi & Nasihah, 2021):

$$ROA = \frac{\text{Earning before tax}}{\text{Total Asset}}$$

Several independent variables are used in this research. The following information explains the measurement of the independent variables. First independent variable is Capital Adequacy Ratio. Each bank has provided the CAR data, that is directly used in this research. The second is Loan to Deposit Ratio. According to (Kasmir, 2019) LDR is a ratio used to measure the composition of the amount of credit provided compared to the amount of public funds and own capital used. The following is the formula for finding the *loan to deposit ratio* and also according to (Otoritas Jasa Keuangan, 2020) through circular letter Number 43/SEOJK.03/2016:

$$LDR = \frac{\text{Total Loans}}{\text{Total Deposits}}$$

The Third independent variable is operating expense per operating income. According to (Galuh & Utami, 2022a) operating expenses operating income is a ratio used to measure the bank's ability to manage existing resources. Here's how to find the amount in determining BOPO according to (Otoritas Jasa Keuangan, 2020) through Number 43/SEOJK.03/2016:

$$BOPO = \frac{\text{Operating Expenses}}{\text{Operating Income}}$$

The fourth independent variable is non-performing loan. According to (Arwin, S.E. & Sutrisno, S.Pd., 2022) and in accordance with (Otoritas Jasa Keuangan, 2020) through circular letter Number 43 / SEOJK.03 / 2016 , the measurement of NPL is as follows:

$$NPL = \frac{\text{Bad Loans}}{\text{Total Loans}}$$

The fifth independent variable is net interest margin. According to (Arwin, S.E. & Sutrisno, S.Pd., 2022) *net interest margin* is a measuring tool used to determine the profitability of banks derived from interest-earning assets or derived from net interest income on productive assets. According to (Arwin, S.E. & Sutrisno, S.Pd., 2022) and according to (Otoritas Jasa Keuangan, 2020) through Number 43/SEOJK.03/2016, the measurement of NIM is as follows.

$$NIM = \frac{\text{Interest Revenue}}{\text{Average of Productive Asset}}$$

The sixth independent variable is managerial ownership. According to (S. H. Pratama & Triyonowati, 2019) Managerial ownership is share ownership by the company's management.



According to (Novita & Ersyafdi, 2022) the way to find the amount of managerial share ownership in a company can use the following formula:

$$KM = \frac{\text{total share owns by managerial}}{\text{total outstading share}}$$

The seventh independent variable is institutional ownership. According to (Novita & Ersyafdi, 2022) the way to find the amount of institutional ownership is as follows.

$$KI = \frac{\text{total share owns by institutional industry}}{\text{total outstading share}}$$

The eight independent variable is public ownership. According to (Franita, 2018) public ownership is ownership owned by the public or the community. That way, it will have an impact on the value of the company because of the supervision by public ownership of the company. The following is the formula for finding the percentage of public ownership (Franita, 2018).

$$KP = \frac{\text{total share owns by public}}{\text{total outstading share}}$$

This research data analysis technique uses panel data regression analysis, then in processing data using Excel and STATA. This panel data regression analysis has 3 estimation models including *Pooled Least Square*, *Fixed Effect Model*, *Random Effect Model*. This analysis needs to decide the best model using Chow test, Hausman test, and Langrage Multiplier test. Several classic assumptions are applied in this method. Then, the best model would be analyzed further to decide the R-Squared, F-Statistic to estimate the goodness fit of model, and also t-statistic to decide whether the hypotheses of research is supported or not. These following is hypotheses of the research:

- H1 : Capital Adequacy Ratio significantly effects on banking Profitability
- H2 : Loan to Deposit Ratio significantly effects on banking Profitability
- H3 : Operating Expenses per Operating Income (BOPO) significantly effects on banking Profitability
- H4 : Non Performing Loan significantly effects on banking Profitability
- H5 : Net Interest Margin significantly effects on banking Profitability
- H6 : Managerial Ownership significantly effects on banking Profitability
- H7 : Institutional Ownership significantly effects on banking Profitability
- H8 : Public Ownership significantly effects on banking Profitability



RESULT AND DISCUSSION

Before result presentation and discussion, the following is table 1 that presents the purposive sampling process. Based on table 1, the sample of this research in 36 banks for 2018 – 2022. So, total observations of this research are 180 observations.

Table 1 purposive sampling process

No	Criteria	Not Included	Total Bank
1	Bank registered in Financial Service Authority (in Indonesia Otoritas Jasa Keuangan, OJK)		107
2	Conventional Bank, excluding sharia bank	13	94
3	Banking includes state-owned public banks and national private public banks, Excluding local government bank	35	59
4	Banking consistently publishes annual reports on each company's website during 2018-2022	0	59
5	Availability data related to research variables	4	55
6	Outlier data	19	36
Observations for 2018 - 2022 = 36x5 = 180 observations			

Statistic Descriptive

Table 2 presents the statistic descriptive. From table 2, almost all variables have a standard deviation that is smaller than the mean, except for the managerial ownership (KM) and public ownership (KM) variables. A standard deviation that is smaller than the mean indicates that there is not much variation so the data can be normally distributed.

Table 2 statistic Descriptive

Variabel	N	Mean	Std. Dev.	Minimum	Maximum
ROA	180	1.36	1.22	-4.00	4.56
CAR	180	27.84	19.03	10.95	184.61
LDR	180	86.86	20.87	38.76	162.29
BOPO	180	85.35	14.24	46.50	150.91
NPL	180	3.14	1.74	0.63	10.64
NIM	180	4.58	1.43	0.47	8.90
KM	180	0.27	0.92	0.00	4.84
KI	180	89.52	18.91	29.61	100



KP	180	14.36	17.78	0.00	59.30
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Coefficient of Determination (R^2)

The following is the result of the coefficient of determination with the selected model is the *fixed effect* model:

Table 3. Results of the Coefficient of Determination

<i>Within</i>	0.8408
<i>Between</i>	0.6489
<i>Overall</i>	0.6830

Source: STATA Output Results, 2023

The coefficient of determination or R^2 is basically used to measure how far the model's ability to explain variations in the dependent variable. The coefficient of determination is between 0 or 1 (Ghozali, 2019).

The results of the regression using the *fixed effect* model show the coefficient of determination of 0.8408 or 84.08%. Based on these results, it can be interpreted that the independent variables used in this regression equation have 84.08% suitability in explaining the dependent variable (profitability / ROA) and the remaining 15.92% is due to other factors that can affect profitability.

F Statistical Test

The following are the results of the F statistical test with the selected model being the *fixed effect* model:

Table 4. F Statistical Test Results

Prob > F	0.0000
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Source: STATA Output Results, 2023

The F test is used to show the test results globally or thoroughly in knowing the model used (independent variables) can significantly explain the dependent variable. The decision making of the F statistical test is if the significance value is <0.05 , all independent variables affects the dependent variable. The results of the F statistical test in table 4.7 are 0.0000, meaning that overall the independent variable has an effect on the dependent variable. It also explains that the model meets the goodness fit model that could analyze further.

t-Test

t-test is carried out with the aim of seeing how much the independent variable individually affects the dependent variable. Tabel 5 present the result of t-test. Based on table 5, t test results of CAR variable show a probability value of 0.011, that smaller than 0.05. It is interpreted that CAR has an effect on profitability. Then the coefficient of CAR of -0.0047 has a



negative sign, meaning that CAR has a negative effect on profitability. Based on the result, hypothesis 1 (H_1) is accepted.

Table 5. Results of the t Statistical Test with the *Fixed Effect Model*

	Coefficient	std.err.	t-statistic	Probability
CAR	-0.0047	0.0018	-2.58	0.011
LDR	0.0063	0.0023	2.69	0.008
BOP O	-0.0700	0.0034	-20.70	0.000
NPL	-0.0567	0.0254	-2.23	0.027
NIM	0.1844	0.0449	4.10	0.000
KM	-0.3106	0.2673	-1.16	0.247
KI	0.0268	0.0070	3.84	0.000
KP	0.0017	0.0071	0.24	0.810
cons	3.9071	0.7578	5.16	0.000

Source: STATA Output Results, 2023

t-test result of LDR variable show the probability value of 0.008. It is interpreted that LDR affects profitability, because the probability value is smaller than 0.05. The LDR coefficient value of 0.0063061 means that LDR has a positive effect on profitability, thus hypothesis 2 (H_2) is accepted.

t-test results on the BOPO variable show a probability value of 0.000, which is smaller than the significance level of 0.05, so BOPO affects profitability. The coefficient of -0.0699877 indicates a negative sign, so BOPO has a negative effect on profitability, thus hypothesis 3 (H_3) is accepted.

t-test results of NPL variable show the probability value of 0.027. It is interpreted that NPL has an effect on profitability, because the probability value is smaller than 0.05. The NPL coefficient value of -0.0567021 has a negative sign indicating that NPL has a negative effect on profitability, thus hypothesis 4 (H_4) is accepted.

t-test results of NIM variable show a probability value of 0.000. It is interpreted that NIM has an effect on profitability, because the probability value is smaller than 0.05. The coefficient value is 0.1843561, meaning that NIM has a positive effect on profitability, thus hypothesis 5 (H_5) is accepted.

t-test results of managerial ownership variable show a probability value of 0.247. It is interpreted that managerial ownership has no effect on profitability, because the probability value is greater than 0.05, thus hypothesis 6 (H_6) is rejected.

t-test results of institutional ownership variable show a probability value of 0.000. It is interpreted that institutional ownership affects profitability, because the probability value is



smaller than 0.05. The coefficient value is 0.0267887, meaning that institutional ownership has a positive effect on profitability, thus hypothesis 7 (H_7) is accepted.

t-test results of the public ownership variable show the probability value of 0.810. It is interpreted that public ownership has no effect on profitability, because the probability value is greater than 0.05, thus hypothesis 8 (H_8) is rejected.

Discussion

Effect of CAR on Profitability

The result proves that capital adequacy ratio (CAR) negative significant affect on banking profitability. It indicates that higher CAR would be lower profitability. High CAR indicates that the bank does not allocate much of its funds as reserves to anticipate financing risks and the bank does not do much financing which ultimately reduces profitability. On the other hand, public trust in banks is a very crucial factor in increasing bank profits. Even though the bank has high capital, if the public loses confidence in the bank, the bank will find it difficult to rotate funds for investment or financing, so that profitability will decrease (Anisa & Anwar, 2021a).

Figure 2 also show CAR graph of the increase from 2018 to 2022, whereas in 2020 the pandemic occurred which resulted in banking profitability decreasing. The increase in CAR during the pandemic is likely aimed at maintaining capital buffers. The pandemic caused economic uncertainty so owners added capital to prevent bankruptcy or liquidation. This result supported Ardichy & Rahayu (2022), Natanael & Mayangsari (2022), and Anisa & Anwar (2021b) that CAR negatively influence on banking performance. While, this result is in contrast to M. S. Pratama (2021a) and Suroso (2022).

The Effect of LDR on Profitability

The results of this study indicate that LDR has a positive effect on profitability. Profitability comes from the amount of credit that has been provided by banks, from the credit provided the bank will get interest from the loan (Fanesha et al., 2021a). Profitability is also closely related to the amount of credit given to customers, where a high LDR indicates that the company has good profitability, because profitability comes from the amount of credit the company has given (Fanesha et al., 2021b). A large amount of credit is aimed at getting a large return. When a company's return is large, the company will also gain profitability (Sitaneley et al., 2021). Therefore, LDR is able to increase the profitability of a bank. This research supported the previous findings, such as Sante et al. (2021), Sumbayak & Manda (2020) and Paramita & Dana (2019) that found LDR has a positive effect on profitability.

Effect of BOPO on Profitability

BOPO is a ratio used to measure a bank's ability to manage existing resources (Galuh & Utami, 2022b). The research results show that BOPO has a negative effect on banking profitability. It means that lower BOPO indicates more efficiency and it impact on more profit. This result shows that the ability of banking management to control operating expenses and increase operating income has a big impact. The BOPO ratio is considered good if the banking company is able to manage its operating expenses well, which can optimize profits. Therefore,



companies need to focus on operational efficiency to reduce the value of the BOPO ratio, which will have an impact on profits and ROA (M. S. Pratama, 2021b).

Operational costs that have been managed efficiently would have an impact on operating expense that decreased, while the operating income increase. Smaller the BOPO, the more efficiently the company will manage costs, which will have an effect on increasing banking profitability. This is in line with research by Sante et al. (2021), Sumbayak & Manda (2020), Nuryanto et al., (2020) and Fadhilah & Masdjojo (2023) with results stating that BOPO has a negative effect on profitability (ROA).

Effect of NPL on Profitability

Non-Performing Loans is a ratio to measure how bad loans are compared to the total loan. The research proves that NPL significant negatively effect on banking profitability. If the NPL is low, the lower the level of bad credit that occurs. This situation has the opportunity for banks to obtain large amounts of income and the portion of profits obtained will also follow, resulting in an increase in bank profitability (Nurhayati & Safri, 2023). If the NPL ratio increases, the risk of loans that have been given to default also increases. This can result in a decrease in interest income and profits, so that banking profitability also decreases (Widyastuti & Aini, 2021). This supports the research by Sumbayak & Manda (2020), Sante et al. (2021), Nuryanto et al., (2020) and Widyastuti & Aini (2021) with results stating that NPL has a negative effect on profitability (ROA).

Effect of NIM on Profitability

The result proves that NIM significant positively effect on bank profitability. Obtaining a high NIM value will increase net interest income from productive assets managed by the bank. The bank's net interest income increases, the profit earned by the bank will also increase, and will ultimately increase banking profitability / ROA (Lestari & Setianegara, 2020).

Net Interest Margin is a ratio that shows the ability of bank management to manage its productive assets to generate net interest income (Astohar & Sumiyanti, 2019). According to the Indonesian Bankers Association (2016), if the NIM value is large, it can increase interest income on productive assets managed by the bank, so that the possibility of a bank being in trouble is small. A high NIM can also generate high profits and also have an impact on the profitability of a bank which also increases. These results support research by Sumbayak & Manda (2020) and Lestari & Setianegara (2020) with results stating that NIM has a positive effect on profitability (ROA).

The Effect of Managerial Ownership on Profitability

The result of this study shows that managerial ownership does not influence on banking profitability. In this study, not all banks have a level of managerial ownership or shares owned by members of the board of directors and commissioners. Some companies do not even have managerial share ownership. The low proportion of share ownership by management results in them not feeling the benefits and not having a significant influence on the level of company profitability. Share ownership allows members of the board of directors and commissioners to actively participate in corporate decision-making and feel the impact of these (Solekhah &



Efendi, 2020). These results support research by Solekhah & Efendi (2020). While this research results are not in line with Subiyanti & Zannati (2019).

Effect of Institutional Ownership on Profitability

This research proves that institutional ownership positive significant influence on banking profitability. This shows that the composition of share ownership owned by large institutions could increase supervision by the institution on management performance so as to deter manager behavior that will act fraudulently and can help company decision making. It would improve banking performance and profitability (Agustina & Soelistya, 2018).

Institutional ownership can supervise and control more tightly because they have more resources and are experienced in analyzing finances. The involvement of institutional share ownership will motivate management to improve its performance in managing the company and generate profits, then management will be careful in making decisions which can later affect the company's profitability (Roslita & Daud, 2019). This result is in line with research by Ali (2019) and Agustina & Soelistya (2018) with results stating that Institutional Ownership has a positive effect on profitability (ROA).

The Effect of Public Ownership on Profitability

This result does not find evidence that public ownership influence on banking profitability. In general, public shareholders only own a small portion of bank shares compared to large shareholders or controlling shareholders (Rahayu & Yuliandhari, 2023). This minority ownership cannot have a significant influence on decision making or control of the bank (Darmawan, 2018). Although public shareholders have voting rights in shareholder meetings, most of them do not have direct control over these decisions. This is in line with Rahayu & Yuliandhari (2023) with results stating that Public Ownership has no effect on profitability (ROA).

CONCLUSIONS AND SUGGESTIONS

This research aims to find out and analyze whether financial ratios and share ownership have an influence on banking profitability, with case studies of banks that have been registered with the OJK for the research period from 2018 to 2022. Using the purposive sampling method, the sample was obtained as many as 36 banks with period 2018 – 2022, so the total observations are 180 observations.

In this research, the variables included in the financial ratio category are capital adequacy ratio (CAR), loan to deposit ratio (LDR), operating expense per operating income (BOPO), non-performing loans (NPL), and net interest margin (NIM). The results conclude that LDR and NIM have a positive influence on banking profitability. While, CAR, BOPO and NPL have a negative influence on banking profitability.

The types of share ownership used in this research are managerial ownership, institutional ownership, and public ownership. From the three research variables, the results show that only institutional ownership has a positive influence on profitability. Meanwhile, managerial ownership and public ownership have no influence on profitability.

Based on the 36 banks that were sampled in this study, 21 banks did not have managerial



ownership from 2018 to 2022 or in these banks the board of directors and the board of commissioners did not own the banking shares where they worked so that the results obtained still did not accurately represent the entire sample taken.

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