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The Effect of Lending Money and Asset Quality on the Profitability of State-Owned Company and Private Banks Listed on the Indonesian Stock Exchange (IDX)

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A B S T R A C T

This study analyzes the effect of lending money, asset quality, capital adequacy, and bank size on the profitability of state-owned and private banks in Indonesia, with ROA as an indicator. Panel data regression analysis uses bank data listed on the IDX during 2017-2023. This study reveals a significant difference in the effect of profitability between state-owned and private banks. SOE banks experience a significant negative impact from lending money and asset quality, while private banks show a significant positive effect from lending money. Capital adequacy and bank size have a positive effect on SOE banks, but are not significant in private banks. In conclusion, differences in characteristics and strategies affect profitability, with SOEs needing to improve risk management and efficiency, as well as aggressive utilization of deposits for loans in private banks.

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INTRODUCTION

In facing increasingly tight competition in the banking sector, profitability is one of the important indicators to assess the performance of banks, both those managed by the government (BUMN) and private companies. The difference between BUMN and private banks lies in ownership, operational objectives, products and services offered, and how they function in the economic and social context (Christian, 2009). Both have an important role in the banking system in Indonesia, but with different approaches to financial management and services betweeneach type of bank can significantly affect their financial performance (Shandy Utama, 2018).

There are still many contradictory studies stating that there is a difference between the financial performance of state-owned and private banks. As previous findings stated that there is a significant difference between state-owned and private banks (Christian, 2009; Misral et al., 2021). While this finding states otherwise, there is no significant difference (Supit et al., 2019; Nasution, 2024).

The banking sector plays an important role in the economic system. As a credit institution, banks are intermediary institutions that mobilize public and economic savings with the aim of placing them in order to gain profit (Chukwuogor et al., 2021). Regarding bank performance as measured by the return on assets (ROA) ratio which is influenced by variables such as, the influence of lending money on profitability, there are still many different opinions, such as several findings that have a significant positive impact on bank profitability (Altaee et al., 2024; Margaretha et al., 2023). Meanwhile, this study concludes that LDR has a significant negative influence on bank profitability (Sari et al., 2020; Putra , 2020).

Then, similarly to lending money, research related to asset quality with LLR as an indicator is also still contradictory, as shown by the results of previous research. Loan loss reserves (LLR) have a significant positive influence on Return on Assets (ROA) (Kanga et al., 2020; Oleiwi et al., 2019). This research explains that The relationship between the loan loss reserve ratio (LLR) and return on assets (ROA) does not show a significant effect(Dewi et al., 2023;Ha, 2020). Meanwhile, in this study, loan loss reserves (LLR) have a significant negative influence on Return on Assets (ROA) (Akhiruddin Siregar et al., 2023; Chukwuogor et al., 2021).

In previous research related to capital adequacy, there are still many different opinions, based on previous research, the CAR ratio has a positive effect on Return on Assets (ROA).((Jigeer & Koroleva, 2023;Priharta & Gani, 2023;Al-Sharkas & Al-Sharkas, 2022;Chand et al., 2024). Sedangkan, Penelitian ini menunjukan ada hubungan tidak signifikan antara CAR dan *Return on Assets* (ROA) (Gazi et al., 2021;Alshiqi & Sahiti, 2021)). Meanwhile, this study shows that there is a significant negative relationship between CAR and Return on Assets (ROA) (Rohman et al., 2022;Gazi et al., 2024;Chukwuogor et al., 2021)

Bank size is also a variable that is still contradictory, as previous research states that bank size has a positive and significant relationship with bank profitability (Haddad et al., 2022;Priharta & Gani, 2023;Isayas, 2022)Meanwhile,

other studies argue that total assets do not have a significant effect on profitability (Barbadia & Haguisan, 2020; Altaee et al., 2024). And previous research states that bank size has a negative relationship with bank profitability (Gazi et al., 2024).

Based on previous studies, there are still many differences regarding the influence of variables such as lending money, asset quality, capital adequacy, and bank size on profitability. Some studies show a positive relationship, while others find contradictory results. This uncertainty raises questions about how these variables interact with each other and affect profitability, especially in state-owned and private banks in Indonesia. Selain itu, karena adanya perbedaan karakteristik antara kedua jenis bank menunjukkan perlunya pemahaman yang lebih mendalam mengenai dampak variabel-variabel tersebut terhadap profitabilitas masing-masing bank. Tentang bagiamana perbedaan antara kedua bank dan pihak manajemen memainkan peran dalam menentukan profitabilitas.

The contribution of this paper lies in enriching knowledge by combining these variables in one study, as well as providing new insights into the dynamics of bank performance in different contexts. This study will not only offer relevant empirical findings, but also provide guidance for policy makers and bank management to formulate more effective management strategies. Thus, this paper is expected to provide an in-depth understanding of the factors that influence profitability in the Indonesian banking sector. Dengan demikian, makalah ini diharapkan dapat memberikan pemahaman yang lebih mendalam tentang faktor-faktor yang memengaruhi profitabilitas di sektor perbankan Indonesia, serta mengidentifikasi faktor-faktor yang membedakan kinerja antar jenis bank.

This paper is presented in. The next section presents a literature review. Section 3 reviews the description of the data and research methodology. Section 4 presents the results of the study. Section 5 presents a discussion of the research findings and the conclusions of the study are presented in section 6.

LITERATURE REVIEW

Financial Intermediation Theory

Intermediation that mobilizes community and economic savings with the aim of placing them in order to make a profit (Chukwuogor et al., 2021). Bank financial intermediation refers to the process by which banks collect deposits from savers and lend them to borrowers, facilitating financial transactions. This process ensures efficient allocation of savings and facilitates returns on investment. Good intermediation can support economic growth by enhancing liquidity and stability of the financial system (Rohman et al., 2022).

Risk Management Theory

Risk management theory in banking has several important uses. First, it helps banks identify risks arising from lending, such as moral hazard and adverse selection. In addition, this theory allows risk assessment for each loan based on the borrower's profile and market conditions. Thus, banks can better manage their loan portfolios, encouraging diversification to reduce the impact of non-performing loans. This theory also ensures compliance with regulations on

capital adequacy, so that banks have sufficient reserves to face potential losses. In terms of profitability, risk management contributes to improving loan quality, which has a positive impact on return on assets (ROA). Finally, this theory supports the development of risk mitigation strategies, including reserves for loan loss provisions. Overall, the implementation of risk management is vital to the stability and performance of banks (Shuibin Gu et al., 2020). Overall, effective risk management not only protects bank assets, but also contributes to the broader economic health of the financial system (Margaretha et al., 2023).

Capital Structure Theory

Capital structure theory is an important concept in financial management that helps banks determine the optimal combination of debt and equity to fund their operations and growth. In the context of bank profitability, this theory enables better financing decisions, more effective risk management, and more accurate assessment of the cost of capital. A balanced capital structure not only contributes to the financial health and stability of a bank but also ensures compliance with banking regulations. Thus, capital structure theory plays a crucial role in improving bank profitability and sustainability in the face of economic challenges (Pires et al., 2021).

Lending Money

The ratio of net loans to total assets (loans) can lead to a higher level of profit, although not very significant (Jeris, 2021). Loan deposit ratio (LDR) is an indicator of lending money that shows the bank's ability to lend money by measuring the proportion of loans to deposits, which reflects liquidity and credit risk management (Altaee et al., 2024). When banks lend money, they earn interest on the loan, which contributes significantly to their overall profitability. However, although lending is very important to profitability. The effect of Lending money with LDR as an indicator on profitability is that LDR has a significant positive impact on bank profitability. This shows that an increase in LDR contributes positively to bank profitability(Altaee et al., 2024;Margaretha et al., 2023).

Hypothesis 1 (H1): There is a positive influence between lending money as measured by the loan deposit ratio (LDR) on the profitability of state-owned banks.

Hypothesis 2 (H2): There is a positive influence between lending money as measured by the loan deposit ratio (LDR) on the profitability of private banks.

Asset Quality

Asset quality is a measure that shows how well a bank's assets are managed and how much risk is associated with the loans it provides.(Jeris, 2021). indicators of asset quality can be seen from loan loss reserves(Koroleva et al., 2021). Good asset quality, meaning that bank loans and investments have a low risk of default, can increase bank profitability. This allows banks to maintain healthy capital adequacy, as banks have more profits to retain as capital (Chukwuogor et al., 2021). Banks that have higher loan loss reserves tend to show better levels of profitability. These reserves reflect good risk management, where

banks take proactive steps to anticipate possible future losses.(Jigeer & Koroleva, 2023)loan loss reserves (LLR) has a significant positive effect on Return on Assets (ROA)(Kanga et al., 2020; Oleiwi et al., 2019).

Hypothesis 3 (H3): There is a positive influence between asset quality as measured by the loss reserve ratio (LLR) on the profitability of state-owned banks.

Hypothesis 4 (H4): There is a positive influence between asset quality as measured by the loss reserve ratio (LLR) on the profitability of private banks.

Capital Adequacy

Profitability and capital adequacy are closely related. According to research, the capital adequacy ratio with the Capital Adequacy Ratio (CAR) indicator has a positive effect on Return on Assets (ROA). The bank's ability to meet its obligations and bear its losses is measured by the Capital Adequacy Ratio (CAR). Capital adequacy greatly affects bank profitability positively. because it allows the bank to bear the risks and losses that may occur, providing confidence to consumers and investors(Chand et al., 2024; Rohman et al., 2022). Sufficient capital allows banks to operate more stably, even in uncertain market conditions. This stability can help banks maintain or increase ROA.(Haddad et al., 2022; Jigeer & Koroleva, 2023; Sutrisno et al., 2022). With adequate capital, banks can better manage credit and operational risks. This effective risk management can reduce the number of problem loans.(Adeoti & Akinroluyo, 2022; Al-Sharkas & Al-Sharkas, 2022). Kecukupan modal memiliki pengaruh positif terhadap roa (Haddad et al., 2022;Al-Sharkas & Al-Sharkas, 2022; Chukwuogor et al., 2021).

Hypothesis 5 (H5): There is a positive influence between capital adequacy as measured by the capital adequacy ratio (CAR) on the profitability of state-owned banks.

Hypothesis 6 (H6): There is a positive influence between capital adequacy as measured by the capital adequacy ratio (CAR) on the profitability of private banks.

Bank Size

Banking refers to the cost advantages that financial institutions experience as they increase their total assets and scale of operations. Bank size is defined as the total assets held by a bank, measured using the natural logarithm of those total assets.(Chand et al., 2024; Haddad et al., 2022; Isayas, 2022).Another study stated that banks with larger assets tend to have higher efficiency and therefore, are more likely to generate greater profits.(Priharta & Gani, 2023). Meanwhile, several studies show that larger banks can take advantage of better economies of scale through transactional activities, which can increase their profit margins.(Chand et al., 2024; Gazi et al., 2024; Isayas, 2022; Quy & Tuan, 2024).

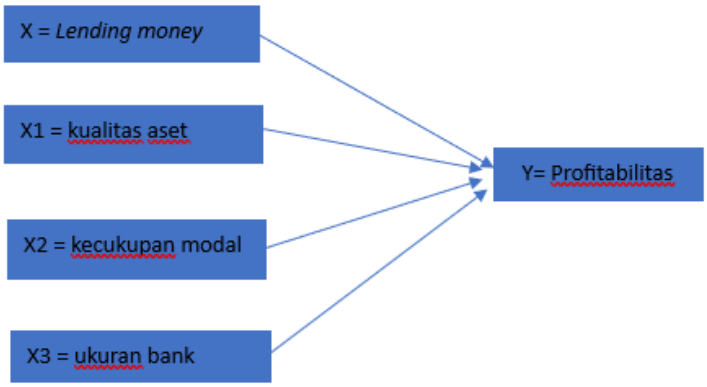
Hypothesis 7 (H7): There is a positive influence between bank size based on total assets on BUMN profitability.

Hypothesis 8 (H8): There is a positive influence between bank size based on total assets on BUMN profitability.

State-owned and Private Banking

The profitability of each bank can differ due to differences in ownership between private banks and state-owned banks, where management strategies, resource allocation, and operational policies implemented by each type of bank can significantly affect their financial performance.(Shandy Utama, 2018). The difference in financial performance between state-owned banks and private banks is caused by factors such as ownership structure, management strategy, business focus, regulation, economic conditions and experience in risk management (Misral et al., 2021).

Hypothesis 9 (H): There is a difference between state-owned banks and private banks in the influence of asset quality, money lending, capital adequacy, and bank size on profitability.



METHODOLOGY

This study applies a quantitative approach. Data is used annually from 2017 to 2023. With complete criteria and data, this study does not include data from 2020 and 2021 due to government policies related to the Loan Restructuring Program which have an impact on the COVID-19 pandemic. Secondary data used in the study come from financial reports from all banks listed on the Indonesia Stock Exchange, consisting of five state-owned banks and 38 private banks. These financial reports were collected during that period. Data is taken from official financial reports such as the Indonesia Stock Exchange (IDX), the Financial Services Authority (OJK), and others.

Variable = Measurement ratio = Formula

Profitability = ROA = (Net profit : total assets) X 100.

Lending money = LDR = (total loans; total savings) X 100.

Asset quality = LLR = (loan loss allowance : total loans) X 100.

Capital adequacy = CAR = (bank capital : risk weighted assets) X 100.

Bank size = Total Assets = total of all assets.

In this study, panel data regression is used to analyze the annual financial ratios of several banks. The data analysis tool used is Eview 12. By using panel data, researchers can see how variables change over time and across banks simultaneously, which allows for a more in-depth analysis of the elements that affect bank profitability.(Gazi et al., 2024). To determine the most suitable model for the analysis, panel data regression is used with a combined model of Fixed Effects (FE) and Random Effects (RE) Models. Chow Test, Hausman Specification

Test, and Multiple Lagrange are used.(Gazi et al., 2021). Continued with the examination of classical assumptions, which includes examination of correlation and heteroscedasticity. Furthermore, examination of hypotheses, partial, and simultaneous are carried out (Isayas, 2022).

RESEARCH RESULT

Model Selection Test

It can be seen in table 1 related to the results of the model selection carried out using the Chow Test, Lagrange Multiplier (LM) Test, and Hausman Test. By using a significance value of 5% to select the right model in conducting research.

Table 1. Results of the Chow Test, Lagrange Multiplier (LM) Test, and Hausman Test.

No	Model testing	Criteria	Probability value		Test results	
			State-owned Enterprises	Private	State-owned Enterprises	Private
1	Chow Test	CEM (prob. value > 0.05) FEM (prob. value < 0.05)	0.87 > 0.05	0.00 < 0.05	***Common Effect Model (CEM)***	*fixed effects model*(BRAKE).
2	Hausman test	REM (prob. value > 0.05) FEM (prob. value < 0.05)	1.89 > 0.05	0.75 >0.05	*Random effects model*(BRAKE).	*Random effects model*(BRAKE).
3	Lagrange Multiplier (LM) Test	CEM (prob. value > 0.05) REM (prob. value < 0.05)	0.55 > 0.05	0.00 < 0.05	***Common Effect Model (CEM)***	*Random effects model*(BRAKE).

Source: Data processed with eviews

Results of the Classical Assumption Test

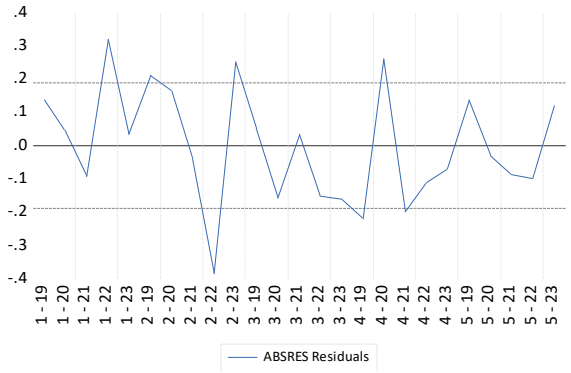
In the Random Effect Model (REM) research model, it is not necessary to use the classical assumption test (Gujarati & Porter (2009). So, this test is only carried out by state-owned banks that use the Common Effect Model (CEM) research model. So the classical assumption test must be carried out by testing

for multicollinearity and heteroscedasticity. Table 2 presents the results of the correlation test with a significance of 0.80. So, it can be concluded that all indicators are free from multicollinearity or pass the multicollinearity test. And graph 1, the residual graph can be seen not to cross the limits (500 and -500), meaning that the residual variance is the same. Therefore, there are no symptoms of heteroscedasticity or pass the heteroscedasticity test (Napitupulu et al., 2021:143). Therefore, it is free from heteroscedasticity.

Table 2. Results of BUMN multicollinearity test

VARIABLES	LDR	LLR	CAR	Total Assets
LDR	1,000	-0.33061	-0.02021	-0.15081
LLR		1,000	0.601089	0.57788
CAR			1,000	0.78961
TOTAL ASSETS				1,000
A value < 0.80 is declared to have passed the multicollinearity test.				

Source: Data processed with eviews



Source: Data processed with eviews

Figure 1. residual graph

Panel Data Regression Results

Table 3. Results of panel data regression of private and state-owned banks on profitability

Dependent Variable (ROA)						
Independent variables	Model 1 state-owned bank			Model 2 Private banks		
	coefficient	T statistics	p-value	coefficient	T statistics	p-value
LDR	-0.03357	-3.3426	0.0032**	0.01557	3.0860	0.0023**
LLR	-0.33047	-3.8202	0.0011**	-0.13650	-1.1354	0.2577
CAR	0.17759	2.7642	0.0120**	-0.01774	-1.8366	0.0679
TOTAL ASSETS	1.60E-09	6.1358	0.0000**	2.97E-10	1.1306	0.2597
OBSERVATION	25			190		
R - square	0.8875			0.0631		

Adjusted R-squared	0.8650	0.0429
F-statistic	39,454	3.1198
Prob (f- statistic)	0.00	0.016
Durbin-Watson statistic	1.9813	2.2642
Note:**significance 5%	T table model 1:2,068 F table model 1:2,866	T table model 2:1,973 F table model 2:2,420

Source: Data processed with eviews

DISCUSSION

Lending Money

Based on the results presented, in model 1 of state-owned banks, this finding states that lending money with the LDR indicator (X) in state-owned banks statistically has a significant relationship to profitability as measured by a significance level of 5%. But it shows a negative coefficient between the two. Where every increase of one unit in LDR will decrease the profitability value by 0.03357 on the profitability of state-owned banks. In other words, it can be concluded that LDR in state-owned banks has a significant negative effect. Therefore, hypothesis 1 (H1) is rejected.

Significant negative impactThis finding supports previous findings Sari et al., (2020) putra, (2020). That high liquidity risk, which makes it difficult for banks to meet deposit withdrawals. In addition, high LDR is often associated with low loan quality, thus increasing the number of non-performing loans which has an impact on decreasing profits. If banks are unable to manage risk well, increasing interest expenses can also reduce profitability, which in turn affects ROA.

In model 2, private banks state that lending money with the LDR indicator (X) in private banks statistically has a significant relationship to profitability as measured by a significance level of 5%. Showing a positive coefficient, there is an increase of one unit in LDR will increase the profitability value by 0.01557 on the profitability of private banks. In other words, it can be concluded that LDR in private banks has a significant positive effect. Therefore, hypothesis 2 (H2) is accepted.

Thus, this study supports previous research Altaee et al., (2024) that LDR has a positive effect on profitability. Because, a high ratio indicates that the bank provides more loans, which has an impact on increasing interest income. It also creates operational efficiency and economies of scale, which can lower unit costs and increase net income. In addition, a healthy LDR can increase customer confidence and attract more deposits, thereby strengthening the bank's liquidity position and profitability.

Asset Quality

Asset quality with LLR (X) indicator in model 1 of state-owned banks statistically has a significant relationship to profitability as measured by a significance level of 5%. But it shows a negative coefficient between the two. Where every increase of one unit in LLR will decrease the profitability value by

0.33047. In other words, it can be concluded that LDR in state-owned banks has a significant negative effect. Therefore, hypothesis 3 (H3) is rejected.

This research supports previous research Butola et al., (2022) that LLR has a negative effect on profitability. Because, the increase in reserves for loan losses reduces net income, because funds that should have gone into profit are allocated to reserves and the allocation of funds for LLR can limit the bank's ability to provide new loans, which has an impact on potential income. A high LLR indicates that the bank has a high proportion of bad or risky loans. This reflects poor asset quality, which can reduce profitability. In addition, a high LLR can reduce investor confidence, which has an impact on cash flow and the bank's ability to generate new investments. Thus, the higher the LLR, the lower the ROA generated by the bank.

In model 2 of private banks, this finding states that asset quality with the LLR indicator (X1) in private banks statistically has an insignificant relationship to profitability as measured by a significance level of 5%. Showing a negative coefficient, every increase of one unit in LLR will decrease the profitability value by 0.13650. In other words, it can be concluded that LLR in private banks does not have a significant effect on profitability. Therefore, hypothesis 4 (H4) is rejected.

Asset quality as measured by llr does not have a statistically significant effect, supporting previous findings Dewi et al., (2023) that llr has no significant effect on roa. Because, accounting practices that use estimates, which do not always reflect actual losses, so they do not have a significant effect on reported profits. In addition, company management tends to focus more on other strategies to increase profitability, such as operational efficiency, which can reduce the impact of LLR. External factors, such as market and economic conditions, may also have a greater influence on ROA. Variations in receivables management policies and methods between companies can produce different results.

Capital Adequacy

This finding states that capital adequacy with CAR indicator (X2) in state-owned banks statistically has a significant relationship to profitability as measured by a significance level of 5%. With a positive coefficient, every increase of one unit in CAR will increase the profitability value by 0.17759 on the profitability of state-owned banks. In other words, it can be concluded that CAR in state-owned banks has a significant positive influence. Thus, hypothesis 5 (H5) is accepted.

High capital adequacy indicates that high CAR indicates the bank's ability to absorb losses, increase investor and customer confidence, and have a positive impact on profits. In addition, banks with good CAR tend to have lower funding costs and are more attractive to investors, so they can attract more funds for investment. Good risk management practices are also often reflected in high CAR, helping banks avoid losses from problem loans. Overall, the positive relationship between CAR and profitability indicates that sufficient capital

increases the bank's chances of generating profits, which supports previous findings Haddad et al., (2022) And Koroleva et al., (2021)

In model 2, private banks state that capital adequacy with CAR indicator (X2) in private banks is statistically insignificant to profitability as measured by a significance level of 5% and shows a negative coefficient. Where every increase of one unit in CAR will decrease the profitability value by 0.01774. In other words, it can be concluded that CAR in private banks does not have a statistically significant effect even though it shows a negative coefficient. Hypothesis 6 (H6) is rejected.

Capital adequacy does not have a significant effect, which supports previous findings Alshiqi & Sahiti, (2021) and Rohman et al., (2022). That, other variables may have a greater impact on profitability and bank management focus more on cost management and marketing strategies, which may divert attention from the role of CAR.Negative coefficientbecause, the bank's efforts to cover liquidity risk (Liquidity Risk, LLR). When banks hold more capital to meet CAR requirements, they may reduce the amount of loans given, thereby reducing interest income. This can result in a decrease in ROA, because banks focus more on maintaining liquidity than generating profits.

Bank Size

This finding states that the size of the bank with the total asset indicator (X) in private banks statistically has a significant relationship to profitability as measured by a significance level of 5% and shows a positive coefficient for every one unit increase in total assets, the profitability value will increase by 1.60E-09. In other words, it can be concluded that total assets in state-owned banks have a significant positive effect. Hypothesis 7 (H7) is accepted.

Bank size has a positive impact supporting previous findings Priharta & Gani, (2023) and Quy & Tuan, (2024) that larger banks are usually able to achieve better cost efficiency, thereby increasing profitability. As a result, the ROA of large banks tends to be higher than that of smaller banks.

This finding states that the size of the bank with the total asset indicator (X) in private banks statistically does not have a significant relationship to profitability as measured by a significance level of 5%. But it shows a positive coefficient between the two. Where every increase in one unit in total assets will increase the profitability value by 2.97E-10. In other words, it can be concluded that total assets in private banks do not have a significant effect. Therefore, hypothesis 8 (H8) is rejected

This study supports previous studies that bank size is not significant because large banks may not be able to utilize economies of scale well, which has an impact on profitability. Then, tight competition in the market can hinder the ability of large banks to generate profits from assets. Also, aspects of management and operational efficiency may have a greater influence on profitability than the size of the bank itself Rohman et al., (2022)And Altaee et al., (2024).

Differences Between State-Owned and Private Banks

Based on the results of the simultaneous test of model 1 state-owned banks and model 2 private banks, all variables have a significant influence, as shown by the calculated f of model 1, which is 39,454, which is greater than the table f of 39,454.2,866 andThe significance value of 0.00 is smaller than 0.05. The calculated f of model 2 is 3.1198 which is greater than the table f of 0.05.2,420 andsignificance value of 0.00 is smaller than 0.016. Although it has similarities in the overall influence. However, the difference in the influence of various factors on profitability between state-owned banks and private banks reflects the different operational characteristics, strategies, and risks of the two types of banks. Therefore, hypothesis 9 (H9) is accepted.

This finding supports previous findings Christian, (2009) that there are differences between state-owned and private banks. In this finding, state-owned banks tend to experience negative impacts from lending money and asset quality, while private banks show more positive results in lending money but are not significant in asset quality and capital adequacy. The influence of variables on Return on Assets (ROA) reveals significant differences between state-owned banks and private banks. In the loan to deposit ratio (LDR), state-owned banks show a negative coefficient, indicating that an increase in LDR is associated with a decrease in ROA, reflecting a greater risk in lending. In contrast, private banks have a positive coefficient, meaning that an increase in LDR contributes to an increase in ROA, indicating better efficiency in utilizing deposits.

In the context of Loan Loss Reserves (LLR), state-owned banks have a significant negative coefficient, indicating a large and negative impact on ROA due to the need to provide loss reserves. Meanwhile, private banks show an insignificant negative coefficient, reflecting more effective risk management. Regarding the Capital Adequacy Ratio (CAR), state-owned banks show a significant positive coefficient, indicating that adequate capital supports stability and capacity to face risks. On the other hand, private banks show a negative coefficient that is close to significant, which may indicate limitations in credit expansion.

Finally, for Total Assets, state-owned banks show a very small but significant coefficient, indicating that the increase in total assets has a positive contribution to ROA. In contrast, private banks show an insignificant positive coefficient, indicating that total assets do not have a clear impact on ROA. Overall, these differences reflect the characteristics in risk management, operational efficiency, and business strategies that are different between the two types of banks.

The state-owned bank model is much better at explaining ROA variability compared to the private bank model. The state-owned bank has a very significant model, while the private bank model is also significant but not as strong as the state-owned model. Because, this significant difference could be caused by external factors, higher data complexity in private banks, or the lack of important variables in their models. Model 1 has a Durbin-Watson of 1.9813 and Model 2 has 2.2642, both indicating no autocorrelation problems, which is a positive result in regression analysis.

CONCLUSION AND RECOMMENDATIONS

Based on the findings, it is concluded that there are significant differences in the influence of variables on Return on Assets (ROA) between state-owned banks and private banks. In state-owned banks, the Loan to Deposit Ratio (LDR) has a significant negative effect on profitability, where an increase in LDR is related to a decrease in ROA. In contrast, private banks show a significant positive effect, indicating efficiency in utilizing deposits. In terms of Loan Loss Reserves (LLR), state-owned banks also show a significant negative impact on profitability, while private banks have an insignificant negative coefficient, reflecting better risk management.

Regarding the Capital Adequacy Ratio (CAR), state-owned banks show a significant positive effect, indicating that sufficient capital supports stability, while private banks show a negative coefficient that approaches significance. For total assets, state-owned banks have a significant positive contribution to ROA, while private banks do not show a significant effect.

The differences in the effects of these variables reflect the different operational characteristics, strategies, and risks between the two types of banks. The state-owned bank model is better at explaining ROA variability than the private bank model, which may be due to external factors or data complexity. Thus, the hypotheses tested in this study show mixed results and provide insight into the dynamics of profitability across the two types of banks.

These findings are expected to imply that state-owned banks need to strengthen risk management by reducing loss reserves and increasing the efficiency of deposit use to improve profitability. Meanwhile, private banks should aggressively utilize deposits for loans to increase interest income, while still paying attention to asset quality to avoid greater risks. Capital adequacy is also an important factor, especially for private banks that need to strengthen their capital position. Both types of banks should re-evaluate their asset growth strategies with a focus on operational efficiency and better risk management.

ADVANCED RESEARCH

Further research is recommended to add other internal and external factors that affect profitability, including operational costs to operational income, public savings, organizational governance, and so on. External factors that need to be studied further include economic growth, inflation, money supply, interest rates, Regulation, Deposit Insurance Corporation, or Financial Services Authority. Further research can also test more deeply related to the effect of capital adequacy on profitability and also differences between banks.

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