

**THE INFLUENCE OF LIQUIDITY ON PROFITABILITY IN INDONESIA PEOPLE'S BANK  
(PERSERO) TBK FOR THE PERIOD 2015-2023**

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**Abstract**

*The purpose of this research is to determine whether liquidity (LDR) affects profitability (ROA) at PT Bank Rakyat Indonesia (Persero) Tbk. The method used is the quantitative method, to test the influence of the independent variable on the dependent variable. The population of this study consists of all financial report data from PT Bank Rakyat Indonesia (Persero) Tbk from 2015 to 2023 on a quarterly basis, and the sample taken includes the balance sheet and income statement. The data collection technique used is documentation, with the analyzed data employing financial ratios and processed through simple linear regression equations. The research results indicate that Liquidity (LDR) has a negative and insignificant effect on Profitability (ROA). In other words, fluctuations in LDR do not directly affect profitability (ROA), so banks should consider other factors that may be more dominant in influencing the profits of Bank Rakyat Indonesia (Persero) Tbk.*

**Keywords:** Liquidity, Loan to Deposit Ratio (LDR), Profitability, Return on Assets. (ROA).

## INTRODUCTION

The Republic of Indonesia Law No. 10 of 1998 states that banking is a business entity that collects funds from the public in the form of deposits and redistributes them in the form of loans or other forms with the aim of improving the standard of living for many people. Based on this explanation, banking activities play a role in supporting a country's economy through investment, business growth, and increased consumption. A bank functions as an intermediary between parties that have surplus funds and those that need funds. Banking also plays an important role in enhancing public trust in banks. This level of trust is greatly influenced by information regarding the health of the bank. Good bank management will encourage the creation of a healthy financial system, which ultimately has a positive impact on the bank's performance itself. (Kasmir, 2019: 96).

Optimal profit growth indicates that the company's operations are running effectively and efficiently. For banking management, this profit growth is considered important because it relates to the level of profitability. The health of a bank is to assess the bank's performance over a specific period, indicating how the results of banking operations will evolve. Profitability is a way to measure a bank's performance, defined as a company's capacity to generate income over a specific period of time. (Gitman & Zutter, 2018: 354).

The bank's profitability ratio in this context is measured using Return on Assets (ROA). ROA emphasizes the company's ability to generate income from its operations in relation to its total assets, allowing the efficiency of asset management by the company to be reflected in the percentage of this ratio. (Sari dan Hadriyani, 2019: 49).

Liquidity is one of the indicators that can affect profitability. Liquidity can be used to project a company's ability to repay its debts. Typically, these obligations take the form of short-term debt. Companies with good liquidity can settle their short-term debts, indicating that they are in a liquid state. (Sari dan Hadriyani, 2019: 41). The total assets for the year 2024 owned by Bank BRI currently amount to IDR 1,989 trillion. This bank continues to show significant asset growth, reflecting its position as one of the largest and most stable banks in Indonesia. BRI focuses on empowering the MSME sector, which is the backbone of Indonesia's economy, through various financial products and services (CompaniesMarketCap). In 2020, Bank BRI was also recorded as a state-owned enterprise with the largest dividend contribution to the state, amounting to 26.4% or approximately IDR 11.7 trillion. (CNBC News, 2020). The following is data regarding general information from the profitability and liquidity financial report by Bank Rakyat Indonesia (Persero) Tbk for the period 2015-2023.

**Table 1. Development of Profitability (ROA) of PT Bank Rakyat Indonesia (Persero) Tbk for the Period 2015-2023.**

No	Year	Profitability (ROA)	Growth
1	2015	2,89%	0
2	2016	2,62%	-9,3%
3	2017	2,58%	-1,5%
4	2018	2,50%	-3,1%
5	2019	2,43%	-2,8%
6	2020	1,23%	-49,4%
7	2021	1,83%	48,8%
8	2022	2,76%	50,8%
9	2023	3,08%	11,6%

Source: BRI Financial Report (processed data) 2024

Based on Table 1, it can be seen that the profitability level (ROA) of PT. Bank Rakyat Indonesia (Persero) Tbk during the period of 2015-2023 has experienced fluctuations. From 2015 to 2020, there was a significant decline, dropping from 2.89% to 1.23%. The decrease in profitability, measured by Return On Assets (ROA), was due to several factors, including rising commission costs, adjustments resulting from weakening interest margin growth due to the impact of rising benchmark interest rates, as well as a decline in net profit and asset quality due to the COVID-19 pandemic.

Then, from 2021 to 2023, ROA began to improve for profitability, rising from the previous low of 1.23% to 3.08%. This increase in ROA is certainly linked to the improved performance of the company, driven by efficient management of revenue and assets. As determined by Bank Indonesia, a good Return On Assets (ROA) standard is 1.5%. However, as seen in the data above, the ROA achieved by Bank BRI from 2015 to 2023 has been above 1.5%. Although Bank BRI's ROA is considered to have met the standard set, the ROA obtained from 2015 to 2023 has experienced fluctuations with a downward trend. Based on the calculation results of the profitability ratio with the decline in ROA, it indicates that the company's profit or profitability has experienced a significant decrease, suggesting that PT Bank Rakyat Indonesia (Persero) Tbk may be

facing issues. A declining asset value (ROA) indicates that the bank has a lower ability to utilize its assets and does not provide high returns, thus not encouraging the bank to generate optimal profits. (Gitman & Zutter, 2018: 304). As a result, if banking activities are disrupted, this will lead to a decrease in revenue and a decline in profit margins. The decline in profit levels generated from profitability, as well as the bank's inability to manage funds from underperforming assets. The existence of banking institutions, which is crucial for the economic stability of a country, must not be disrupted, so this issue needs to be addressed. The banking industry heavily relies on public trust, so they must remain healthy. Health maintenance of banks is carried out to reduce banking risks. Several factors that can influence a bank's profitability include capital adequacy, asset quality, and liquidity (Koch & MacDonald, 2020: 106). This study highlights the impact of liquidity on profitability, where liquidity measured using the Loan to Deposit Ratio (LDR) is one of the factors affecting Return on Assets (ROA), considering the conflict of interest between liquidity and profitability (Al-Harbi, 2018: 347). LDR is an indicator of a bank's liquidity. If a bank's LDR ratio is at a healthy level, it indicates that the bank can effectively channel credit from third-party funds to the public, allowing the bank to maintain its liquidity and meet its short-term obligations well.

**Table 2. Development of Liquidity (LDR) of PT Bank Rakyat Indonesia (Persero) Tbk for the Period 2015-2023**

No	Year	Liquidity Ratio (LDR)	Growth
1	2015	84,38%	0
2	2016	85,28%	1,1%
3	2017	86,80%	1,8%
4	2018	88,22%	1,7%
5	2019	88,06%	- 0,2%
6	2020	86,79%	-1,4%
7	2021	87,33%	0,6%
8	2022	82,52%	-5,5%
9	2023	88,18%	6,9%

Source: BRI Financial Report (processed data) 2024

Based on Table 2, it can be seen that the development of the Loan to Deposit Ratio (LDR) of PT. Bank Rakyat Indonesia (Persero) Tbk for the period 2015-2023 is stable, averaging around 80%. Although the LDR ratio obtained by Bank BRI has experienced fluctuations, rising and falling from 2015 to 2023, it remains within a stable range, still around 80%. According to Bank Indonesia Regulation No. 17/11/PBI/2015, the tolerance limit for the LDR value is between 80%-92%. Therefore, from this data, it can be stated that the liquidity level, as measured by the LDR, at Bank BRI is in good condition as it meets the standards. Thus, Bank BRI is able to meet its short-term obligations or effectively distribute its credit funds to the community, allowing the bank to maintain its liquidity.

The data above explains that the liquidity ratio, indicated by the Loan to Deposit Ratio (LDR), is in a stable and good condition; however, this is not accompanied by an increase in Return on Assets (ROA). In this case, profitability should also rise because the company has been able to disburse loans from third-party funds or meet its short-term obligations, which means it can generate significant profits. Ideally, as liquidity increases, profitability should also increase; however, in this case, liquidity is stable while profitability is declining. This is in contrast to the opinion of Sugeng B (2019: 155), who states that if the Loan to Deposit Ratio (LDR) increases, then the Return on Assets (ROA) will also increase, because a higher LDR indicates a higher distribution of credit, which can boost interest income, ultimately enhancing profitability. Liquidity has a positive and quite significant impact on profitability, as shown by related studies (Mambu, Maryam, & Paulina (2022); and Sumarni, Gustina & Nurftirani (2023)). On the other hand, research (Efendi, I, & Na (2024); and Siagian & Rodiana (2022)) indicates through their studies that profitability is not significantly influenced by liquidity. Based on the previous research that has been described, there is inconsistency, which creates a gap for further research on the impact of liquidity on profitability.

## **RESEARCH METHOD**

This research employs a quantitative method, which is a systematic scientific approach used to analyze components and phenomena as well as the cause-and-effect relationships among them. Quantitative research is a structured study of phenomena that involves collecting information or data that can be quantified using computational, mathematical, or statistical methods. (Abdullah et al, 2021: 1).

This research approach uses an associative or relational approach, where the study aims to inquire about the relationship between two or more variables. (Abdullah et al, 2021: 19). This type was chosen because it aligns with the research objectives,

which are to test whether the independent variable (liquidity) affects or has a relationship with the dependent variable (profitability) in this study.

The guidelines for the process or steps of implementation that are systematically carried out in research, starting from the preparation stage to the reporting of research results, are outlined in the Research Design (Sugiyono, 2018: 75). A research design is necessary to achieve research outcomes that meet the desired objectives. The research design also provides an overview of the procedures and data collection needed in the study.

Population is a generalization area consisting of objects or subjects that possess certain qualities and features selected by the researcher for study and then drawing conclusions. The population in research can be defined as the entire object of study, which may include living beings, objects, phenomena, test values, or events as data sources, reflecting certain characteristics of the research (Abdullah et al., 2021: 80). The population in this study includes all annual and quarterly financial report data of PT Bank Rakyat Indonesia (Persero) Tbk for the period 2015-2023, published by the Indonesia Stock Exchange (IDX) on the website [www.idx.co.id](http://www.idx.co.id). Sample

A sample is a part of a population that reflects the quantity and characteristics of that population. When the population is large and researchers cannot study the entire population due to limitations in funding, manpower, and time, researchers can use a sample taken from a representative population (Abdullah et al, 2021: 81).

In this study, the sample is taken from the financial position reports and income statements of PT Bank Rakyat Indonesia (Persero) Tbk from 2015 to 2023. The data was obtained from annual and quarterly financial reports published on the Indonesia Stock Exchange (IDX) through [www.idx.co.id](http://www.idx.co.id) and the official website of PT Bank Rakyat Indonesia (Persero) Tbk at [www.bri.co.id](http://www.bri.co.id). Data was collected quarterly, resulting in a total sample of 36 (4 quarters x 9 years). The use of these 36 samples aims to ensure that regression tests and classical assumption tests can be conducted optimally.

The approach applied in data collection and research is documentation, which involves gathering secondary data and information related to the variables being studied, in this case, financial reports in the form of annual and quarterly reports from PT Bank Rakyat Indonesia (Persero) Tbk.

The problem formulated in this research will be addressed by applying various data analysis techniques. This research employs data analysis methods to examine whether the independent variable, namely Liquidity (LDR), affects the dependent variable, namely Profitability (ROA). The techniques used include descriptive analysis

to explain liquidity and profitability, as well as inferential statistical analysis (simple linear regression). A simple linear regression model is used to assess the relationship between the independent and dependent variables, in order to gain a comprehensive understanding of the interrelationship among the variables. The data analysis process was conducted using SPSS for Windows software.

## **RESULT AND DISCUSSION**

The discussion of the research results will provide an overview of the analysis and findings of this study regarding the alignment between various theories that have been examined, the opinions of experts, and previous research, all of which have been outlined in the previous discussion. Below is an explanation of the research findings obtained in this study. The results of the hypothesis test indicate that the Loan to Deposit Ratio (LDR) has a negative and insignificant effect on profitability (ROA) at PT. Bank Rakyat Indonesia (Persero) Tbk from 2015 to 2023. This suggests that increases or decreases in the Loan to Deposit Ratio (LDR) do not significantly or directly affect the increases or decreases in the company's profitability (ROA). In line with the results of the liquidity ratio calculations in this study, it can be observed that the Loan to Deposit Ratio (LDR) at PT. Bank Rakyat Indonesia (Persero) Tbk has experienced fluctuations but within a narrower range. It can be seen in Table 5 the results of liquidity calculations, where from 2016 to 2018 the Loan to Deposit Ratio (LDR) experienced an increase, then in 2019 and 2020 the LDR decreased again due to the COVID-19 pandemic. The LDR improved again in 2021, but in 2022 it experienced a significant decline compared to previous years, due to the increase in total deposits. Subsequently, in 2023, the LDR saw a significant increase supported by an 11% rise in credit.

The LDR ratio of BRI Bank, which ranged from 82% to 88% during the period of 2015-2023, indicates that the bank maintained a relatively stable proportion between the loans granted and the deposits received. LDR can be calculated by dividing the amount of credit provided by the bank by the total third-party funds (DPK) collected from customers. Thus, BRI Bank's LDR still indicates sufficient liquidity to meet short-term obligations and maintain smooth operations, even though the majority of customer funds have been disbursed as loans. Looking at Table 5, the results of the liquidity calculations (LDR) from the first quarter to the fourth quarter of each year show that the amount of credit disbursed by Bank BRI has increased in line with the rise in deposits. The increase in the LDR component indicates that banks are actively expanding credit distribution to utilize the funds collected from customers. However, if the LDR continues to rise close to the upper limit, it could signal that banks are increasingly using deposit funds for credit financing, which may reduce the bank's ability to cope with sudden withdrawals by customers. Thus, although LDR reflects efficiency in credit distribution, it is important for banks to maintain a balance to

ensure they have adequate liquidity reserves to face urgent needs or market fluctuations. The continuous increase in LDR needs to be monitored so that banks can maintain their ability to ensure financial stability in fulfilling customer obligations (Gitman & Zutter, 2018: 556). Although the Loan to Deposit Ratio (LDR) increased from 86.80% in 2017 to 88.28% in 2018, the Return on Assets (ROA) actually decreased from 2.58% to 2.50%. This indicates that despite the increase in LDR, which suggests that banks are disbursing more credit from the funds received, this increase did not directly impact profitability. In 2020, there was a drastic decline in ROA, from 2.43% to 1.23%. Meanwhile, LDR only slightly decreased from 88.06% to 86.79%. This suggests that factors other than LDR may have had a greater influence on the bank's profitability during that year, such as increased credit risk due to uncertain economic conditions.

From the research results, it was found that LDR has a negative and insignificant effect on ROA. Both increases and decreases in LDR affect the ROA of Bank BRI, but within a small range and not significantly, or it only has a slight impact. It can be seen in Table 4 the results of the profitability calculation (ROA), where each year the net profit and total assets of BRI Bank always show an increase or stability in each ROA component from the first to the fourth quarter. Although there was a significant decline in 2020 due to the COVID-19 pandemic, both net profit and total assets in that year still increased. One of the reasons that LDR does not significantly affect ROA is because PT. Bank Rakyat Indonesia (Persero) Tbk has diversified sources of income. The bank has various financial products aside from lending activities that contribute to profitability, ranging from interest income and investments to other operational income such as fee-based income and recovery income. According to the financial reports of BRI Bank, each year the income from interest, investments, fee-based income, and recovery income shows good earnings. The highest interest income in 2019 grew by 29.6%. Meanwhile, operational income in 2020 increased by 42.20%. Additionally, the highest fee-based income in 2016 was 25.4%, and recovery income in 2022 was 38.45%.

This diversification reduces dependence on interest income from credit activities, as represented by the Loan to Deposit Ratio (LDR). The diversification of Bank BRI's income means that fluctuations in the LDR do not have a significant impact on Return on Assets (ROA) because the bank has various other income sources that can support overall profitability. This diversification helps reduce dependence on a single revenue sector (LDR) and provides stability in the face of changes in the credit market. Thus, from the analysis that has been conducted, it can be concluded that the liquidity (LDR) of BRI Bank, whether experiencing a decline or an increase, will not significantly affect profitability (ROA), as ROA shows a stable value over time. This serves as evidence that at BRI, despite fluctuations, whether in the form of significant decreases or increases in liquidity value, it does not affect the company's profitability. Bank Rakyat Indonesia (BRI) has a very efficient liquidity management



policy that allows the company to maintain a balance between liquidity availability and operational needs without significantly impacting profitability. This efficiency allows the bank to maintain a stable LDR level without sacrificing ROA. While liquidity is important for ensuring the smooth operation of the bank, its relationship with profitability is not always direct. (Sugeng, B. 2019). Many other factors can influence profitability, such as operational efficiency, asset quality, and risk management strategies. This is the reason why an increase or decrease in LDR does not always directly impact changes in ROA.

Liquidity measured by the Loan to Deposit Ratio (LDR) often does not have a direct correlation with a bank's profitability. This is because a bank's profitability is influenced by many other factors such as operational costs, management efficiency, and macroeconomic conditions. (Kasmir, 2019). In some cases, banks with a high Loan-to-Deposit Ratio (LDR) may not demonstrate high profitability due to an increase in credit risk that is not offset by good management.

The influence of the Loan to Deposit Ratio (LDR) on Return on Assets (ROA) can be insignificant, especially when banks have strong alternative income sources such as fee-based income (Dendawijaya, 2018). Thus, even if the LDR changes, its impact on ROA could be minimal if the bank can effectively manage non-interest income and operational efficiency.

Based on the Trade-Off theory, this research shows that liquidity has an effect, but it is not significant on profitability. This is due to the fact that banks have reached an optimal trade-off between the two. This means that the bank has balanced its Loan to Deposit Ratio (LDR) at a sufficiently optimal level, where the bank is liquid enough to meet short-term obligations but not excessive in granting credit, thus not generating a significant increase in profitability.

In addition, the results of this study are relevant or in line with the findings of research conducted by Efendi, I, and Na (2024) as well as Siagian and Rodiana (2022), which show that the loan-to-deposit ratio (LDR) does not affect the profitability of the company. Thus, the conclusion that can be drawn from this research is that the hypothesis is rejected, where partially, Liquidity (LDR) does not have a positive and significant effect on profitability at PT Bank Rakyat Indonesia (Persero) Tbk.

## **CONCLUSION**

The conclusion that can be drawn from the results and discussion of this research indicates that the influence of the Liquidity variable (LDR) on Profitability at Bank Rakyat Indonesia (Persero) Tbk for the period 2015-2023 is as follows:

Based on the research findings on PT Bank Rakyat Indonesia (Persero) Tbk, it can be concluded that Liquidity, measured through the Loan to Deposit Ratio (LDR),

does not have a significant effect on Profitability, measured by Return on Assets (ROA) during the analyzed period. This is in accordance with the hypothesis testing results (t-test), where  $t$  calculated  $< t$  table ( $-0.116 < 1.6896$ ) and the significance value is greater than 0.05 ( $0.908 > 0.05$ ). This indicates that fluctuations in liquidity levels do not directly affect the bank's ability to generate profits from managed assets. Other factors beyond liquidity are likely more dominant in determining the profitability of Bank BRI, so the LDR does not serve as the main indicator in measuring its financial performance during the research period.

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