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DESCRIPTIVE OF QUANTITATIVE DATA | SUPPLEMENTARY

The Effect of Cash Ratio on Return on Asset (ROA) at PERUMDA BPR Garut

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Abstract: The banking industry, especially rural banks (BPR), has a vital role in the local and national economy. This study aims to analyse the effect of Cash Ratio on Return On Assets (ROA) at Perumda BPR Garut. The method used is quantitative research with an associative approach, in which the relationship between variables is tested through regression analysis. The population of this study is the annual financial statements of Perumda BPR Garut for the period 2017-2023, with purposive sampling technique to select samples that meet certain criteria, namely financial reports that have been published during that period. This study used a sample of seven annual financial reports. The results showed that Cash Ratio had no significant effect on ROA. Although there is a weak relationship between the two variables, other factors, such as asset management and credit quality, affect bank performance more. The implication of this study is that it is important for the management of Perumda BPR Garut to pay attention to the management of other factors in increasing profitability, other than relying solely on liquidity ratios.

Keywords: Cash Ratio, Return on Asset

1. INTRODUCTION

The banking industry in Indonesia has experienced rapid development in recent decades, driven by technological advances and increasingly complex consumer demands. Banks play an important role in the economy as financial institutions that collect and channel funds, as well as manage risks. Bank performance, especially in terms of profitability and liquidity, is a key indicator to assess the financial health of banks. Therefore, it is important to understand the factors that affect profitability, one of which is financial ratios such as Cash Ratio which can affect Return on Asset (ROA). This research is urgent to do because of the importance of knowing how liquidity factors such as cash ratio can directly affect bank profitability, especially in smaller scale banks such as Perumda BPR Garut, which is the object of this research.

The selection of Perumda BPR Garut as the object of research is based on the existence of this bank as a Regionally-Owned Enterprise that has unique characteristics. BPR Garut operates in a region that requires special attention in terms of liquidity management and profitability, given its heavy reliance on financing activities at the local level. In contrast to commercial banks in general, Perumda BPR Garut focuses more small and medium-sized financing and has a different financial structure from other large banks. This study is important to identify whether factors such as cash ratio can influence the performance of Perumda BPR Garut directly in a more limited context but highly relevant to the dynamics of the regional economy. This research will focus on two main variables, namely Cash Ratio and Return on Assets (ROA). Cash Ratio is a liquidity indicator that measures the bank's ability to meet its short-term obligations using cash or cash equivalents. Meanwhile, Return on Assets (ROA) measures the bank's ability to generate profits relative to its total assets. These two variables are interrelated, where good cash ratio management can strengthen the bank's liquidity position and ultimately support better profitability (ROA). Therefore, the purpose of this study is to



explore the effect of cash ratio on ROA at Perumda BPR Garut, and provide a deeper understanding of the relationship between liquidity and profitability in regional banks.

Based on previous studies, several studies have discussed the influence of factors such as leverage, firm size, and financial ratios on bank profitability. For example, Junaedi (2020) stated that financial ratios such as Current Ratio, Debt to Equity Ratio, and Total Asset Turnover affect ROA. However, these studies focus more on commercial banks or large-scale banks. Research that is more focused on rural banks (BPR), especially in the context of the effect of cash ratio on ROA, is still very limited. Recent studies such as those conducted by Meilanti and Ahmad (2023) and Ella and Argo (2023) show that cash ratio has a significant influence on ROA, but there is still a void in the literature that discusses this in the context of Perumda BPR Garut. Therefore, this research can fill that gap. This research offers novelty by focusing on the effect of cash ratio on ROA in Perumda BPR Garut, a topic that has not been widely explored in previous studies, especially in rural banks with special characteristics. The novelty of this research lies in a more in-depth study of liquidity factors in regional banks and their influence on profitability. The benefit of this study is to provide insight to the management of Perumda BPR Garut and related parties in managing liquidity and financial performance more effectively, so as to increase profitability and financial stability. The purpose of this study is to determine the development of cash ratio and ROA at Perumda BPR Garut, and to analyse the effect of cash ratio on ROA, which in turn can be a reference in managerial decision making in the regional banking sector.

2. LITERATURE REVIEW

2.1. Cash Ratio

Cash Ratio is one of the important indicators used to measure the bank's ability to meet short-term obligations using cash or cash equivalents. This ratio is very relevant in assessing bank liquidity, because the cash ratio provides an overview of how much percentage of short-term liabilities can be repaid with liquid assets owned by the bank. If the cash ratio is too low, the bank will have difficulty meeting its short-term obligations, which may affect its financial stability and operational performance. According to Sungkowo (2024), a higher cash ratio indicates the bank's ability to deal with liquidity pressures and increases the confidence of investors and customers. However, if it is too high, this ratio may indicate unoptimised cash utilisation, as uninvested cash tends to generate lower earnings. Sungkowo (2024) also stated that unstable fluctuations in the cash ratio can have a negative impact on bank profitability, especially related to the low interest income that can be earned from cash funds that are not used for financing. In the context of Perumda BPR Garut, maintaining the right balance of cash ratio is crucial to maintain financial stability and drive profitability growth.

2.2. Cash Ratio

Return on Assets (ROA) is an indicator used to assess the extent to which a bank can generate profits from its total assets. The higher the ROA, the more efficient the bank is in using its assets to generate profits. ROA is often used as the main indicator in evaluating bank performance and profitability. According to Nurhayati (2020), ROA provides an overview of the effectiveness of asset management and management in generating profits, which is very important for investors and interested parties in making investment decisions.

Rachmat (2023) also added that ROA provides in-depth information about the quality of asset management, which includes the bank's ability to optimise the use of financial resources to achieve profitability targets. ROA is strongly influenced by various factors, such as cash management, financing structure, and the quality of loans granted. In this study, ROA is used as the main variable to assess the performance of Perumda BPR Garut in generating profits based on total assets managed. A high ROA indicates that the bank is able to use assets efficiently to generate profits.



2.3. Effect of Cash Ratio on Return on Assets (ROA)

The influence between cash ratio and ROA has been the subject of research in various sectors, including banking. The study by Eldiani (2024) shows that cash ratio can affect ROA through its ability to maintain liquidity stability, which allows banks to be more flexible in making investment or lending decisions. Banks that have an adequate cash ratio can not only fulfil their short-term obligations, but can also allocate funds to more productive activities that support the achievement of higher ROA. On the other hand, a study by Eldiani (2021) confirms that good liquidity management, through ratios such as cash ratio, can improve the effectiveness of capital management and help banks deal with liquidity risk. Banks with a higher cash ratio can avoid a shortage of funds for operations and maximise profits from their assets, which ultimately contributes to an increase in ROA.

Previous studies, such as those conducted by Rachmat (2023) and Sungkowo (2024), have shown the relationship between financial ratios such as cash ratio and profitability performance, but there is still a gap in terms of research focus on rural banks (BPR), especially Perumda BPR Garut. Some studies such as those conducted by Eldiani (2024) and Sungkowo (2024) focus on commercial banks or large banks, while BPRs have unique characteristics in terms of financing structure and scale of operations that require more in-depth analysis. In this case, this study seeks to fill the gap by focusing on Perumda BPR Garut, which is a bank with smaller characteristics and more focused on regional financing. Therefore, it is important to analyse whether liquidity factors such as cash ratio have a significant influence on profitability (ROA) in Perumda BPR Garut, given that this bank has limitations in terms of access to large capital markets.

From this literature review, it can be concluded that cash ratio and Return on Assets (ROA) are two variables that have an important role in determining the financial performance of banks. Cash ratio reflects the bank's liquidity and its ability to fulfil short-term obligations, while ROA shows the bank's efficiency in generating profits from its assets. These two variables have a close relationship, where good cash ratio management can increase ROA by providing greater financial flexibility for banks. This study aims to further analyse the effect of cash ratio on ROA, especially at Perumda BPR Garut, which is expected to make a significant contribution to the financial management and performance of regional banks in Indonesia.

3. RESEARCH DESIGN AND METHOD

This research uses quantitative methods with an associative approach. Quantitative methods are used to test hypotheses by collecting numerical data which is then analysed statistically. The associative approach was chosen to identify the relationship between two variables, namely Cash Ratio as the independent variable and Return On Asset (ROA) as the dependent variable (Yusuf Tojiri, M. M., Putra, H. S., & Nur Faliza, S. E., 2023). This method aims to see the extent to which changes in Cash Ratio can affect ROA at Perumda BPR Garut during the specified period.

3.1. Population and Sample

This study uses non-probability sampling technique with purposive sampling method to determine the sample. The sample taken is the annual financial report of Perumda BPR Garut for the period 2017-2023 published by the Financial Services Authority (OJK). The purposive sampling technique was chosen because researchers only need data from a specific period, namely financial reports that have been published for seven consecutive years (Yusuf Tojiri, M. M., Putra, H. S., & Nur Faliza, S. E., 2023).

3.2. Data Analysis Technique



In analysing the data, this study used several statistical techniques. Descriptive analysis is used to describe the data that has been collected without the aim of making generalisations (Sugiyono, 2020). Furthermore, the simple linear regression test is used to test the effect of Cash Ratio on ROA, considering that both are interrelated variables (Sugiyono, 2020). The product moment correlation test is used to test how strong the relationship is between the two variables, and the coefficient of determination (R^2) test to determine the extent to which the independent variable (Cash Ratio) can explain the dependent variable (ROA). Finally, hypothesis testing is done using the t test to determine the significance of the effect of Cash Ratio on ROA (Sugiyono, 2019).

4. RESULT AND DISCUSSION

4.1. Descriptive Analysis

Table 1. Descriptive Statistics Test Results

Variables	Min	Max	Mean	Std. Dev.
Cash Ratio (X)	17.51	29.73	22.55	3.97
ROA (Y)	2.69	3.57	3.12	0.47

Based on the results of the descriptive statistical test above, it can be concluded that:

1. Cash Ratio (X) variable: The minimum value of Cash Ratio is 17.51, while the maximum value reaches 29.73. The average Cash Ratio is 22.55 with a standard deviation of 3.97, which indicates a relatively large variation in Cash Ratio data during the study period.
2. ROA (Y) variable: The minimum value of ROA is 2.69, while the maximum value reaches 3.57. The average ROA is 3.12 with a standard deviation of 0.47, showing a smaller variation compared to the Cash Ratio.

4.2. Simple Linear Regression Test

Simple linear regression test was conducted to determine the effect of Cash Ratio on ROA. The results of this regression analysis can be seen in the following table:

Table 2, Regression Coefficient of Cash Ratio on ROA

Coefficient	B	Std. Error	t	Sig.
(Constant)	3.48	0.878	3.97	0.01
Cash Ratio	-0.016	0.038	-0.41	0.697

Based on the table above, the regression coefficient for Cash Ratio on ROA is -0.016 with a significance value of 0.697. This value is greater than 0.05, which indicates that Cash Ratio has no significant effect on ROA. This indicates that changes in Cash Ratio do not significantly affect Return On Asset at Perumda BPR Garut.

4.3. Correlation Test

The correlation test was conducted to determine the relationship between Cash Ratio and ROA. The product moment correlation test results show a correlation coefficient of 0.182.

Table 3. Correlation of Cash Ratio to ROA

Variables	Cash Ratio	ROA
Cash Ratio	1	0.182
ROA	0.182	1

The correlation coefficient of 0.182 indicates a very low relationship between Cash Ratio and ROA. The correlation coefficient is in the interval 0.000 to 0.199, which indicates that the relationship between these two variables is very weak and insignificant.

4.4. Determination Coefficient Test

The coefficient of determination (R^2) measures how much the independent variable (Cash Ratio) can explain the dependent variable (ROA). Based on the following table, the R^2 value is 0.033.

Table 4. Coefficient of Determination of Cash Ratio on ROA

Model	R	R^2	Adjusted R^2	Std. Error of the Estimate
1	0.182	0.033	-0.160	0.37393

The R^2 value of 0.033 or 3.3% indicates that the contribution of Cash Ratio to ROA is 3.3%. The remaining 96.7% is influenced by other factors not examined in this study.

4.5. Hypothesis Test

To test the hypothesis regarding the effect of Cash Ratio on ROA, a t-test was conducted. Based on the results of the t-test, the t-count value is 0.413, which is smaller than the t-table (2.570), and the significance value is 0.697, which is greater than 0.05.

Table 5. Results of the t-test

Model	B	Std. Error	t	Sig.
(Constant)	3.48	0.878	3.97	0.01
Cash Ratio	-0.016	0.038	-0.41	0.697

Because the significance value is greater than 0.05 and the t-count is smaller than the t-table, the null hypothesis (H_0) is accepted and the alternative hypothesis (H_a) is rejected. Thus, it can be concluded that Cash Ratio has no effect on Return On Asset (ROA) at Perumda BPR Garut.

4.6. Discussin

4.6.1. Relationship between Cash Ratio and Return on Asset (ROA)

Based on the results of the study, it was found that the Cash Ratio has no significant effect on Return On Asset (ROA) at Perumda BPR Garut. This shows that although the cash ratio can reflect the bank's liquidity position, liquidity management alone is not enough to increase bank profitability. This research is in line with the findings in a study by Eldiani (2021), which shows that liquidity, as measured by various ratios such as the cash ratio, does not always have a direct effect on profitability, especially in banks with certain characteristics. Eldiani (2024) in a study related to Capital Adequacy Ratio (CAR) also noted that although liquidity is important, other factors such as capital structure and financing management are more dominant in influencing the financial performance of banks.

However, this study differs from previous studies in terms of its context. Eldiani (2024) focuses on public and private banks, which have larger capital capacity and different liquidity risks compared to BPRs such as Perumda BPR Garut. Perumda BPR Garut, as a small-scale regional bank, faces different challenges in cash and asset management. Therefore, although cash ratio can be an important indicator in assessing a bank's ability to meet short-term liabilities, the results of this study show that other factors are more dominant in influencing ROA, such as asset management, credit quality, and internal bank policies.

In previous research conducted by Eldiani, Nita (2024), entitled *The Effect of Loan to Deposit Ratio (LDR) on Return on Asset (ROA)*, it was found that liquidity ratios such as LDR have a significant effect on ROA. This shows that for banks with a larger scale or that are more diversified in their products and financing, liquidity factors such as LDR are more directly related to profitability. However, for Perumda BPR Garut, which focuses more on financing the micro and medium sectors, the cash ratio does not show a significant influence on ROA. This research suggests that there might be a need to further analyse factors that are more relevant for BPRs, such as credit risk management, or the use of technology to improve operational efficiency.

Meanwhile, Sungkowo (2024) in his study entitled *The Use of Available for Sale Securities in Earnings Management and Capital Adequacy Ratio Management* noted that banks that have good earnings management and proper capital management are better able to increase ROA. This suggests that although cash ratio has no significant effect in this study, factors related to earnings and capital management could have a greater role. This study supports the conclusion that in the context of Perumda BPR Garut, more efficient asset management and innovation in financing products may be more relevant in improving ROA than just paying attention to the cash ratio.

4.6.2. Factors Affecting ROA

This research shows that although cash ratio does not have a significant effect on ROA, other more relevant factors such as asset management, financing quality, and operating cost structure may contribute more to improving profitability. For example, Khaeriyah (2023) in her research showed that efficient asset management, especially in terms of loan turnover, affects ROA more than liquidity ratios alone. Therefore, Perumda BPR Garut needs to focus on asset management strategies and improve credit quality to drive higher profitability.

In addition, external factors such as regional economic conditions, interest rates, and government policies towards regional banks also affect the financial performance of banks. In a study by Agustina et al. (2024), which analysed investment portfolios in insurance companies, showed that macroeconomic factors play an important role in influencing the results achieved by financial companies, including regional banks such as Perumda BPR Garut. From the above discussion, it can be concluded that although Cash Ratio does not show a significant influence on ROA at Perumda BPR Garut, this can be understood by considering the special characteristics of regional banks that are more focused on local financing. Other factors such as asset management and credit quality are more dominant in influencing ROA. This study contributes by showing that in the context of BPR, liquidity factors such as cash ratio are not enough to directly increase profitability. Therefore, it is important for Perumda BPR Garut to pay attention to other factors that are more relevant in managing the bank's financial performance.

5. CONCLUSIONS

Based on the results of the research conducted, it can be concluded that the Cash Ratio has no significant effect on Return On Asset (ROA) at Perumda BPR Garut. Although Cash Ratio serves as an important indicator of liquidity, liquidity management alone is not enough to increase bank profitability. Other factors, such as asset management, credit quality, and operational cost management, are more dominant in influencing ROA at Perumda BPR Garut. This study also shows that although the relationship between Cash Ratio and ROA is very low, the contribution of Cash Ratio to ROA is relatively small, with most of the factors affecting ROA coming from other elements not examined in this study.

For future research, it is recommended to expand the variables studied, such as asset management, credit quality, and internal bank policies in order to provide a more comprehensive picture of the factors that affect the financial performance of regional banks such as Perumda BPR Garut. Researchers may also consider conducting a more in-depth analysis of external factors, such as regional



economic conditions, interest rates, or government policies that may affect bank profitability. In addition, future research can involve banks with more diverse characteristics to obtain results that are more general and relevant to the banking sector in Indonesia.

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