

Liquidity, Third-Party Fund, and Bank Size on Profitability (Empirical Study on Macro-finance institutions in Bali, Indonesia)

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ABSTRACT : *Bank Perkreditan Rakyat (BPR)* as the macro-financial institutions closest to the public need to pay attention to their ability to earn profits (profitability) to maintain public trust. This study aims to examine the effect of liquidity as measured by the Loan to Deposit Ratio (LDR), third party funds, and bank size on profitability as measured by Return on Assets (ROA). The research was conducted at BPRs in Bali Province with a total sample size of 130 BPRs which were determined by purposive sampling method. The analysis technique used is multiple linear regression. Based on the test results, it was found that liquidity, third party funds, and bank size had a positive and significant effect on profitability. Therefore, to maintain and increase profitability, it is expected that BPRs will pay serious attention to liquidity, third-party funds, and bank size.

Keywords: *liquidity, third party funds, bank size, profitability*

I. INTRODUCTION

The banking industry has a very important role in the economy of a country, where almost every aspect of human life is inseparable from banks and financial institutions (Suryaningsih & Sudirman, 2020). One of the financial institutions that support the country's economy is the *Bank Perkreditan Rakyat (BPR)*. *Bank Perkreditan Rakyat (BPR)* are Indonesian banks that carry out their business activities conventionally or based on Sharia Principles which in their activities do not provide services in payment traffic (Perbawa & Pratiwi, 2020). Seeing the importance of BPR in supporting the economy of the community which will later affect economic development, the existence of BPRs needs better attention. BPR's attention is inseparable from its ability to generate profits or profitability (Anggari & Dana, 2020). BPRs that continue to maintain stable profitability and even increase, will attract more customers to deposit their excess funds with the BPR (Kabiana & Supartha, 2021). Profitability is the company's ability to generate or earn profits during a certain period by using productive assets or capital, either as a whole or as its own capital (Brastama & Yadnya, 2020). Profitability can be measured by several ratios, including Return on Assets (ROA), Return on Equity (ROE), and Net Interest Margin (NIM). ROA is a ratio used to see the level of effectiveness of using assets to generate profits. ROE is a profitability ratio that shows the comparison of profit after tax with the bank's core capital. NIM is a ratio that shows the ability of bank management to generate returns on net interest on the management of its productive assets. To maximize profitability, BPRs need to know the factors that influence profitability (Mujib & Candraningrat, 2021).

Liquidity is the company's ability to meet its financial obligations in the short term with available current funds. When a company can meet its short-term obligations, it can be said that the company has good liquidity capabilities. Funding management will increase profit or profit at the company, so it can be said that liquidity has a positive correlation to profitability (Dewi & Badjra, 2020). Liquidity can be measured by the Loan to Deposit Ratio (LDR). LDR is a comparison of total credit to Third Party Funds (TPF) collected by the Bank. This ratio will show the level of the Bank's ability to channel funds originating from the public (in the form of demand deposits, savings, time deposits, time deposit certificates, and other immediate obligations) in the form of credit. If it is further developed, it is compared not only to credit but also to the issued securities (bonds) and core capital. A high LDR ratio indicates that the amount of credit extended is greater than the funds received. With an increase in the amount of credit, the bank interest income will increase. This indicates that banks have a great opportunity to increase their profits, considering that the biggest income for banks is from lending (Swandewi & Purnawati, 2021). The more credit extended, the greater the bank's profit. So it can be said that the LDR has a significant effect on profitability (Yuliawati & Dana, 2020). Hantono (2017), Setiawan & Hermanto (2017) state that the Loan to Deposit Ratio (LDR) has a significant effect on profitability.

Yudha et.al (2018), Inggawati & Hermanto (2018), Mohanty & Krishnankutty (2018) states that LDR has a negative and significant effect on profitability. Third-party funds (TPF), which are funds sourced from the wider community, are an important source for bank operational activities and are a measure of the success of a bank if the bank can bear its operating costs from this source of funds. Banks are expected to always stay in the community so that the flow of money from people who have excess funds can be accommodated and then channeled back to the community(Nurhasanah & Melzatia, 2019). This fund is one of the largest sources of funds that banks can rely on, reaching 80% to 90% of all funds managed by the bank.Sukmawati & Purbawangsa (2016)states that the growth of third party funds has a positive and insignificant effect on profitability, meanwhile Wityasar & Pangestuti (2014) shows that there is no significant influence and has a negative direction, but Hendratni & Parenrengi (2018), Andesfa & Masdupi (2019), Muhammad et al. (2020)states that the TPF variable has a positive and significant effect on profitability.

Apart from liquidity and third-party funds, the size of the bank also affects the income or profitability of a bank(Intariani & Suryantini, 2020). One indicator to determine the size of a bank is to look at the total assets of the bank. The size of a bank can be assessed from the total assets owned by that bank. Banks with large assets have the possibility to generate greater profits when followed by the results of their activities. Big banks tend to have better profitability(Indrawan & Damayanthi, 2020). The size of the company or the size of the bank is one of the factors considered by customers in making transactions, especially savings. Kassem & Sakr (2018), argued that the size of the bank, represented by total assets, was the main determinant of the profitability of Egyptian banks, supporting the argument that large banks took advantage of economies of scale. Domanović et.al (2018), Saif-alyousfi (2017) found that foreign and domestic banks with higher capital were more profitable and banks with larger sizes less profitable.Based on the description of the theory and previous research, the following hypothesis can be formulated:

- Hypothesis 1: Liquidity has a significant positive effect on profitability
- Hypothesis 2: Third Party Funds have a significant positive effect on Profitability
- Hypothesis 3: Bank size has a significant positive effect on profitability

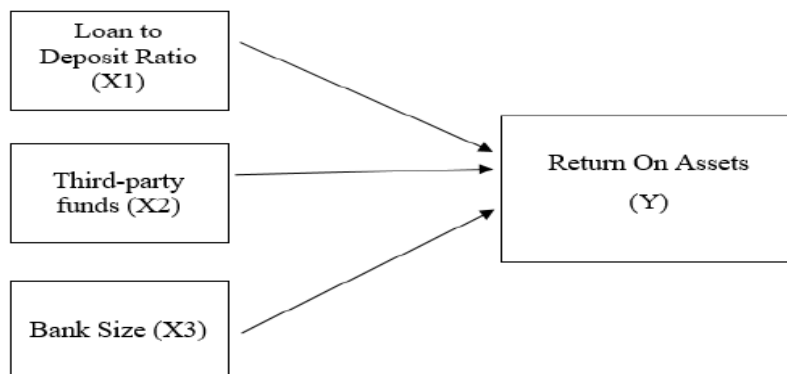


Fig. 1 Conceptual framework

II. RESEARCH METHODS

The approach used in this study is associative causality which aims to analyze the causal relationship between the independent variable and the dependent variable. The population in this study were all People's Credit Banks in Bali Province, amounting to 135 banks. The study used a purposive sampling method with the following criteria: BPRs located in Bali Province and registered with the Indonesia Financial Services Authority and always reporting quarterly financial data throughout 2019. So that 130 BPRs were obtained as samples. The data collection method used in this study is the non-participant observation method.

III. RESULTS AND DISCUSSION

Table 1. Results of Multiple Linear Regression Analysis

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-7.656	1.204		-6.357	.000
	LDR	.025	.002	.599	16.225	.000
	TPF	.121	.059	.078	2.052	.041
	Bank Size	.204	.060	.123	3.418	.001

$Y = -7,656 + 0,025 X_1 + 0,121 X_2 + 0,204 X_3$
F = 115.331 Sig = .000
R = .634 Adjusted R Square = .398

The calculated F value is 115.311 with a significance of 0.000 (<0.05). This shows that the regression model is fit so that it is acceptable and appropriate to be used to predict the effect of the independent variable on the dependent variable. The correlation coefficient (R) is 0.634. This means that the relationship between the independent variables and the dependent variable is 63.4%. From these figures, it can be concluded that the relationship between the independent variable and the dependent variable is strong. Adjust R Square (R²) is 0.401. The results of this statistical calculation mean that the ability of the independent variable to explain the variation in the change in the dependent variable is 40.1%, meaning that the dependent variable is profitability which is explained by the independent variable consisting of liquidity, third party funds, bank size, and the remaining 59.9% is explained by other variables in outside the variables used

Liquidity (X1) on Profitability (Y)

Based on the table, the t test significance value of the Liquidity variable is 0.000 smaller than $\alpha = 0.05$ and the beta coefficient value is 0.599. This identifies that liquidity has a positive and significant effect on profitability, so that in this study the **first hypothesis is accepted**. The greater the credit that can be distributed, the greater the profit that can be generated by the bank. When viewed from the data, the LDR of BPRs in Bali Province throughout 2019 has an average exceeding the limit set by Bank Indonesia, namely the liquidity ratio. This could be due to the lack of public interest in borrowing money at the BPR so that the funds obtained by the bank cannot be managed optimally in the form of credit which then causes the BPR's LDR to be above the normal limit. Based on the results of the regression analysis test, it is said that LDR is the variable with the greatest influence on profitability. Judging from the standardized Coefficient Beta value shows that the LDR has the highest value and this shows that LDR is the most dominant influence on the dependent variable Profitability.

TPF (X2) on Profitability (Y)

Based on the table, the t-test significance value of the Liquidity variable is 0.041, smaller than $\alpha = 0.05$, and the beta coefficient value is 0.078. This identifies that liquidity has a positive and significant effect on profitability so that in this study the **second hypothesis is accepted**. A BPR that has a large number of third-party funds indicates that the BPR has won the trust of the public. With third-party funds, BPRs are more liquid and have sufficient cash reserves to be channeled back to the public in the form of loans. The more third-party funds received means the more funds that can be channeled back. This means that the bank will receive income in the form of credit interest which is sufficient to cover paying interest on funds from third parties and increase bank income. Thus, the bank's profitability will also increase

Bank Size (X3) on Profitability (Y)

Based on the table, the t-test significance value of the Third Party Funds variable is 0.001 smaller than $\alpha = 0.05$, and the beta coefficient value is 0.123. This identifies that bank size has a positive and significant effect on profitability so that in this study the **third hypothesis is accepted**. BPR that has a large bank size indicates that the company has a large number of total assets. This total asset can be managed by the BPR to meet its short-term and long-term liabilities. A bank that can meet its obligations is considered a healthy bank. A bank that is healthy and has good management performance will increase public confidence in using the services of the bank, so that profit or profit will also increase.

IV. CONCLUSION

Liquidity, as measured by the Loan to Deposit Ratio (LDR), has a positive effect on the profitability of BPRs in Bali Province. This shows that if liquidity increases, profitability will also increase. Thus the first hypothesis which states that liquidity has a significant positive effect on profitability can be proven. Third-Party Funds have a positive effect on the profitability of BPR in Bali Province. This shows that if the amount of third-party funds increases, the profitability will also increase. Thus the second hypothesis which states that third-party funds have a significant positive effect on profitability can be proven. Bank size as measured by total assets has a positive effect on the profitability of BPR in Bali Province. This shows that if the size of the bank increases, the profitability will also increase. Thus, the third hypothesis which states that bank size has a significant positive effect on profitability can be proven. Theoretically, research can be carried out related to profitability and the variables that influence it so that more new theories or new research results can be found.

To increase profitability, BPR management is advised to always maintain the level of liquidity, increase third-party funds, and increase the size of the company. For further researchers, it is advisable to add other variables that can affect the profitability of the company because there are still 59.9% of the influence of other variables outside the research and can extend the research period to get more samples and better results.

REFERENCES

- [1] Andesfa, D., & Masdupi, E. (2019). Effect of Financial Ratio on Profitability of Commercial Banks: A Systematic Literature Review. *Advances in Economics, Business and Management Research*, 64(1), 700–706. <https://doi.org/10.2991/piceeba2-18.2019.55>
- [2] Anggari, N. L. S., & Dana, I. M. (2020). The Effect of Capital Adequacy Ratio , Third Party Funds , Loan to Deposit Ratio , Bank Size on Profitability in Banking Companies on IDX. *American Journal of Humanities and Social Sciences Research (AJHSSR)*, 4(12), 334–338.
- [3] Brastama, R. F., & Yadhya, I. P. (2020). The Effect of Capital Adequacy Ratio and Non Performing Loan on Banking Stock Prices with Profitability as Intervening Variable. *American Journal of Humanities and Social Sciences Research (AJHSSR)*, 4(12), 43–49.
- [4] Dewi, N. K. C., & Badjra, I. B. (2020). The Effect Of NPL, LDR And Operational Cost Of Operational Income on ROA. *American Journal of Humanities and Social Sciences Research (AJHSSR)*, 4(7), 171–178.
- [5] Domanović, V., Todorović, V., & Savović, S. (2018). Internal factors of bank profitability in the republic of Serbia. *Business and Economic Horizons*, 14(3), 659–673. <https://doi.org/10.15208/beh.2018.46>
- [6] Hantono. (2017). Effect of Capital Adequacy Ratio (CAR), Loan to Deposit Ratio (LDR) and Non Performing Loan (NPL) to Return On Assets (ROA) Listed in Banking Indonesia Stock Exchange. *International Journal of Education and Research*, 1(1), 69–80.
- [7] Hendratni, T. ., & Parenrengi, S. (2018). Pengaruh Dana Pihak Ketiga, Kecukupan Modal dan Penyaluran Kredit terhadap Profitabilitas Bank. *Jurnal Manajemen Strategi Dan Aplikasi Bisnis*, 1(1), 1–20.
- [8] Indrawan, A. S., & Damayanthi, I. G. A. E. (2020). The Effect of Profitability, Company Size, and Financial Leverage of Income Smoothing. *American Journal of Humanities and Social Sciences Research (AJHSSR)*, 4(2), 09–13.
- [9] Inggawati, L., & Hermanto. (2018). The Influence of Loan to Deposit Ratio, Loan Operational of Income Operational and Non-Performing Loan toward Profitability of Bank Perkreditan Rakyat in Sidoarjo Regency. *International Journal of Scientific and Research Publications*, 8(1), 1.
- [10] Intariani, W. R., & Suryantini, N. P. S. (2020). The Effect of Liquidity , Profitability , and Company Size on the National Private Bank Stock Returns Listed on the Indonesia Stock Exchange. *American Journal of Humanities and Social Sciences Research (AJHSSR)*, 4(8), 289–295.
- [11] Kabiana, I. K. P., & Supartha, I. W. (2021). The Effect of Financial Compensation , Transformational Leadership Style , and Work Motivation on Job Satisfaction in PT . Bank Perkreditan Rakyat. *American Journal of Humanities and Social Sciences Research (AJHSSR)*, 4(1), 454–462.
- [12] Kassem, N. M., & Sakr, A. (2018). The Impact of Bank-Specific Characteristics on the Profitability of Commercial Banks in Egypt. *Journal of Finance and Bank Management*, 6(2), 76–90. <https://doi.org/10.15640/jfbm.v6n2a8>
- [13] Mohanty, B., & Krishnankutty. (2018). Determinants of Profitability in Indian Banks in the Changing Scenario. *International Journal of Economics and Financial Issues*, 1(1), 1.
- [14] Muhammad, R., Suluki, A., & Nugraheni, P. (2020). Internal factors and non-performing financing in Indonesian Islamic rural banks. *Cogent Business and Management*, 7(1), 1. <https://doi.org/10.1080/23311975.2020.1823583>
- [15] Mujib, B., & Candraningrat, I. R. (2021). Capital Market Reaction to Covid-19 Pandemic on LQ45 Shares at Indonesia Stock Exchange (IDX). *American Journal of Humanities and Social Sciences Research (AJHSSR)*, 5(3), 74–80.
- [16] Nurhasanah, & Melzatia, S. (2019). Analysis of Murabaha Financing from Influence of Asset, Deposit Fund, and Profitability. *Journal of Economics and Business*, 2(3), 618–626. <https://doi.org/10.31014/aior.1992.02.03.113>
- [17] Perbawa, S. L. P., & Pratiwi, N. M. A. A. D. (2020). The Effectiveness of KUR Implementation at BPD Bali. *American Journal of Humanities and Social Sciences Research (AJHSSR)*, 4(12), 83–90.
- [18] Saif-alyousfi, A. Y. H. (2017). Profitability of Saudi Commercial Banks: A Comparative Evaluation between Domestic and Foreign Banks using CAMEL Parameters. *International Journal of Economics and Financial Issues*, 7(2), 477–484.
- [19] Setiawan, A., & Hermanto, B. (2017). Comparative Study: Determinant on Banking Profitability Between Buku 4 and Buku 3 Bank in Indonesia. *Jurnal Manajemen Dan Bisnis*, 1(1), 92–101.

- [20] Sukmawati, N. M. E., & Purbawangsa, I. B. A. (2016). Pengaruh Pertumbuhan Dana Pihak Ketiga, Pertumbuhan Kredit, Risiko Kredit, Likuiditas, Dan Kondisi Ekonomi Terhadap Profitabilitas. *E-Jurnal Manajemen Unud*, 5(9), 5333.
- [21] Suryaningsih, N. P. R., & Sudirman, M. S. N. (2020). The influence of credit risk, liquidity risk, and operational risk on profitability in rural banks in Bali Province. *American Journal of Humanities and Social Sciences Research*, 4(3), 258–265.
- [22] Swandewi, N. K. M., & Purnawati, N. K. (2021). Capital Adequacy Ratio Mediates the Effect of Non-Performing Loan on Returns on Assets in Public Commercial Banks. *American Journal of Humanities and Social Sciences Research (AJHSSR)*, 5(1), 651–656.
- [23] Wityasar, M., & Pangestuti, I. R. D. (2014). Analisis Pengaruh CAR, Dana Pihak Ketiga (DPK), NPL, dan LDR terhadap Profitabilitas Perbankan dengan LDR sebagai Variabel Intervening. *DIPONEGORO JOURNAL OF MANAGEMENT*, 1–14.
- [24] Yudha, A., Chabachib, M., & Pangestuti, I. R. D. (2017). Analysis of The Effect of NPL, NIM, Non Interest Income, and LDR Toward ROA with Size as Control Variables (Differences Study on Domestic and Foreign Banks Listed on BEI Period 2010-2015). *Jurnal Bisnis Strategi*, 26(2), 100–113.
- [25] Yuliawati, K. A., & Dana, I. M. (2020). Assessment of the Bank's Financial Health Level at Pt. Bank Central Asia, TBK. Based on Risk Approach. *American Journal of Humanities and Social Sciences Research (AJHSSR)*, 4(2), 175–182. <https://www.ajhssr.com/wp-content/uploads/2020/02/X2042175182.pdf>