

The Effect of Bank-Specific Factors on Profitability of Commercial Banks Listed on the Indonesia Stock Exchange

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Abstract. This study examines the influence of specific factors on the profitability of conventional commercial banks listed on the Indonesia Stock Exchange for the 2016-2020 period. This study uses *purposive sampling* with a sample of 41 conventional commercial banks. The results show that bank size does not affect profitability. The capital, deposit, and liquidity ratio variables have a significant negative effect on profitability. Meanwhile, the variables of management efficiency and asset quality have a significant positive effect on profitability. This research is important so that banks can determine from the start what factors can affect their profitability, with banks having to maintain a level of capital according to Bank Indonesia standards, effectively monitoring bank operations, and selective supervision in lending to increase profitability.

Keywords: Deposit, Management Efficiency, Asset Quality, Liquidity, Profitability, Capital Ratio, Bank Size.

1 Introduction

Banking has the main objective of achieving maximum profitability effectively and efficiently during a specific period, which can be used as an indicator in measuring banking performance. The success of management as a reflection of banking performance is important for people to make savings and investors in making decisions [1].

Several previous studies have shown a significant influence of bank-specific factors on *profitability*, including *bank size*, *capital ratio*, *asset quality*, *deposits*, and *liquidity* [2]. Research by [3] also states that there is an effect of *liquidity* liquidity on *profitability*. Research conducted by [4] shows that other bank-specific factors affect *profitability*, namely *management efficiency*. This is in line with [5], which proves that there is an effect of *bank size* and *management efficiency* on *profitability*.

Table 1 shows that from 2019 to 2020, conventional commercial banks (BUK) in Indonesia. However, the value of the *return on assets* (ROA) ratio was above 1.45% according to Bank Indonesia (BI) regulations, but the ratio value decreased significantly in 2014. 2020 by 0.71% from the previous year. The greater the *return on assets* (ROA) ratio, the more efficient the banking performance in using its assets [6]. The decline in bank profitability is related to bank-specific factors, namely internal factors on individual bank characteristics that can affect bank profitability [7].

A decrease followed the decline in profitability in the growth of total banking assets over the last two years, which only grew 6% from the previous year compared to 2015 to 2018, which grew by 9-10% annually, indicating a change in the size of the bank as seen from total banking assets for several years. Lastly, the total assets owned by banks

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D. Games and Maruf (eds.), Proceedings of the International Conference on Entrepreneurship, Leadership and Business Innovation (ICELBI 2022), Advances in Economics, Business and Management Research 269, https://doi.org/10.2991/978-94-6463-350-4_28

94 78

94.43

83.46

are the determinants of the size of the bank. Banks that are getting bigger are also followed by better opportunities to increase capital and their ability to manage operations efficiently, which leads to profitability [8].

The profitability of Conventional Commercial Banks (BUK) in Indonesia is followed by several other aspects of financial performance that can affect a bank's profit. The following is data on the performance development of Conventional Commercial Banks (BUK) in Indonesia during 2015-2020:

Financial Performance	2015	2016	2017	2018	2019	2020
Total Assets (Trillion)	5.919	6.457	7,100	7.752	8,213	8,687
Credit (Trillion)	3,904	4,199	4,548	5.093	5,392	5,290
TPF (Trillion)	4.238	4,630	5.051	5.373	5.710	6.339
ROA (%)	2.32	2.23	2.45	2.55	2.47	1.76

90.70

Table 1. Financial performance of conventional commercial banks in 2015-2020.

92.11 Source: Financial Services Authority (OJK), data processed

LDR (%)

For the last six years, conventional commercial banks in Indonesia have had a loanto-deposit ratio (LDR) in accordance with Bank Indonesia (BI) standards in PBI No. 17/11/PBI/2015, which is between 78% and 92%. However, in 2020, there has been a significant decline in the loan-to-deposit ratio (LDR) of 10.97% from the previous year, which means there has been a decline in lending. This is in accordance with Table 1, which shows a decrease in credit and a significant increase in third-party funds (TPF), reaching 11%, which indicates that the increase in customer fund collection was not followed by an increase in lending by banks. A decline in credit will be able to impact changes in the quality of banking assets seen from the total assets they have [5].

This research is intended to re-examine banking-specific factors (bank size, capital ratio, management efficiency, asset quality, deposits, and liquidity liquidity) on profitability. Profitability is the main objective of the company's business continuity, which refers to maintaining profits from year to year [1]. According to [9], profitability ensures the sustainability and resilience of banks when facing difficult times by maximizing their role between savers and borrowers. Bank size is generally used to see the potential for economies of scale in a company [10]. Increasing production quantity by reducing costs illustrates economies of scale [11]. According to [12], concerning economies of scale, large banks are expected to be more profitable because they can spread costs across several units and result in lower operating costs. The capital ratio is an assessment of capital adequacy that shows the general health of the bank on how well the bank's capitalization is [1]. According to Ercegovac, [13] the bank's capital ratio has become the primary determinant of profitability that allows banks to survive in periods of financial crisis.

Management efficiency is a method of determining bank welfare as an important component in the company's financial management because it has a direct impact on company profitability. Management's ability to use its resources efficiently, increasing revenue and decreasing operational costs shows the quality of management in banking [14]. Asset quality reflects the ability of bank management to manage productive assets related to the risks faced by the bank for the loans it provides [15]. According to [16], asset quality is also considered one of the requirements to see the health of a bank. Deposits are the primary source of banks in the form of customer deposits with banks through certain agreements [1]. The customer making a deposit or this deposit is considered an obligation for the bank because it must return it to the depositor or customer. The bank's source of income is through investment in depositors' deposits in other projects that can generate profits for banks [17]. The concept of liquidity liquidity is used to overcome the financial condition of the bank, which shows the ability of the bank to settle its obligations immediately. These obligations that need to be funded include loans and investment commitments, withdrawals, deposits, and other accrued obligations [18].

This research is important to be carried out on Conventional Commercial Banks listed on the Indonesia Stock Exchange for the period 2016-2020 in order to find out bank-specific factors that significantly influence profitability so that they can be known from the start. This research is entitled Specific Factors Affecting Profitability in Conventional Commercial Banks Listed on the Indonesia Stock Exchange.

2 Research Method

This study was designed using the associative method, namely research that aims to determine the effect or relationship between two or more variables. This research will analyze the effect of independent variables such as bank size, capital ratio, management efficiency, asset quality, deposits, and liquidity liquidity on profitability. The population asample in this study include all conventional commercial banks listed on the Indonesia Stock Exchange (IDX) for the 2016-2020 period. The analysis method in this study uses panel data regression and Eviews 9.0 software as a data management tool.

2.1 Dependent Variable

Return on asset as a measurement of profitability, which is the dependent variable in this study [5].

$$ROA = \frac{\text{Net Income}}{\text{Total Asset}} \tag{1}$$

2.2 Independent Variable

The variables used as independent variables in this study are bank size, capital ratio [5], management efficiency [4], asset quality, deposit [19], and liquidity liquidity [3].

Bank Size = Ln (Total Assets of the bank)

Capital Ratio =
$$\frac{\text{Total Equity}}{\text{Total Asset}}$$
 (2)

Management Efficiency =
$$\frac{\text{Operating Revenue}}{\text{Total Profit}}$$
 (3)

Asset Quality =
$$\frac{\text{Total Loans}}{\text{Total Asset}}$$
 (4)

$$Deposit = \frac{Total Deposits}{Total Asset}$$
 (5)

$$Liqudiity = \frac{Total Loans}{Total Loansits}$$
 (6)

2.3 Data Analysis

The panel regression model is used to test and analyze the effect of independent variables, including bank size, capital ratio, management efficiency, asset quality, deposits, and liquidity, on the dependent variable, namely profitability at conventional commercial banks listed on the Indonesia Stock Exchange (IDX). The regression model in this study is formulated as follows:

$$ROA_{it} = \beta_0 + \beta_1 BS_{it} + \beta_2 CR_{it} + \beta_3 ME_{it} + \beta_4 AQ_{it} + \beta_5 DP_{it} + \beta_6 LDR_{it} + \epsilon_{it}$$
 (7)

ROA = Profitability; BS = Bank Size; CR = Capital Ratio; ME = Management Efficiency; AQ = Asset Quality; DP = Deposits; LDR = liquidity liquidity; ϵ = Error Term.

3 Results and Discussions

Descriptive statistical results of the variables in the study are shown in the following table:

Variable N Mean Min. Max. Std. Dev ROA 205 0.004002 -0.117277 0.031343 0.021296 Bank Size 205 30.99618 21.34197 34.95208 2.213647 Capital Ratio 205 0.183223 0.862083 0.055336 0.106292 Management 205 1.438980 -0.244203 12.128703 0.934436 Efficiency Asset Quality 205 0.679357 0.315586 4 068537 0.528745

Table 2. Descriptive statistics.

205 Source: Data processed with Eviews 9.

205

0.698636

0.892847

Based on the results of the T-test in this study, it can be concluded that the effect of each independent variable on the dependent variable is as follows:

0.115211

0.345349

0.862970

0.38991

4.443316

0.125075

3.1 Bank Size

Deposit

Liquidity

The results of this study indicate that bank size has no significant effect on the profitability of conventional commercial banks listed on the Indonesia Stock Exchange. This research is not in line with [5], which shows that bank size has a significant negative effect on profitability but is in line with [14], which states that there is no significant effect between bank size and profitability.

Dependent Variables Independent Return on Asset Variables Coefficient Probability Conclusion Constant 0.068861 BS -0.001704 0.1197 Insignificant CR -0.027257 0.0032 Significant Negatives ME 0.000461 0.0491 Significant Positives 0.032822 0.0000 Significant Positives I DP -0.026048 0.0234 Significant Negatives LDR -0.011767 0.0192 Significant Negatives

Table 3. T test results.

Source: Data processed by Eviews 9

3.2 Capital Ratio

The results of this study indicate that there is a significant adverse effect between the capital ratio and the profitability of conventional commercial banks listed on the Indonesia Stock Exchange. The higher the capital ratio will increase the profitability of the banking sector or vice versa. This research is not in line with the research of [5], which shows that the capital ratio does not affect profitability. However, it is in line with the research of [19], which states that the capital ratio has a significant negative effect on profitability.

3.2 Management efficiency

The results of hypothesis testing in this study indicate a significant positive effect of management efficiency on the profitability of conventional commercial banks listed on the Indonesia Stock Exchange. This research is in line with research by [5], which shows that management efficiency has a positive effect on profitability, with higher bank management efficiency being able to increase profits for banks. Assessment of management efficiency with operating revenue proxy on total profit states that the higher the operating profit obtained by the bank, the higher the efficiency of bank management to generate profits.

3.3 Asset Quality

The results of hypothesis testing in this study indicate a significant positive effect of asset quality on the profitability of conventional commercial banks listed on the Indonesia Stock Exchange. This study is in line with the research of [19], which shows that the assessment of asset quality with a proxy for total loans on total assets has a significant positive effect on profitability.

3.4 Deposits

The results of this study indicate that there is a significant negative effect of *deposits* on the *profitability* of conventional commercial banks listed on the Indonesia Stock Exchange. This study is in line with research by [19], which shows that the assessment of *deposits* with a proxy for *total deposits* on *total assets* has a significant negative effect on *profitability*.

3.5 Liquidity

The results of this study indicate that there is a significant negative effect of *liquidity* liquidity on the *profitability* of conventional commercial banks listed on the Indonesia Stock Exchange. This research is in line with research by [3], which shows that *liquidity* assessment with a proxy for *total loans* on total *deposits* has a significant negative effect on *profitability*.

4 Conclusion

This study examines the effect of bank size, capital ratio, management efficiency, asset quality, deposits, and liquidity liquidity on profitability. This study uses 41 conventional commercial banks listed on the Indonesia Stock Exchange from 2016 to 2020. Based on the analysis results, the following conclusions can be drawn: Bank size has no effect on profitability. The capital, deposit, and liquidity ratio variables have a significant negative effect on profitability. Meanwhile, the variables of management efficiency and asset quality have a significant positive effect on profitability.

Reference

- E. Menicucci and G. Paolucci, The determinants of bank profitability: empirical evidence from European banking sector, vol. 14, no. 1, 2016. doi: 10.1108/jfra-05-2015-0060.
- F. A. Almaqtari, E. A. Al-Homaidi, M. I. Tabash, and N. H. Farhan, "The determinants of profitability of Indian commercial banks: A panel data approach," *International Journal of Finance and Economics*, vol. 24, no. 1, pp. 1–18, 2018, doi: 10.1002/ijfe.1655.
- A. Knezevic and D. Obromirov, "The determinants of Serbian banking industry profitability," *Economic Research-Ekonomska Istrazivanja*, vol. 29, no. 1, pp. 459–474, 2016, doi: https://doi.org/10.1080/1331677X.2016.1174390.

- V. O. Ongore and G. B. Kusa, "Determinants of Financial Performance of Commercial Banks in Kenya," *International Journal of Economics and Financial Issues*, vol. 3, no. 1, pp. 237–252, 2013.
- H. Zerihun, "Effect of Bank Specific Factors on Profitability of Commercial Banks in Ethiopi," *Journal of Finance and Accounting*, vol. 9, no. 2, pp. 23–45, 2021, doi: https://doi.org/10.11648/j.jfa.20210902.11.
- E. Koroleva, S. Jigeer, A. Miao, and A. Skhvediani, "Determinants affecting profitability of state-owned commercial banks: Case study of China," *Risks*, vol. 9, no. 8, pp. 150–163, 2021.
- M. E. Mbella and A. A. Magloire, "The Effect of Bank Specific Factors on the Performance of Afriland First Bank in Cameroon," *Journal of Business & Financial Affairs*, vol. 6, no. 4, pp. 305–316, 2017.
- M. Farooq, S. Khan, A. Siddiqui, M. Khan, and M. Khan, "DETERMINANTS OF PROFITABILITY: A CASE OF COMMERCIAL BANKS," *Humanities & Social Sciences Reviews*, vol. 9, no. 2, pp. 1–13, 2021, doi: https://doi.org/https://doi.org/10.18510/hssr.2021.921.
- S. Abel and P. Le Roux, "An application of Panzar-Rosse approach in assessing banking sector competition in Zimbabwe," *Journal of economic and financial sciences*, vol. 9, no. 2, pp. 455–470, 2016.
- N. Suppia and N. Arshad, "Bank Specific Characteristics and Profitability of Islamic and Conventional Banks in Malaysia," *International Journal of Islamic Business*, vol. 4, no. 1, pp. 39–53, 2019, doi: http://www.e-journal.uum.edu.my/index.php/ijib/article/view/13279.
- A. Kovner, J. Vickery, and L. Zhou, "Do big banks have lower operating costs?," *Journal of Financial Perspectives*, vol. 3, no. 1, 2015.
- T. Mashamba, "The Effects Of Basel Iii Liquidity Regulations On Banks Profitability," *Journal of Governance and Regulation*, vol. 7, no. 2, pp. 34–48, 2018, doi: 10.22495/jgr_v7_i2_p4.
- R. Ercegovac, I. Klinac, and I. Zdrilić, "Bank specific determinants of EU banks profitability after 2007 financial crisis," *Journal of Contemporary Management Issues*, vol. 25, no. 1, pp. 89–102, 2020.
- 14. A. Assfaw, "Determinants of the financial performance of a private commercial bank in Ethiopia," *Journal of Business and Administrative Studies*, vol. 7, no. 2, pp. 1–30, 2018.
- S. Suganya and L. Kengatharan, "Impact of bank internal factors on profitability of commercial banks in Sri Lanka: a panel data analysis," *Journal of Business Studies*, vol. 5, no. 1, pp. 61–75, 2018, doi: https://doi.org/10.4038/jbs.v5i1.25.
- A. Mostak, "Asset quality, non-interest income, and bank profitability: Evidence from Indian banks," *Economic Modelling*, vol. 63, no. 3, pp. 1–14, 2017.
- Shah, M. Hussain, Khan, and Sajjad, "Factor Affecting Commercial Bank Profitability in Pakistan," *Journal of Business and Tourism*, vol. 3, no. 1, pp. 1–12, 2017.
- S. Ali and S. Jameel, "The Role of Liquidity Management in Profitability: Case Study of Five Selected Commercial Banks of Iraq Stock Exchange over the Period (2006–2016)," Academic Journal of NawrozUniversity, vol. 8, no. 4, pp. 267–276, 2019.
- A. Al-Homaidi, EA, "Internal and external determinants of listed commercial banks profitability in India," dynamic GMM approach, vol. 13, no. 1, pp. 34–67, 2020.

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