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The Effect of Capital Adequacy Ratio, Third Party Funds, Loan to Deposit Ratio, Bank Size on Profitability in Banking Companies on IDX

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ABSTRACT : This study aims to analyze the effect of Capital Adequacy Ratio (CAR), Third Party Fund, Loan to Deposit Ratio (LDR), and Bank Size to Profitability in banking companies listed in Indonesia Stock Exchange by using annual financial reports published in 2016-2018. The population in this study are 44 banks with 18 obtained as samples using purposive sampling method. The results of this study indicate that the Capital Adequacy Ratio, Third Party Fund, Bank Size have a positive and significant effect on profitability. Meanwhile, Loan to Deposit Ratio has a positive and insignificant effect on the Profitability of Banking Companies in the Indonesia Stock Exchange during the 2016–2018 period.

Keywords: *Capital Adequacy Ratio, Third Party Fund, Loan to Deposit Ratio, Bank Size, Profitability.*

I. INTRODUCTION

Economic development cannot be separated from the banking sector, because banks are one of the institutions that have an important role in economic activity. This important role is as an intermediary institution that collects and distributes public funds effectively and efficiently. Bank performance level is an assessment of a bank's financial statement condition for a certain period in accordance with Bank Indonesia standards. Bank financial statements show the overall financial condition. The financial report will read the real condition of the bank, including its weaknesses and strengths. The way to assess the financial performance of a bank is to analyze the requirements that must be met by a bank which refers to the standard commercial bank financial ratios. One of these components is profitability. The purpose of company performance appraisal is to determine the level of profitability or profitability, which shows the company's ability to generate profits during a certain period. The main objective of the bank is to achieve the maximum level of profitability in conducting its operational activities. Profitability describes the company's ability to earn profits through all existing resource capabilities. To measure the ability of bank management to earn profits in the company's operations by utilizing assets owned by the company, ROA is used. According to SE BI No.13 / 24 / DPNP dated 25 October 2011, the ROA standard set for banks in Indonesia is a minimum of 1.5 percent. The higher the profit, the higher the ROA achieved by the bank in terms of the use of its assets.

The financial performance of banks in Indonesia from 2016-2018 fluctuated when viewed from the average value of the capital adequacy ratio (CAR), in 2018 the CAR had decreased compared to 2017. In 2016-2018 the financial performance of banks in general was better, because there is an increase in the average value of the return on assets ratio, loan to deposit ratio, third party funds, and bank size from year to year, it shows that there has been an increase in the financial performance of banks in general in Indonesia. Profitability shows the company's ability to earn profits or a measure of the effectiveness of company management. The capital adequacy ratio (CAR) can be defined as the ratio used to measure capital and reserves for write-offs in covering credit, especially the risks that occur because interest fails to be collected. Ebenezer et al. (2017)stated that CAR has a positive and significant effect on bank profitability. However, Silaban (2017)and Soares & Yunanto (2018)show that CAR has no effect on ROA.

Bank funds sourced from the public are also known as third party funds in the form of demand deposits, savings and time deposits. In order to support bank operational activities related to fund distribution, banks need to obtain sufficient sources of funds to support these activities. Yanti & Suryantini (2015), show that third party funds have a positive and significant effect on profitability. However, Said & Ali (2016)argue that TPF has a negative effect on profitability. Hakim & Sugianto (2018)found that TPF has a negative and significant effect on ROA.

Liquidity is defined as a bank's ability to meet all its debt obligations, be able to repay all of its depositors and be able to fulfill credit requests submitted without delay. Banking companies are very concerned about liquidity problems because smooth payment traffic in serving the public is the basis of public trust in the wealth and smoothness and ability of bank businesses. Based on BI Circular Letter Number 13/24 / DPNP dated 25 October 2011, the LDR rate that BI said was healthy was in the range of 78% -100%. The higher the LDR, the higher the company's profitability. Chou & Buchdadi (2016) LDR has a positive and significant effect on ROA. However, Pinasti & Mustikawati (2018) show that LDR has a negative effect and has no significant effect on profitability. Vernanda & Widyarti (2016), Hantono (2017)show that LDR has a positive and insignificant effect on profitability (ROA).

Company size is a scale in which the size of the company can be classified according to various ways, including: log total assets, log total sales, market capitalization. Company size is divided into 3 categories which are large companies, medium companies and small companies. The assessment of company size can use the measure of total assets. Company size is measured by the natural logarithm (Ln) of the average total assets of the company. The use of total assets is based on the consideration that total assets reflect the size of the company. In this study, the proxy for total assets is used, this is intended to reduce excess data fluctuation. If the total asset value is directly used, the variable value will be very large, billions or even trillions. Since the company's total assets are large, this can be simplified by transforming it into a natural logarithm, without changing the proportion of the original value. Sarwar et al. (2018)found that bank size has a significant effect on ROA. Rahman et al. (2015) found that bank size has a positive impact on ROA. But Ali & Puah (2018)states that bank size has a significant negative effect on ROA. Kedia (2016), Parvin et al. (2019)found that bank size has no significant effect on profitability (ROA).

II. HYPOTHESIS DEVELOPMENT

Capital is a factor that needs to be considered by banks. The success of a bank's life really depends on the level of capital adequacy that can drive bank operations. One of the ratios used by a bank to measure its minimum capital requirement is the Capital Adequacy Ratio (CAR). CAR is a comparison of total capital with risk-weighted assets (RWA). Based on Bank Indonesia regulation Number 13/14 / DPNP, the minimum capital that a bank must have is 8%. Kusumastuti & Alam (2019)state that CAR has a positive effect on profitability, the increase in CAR, the more bank profitability will increase because the bank is able to finance assets that contain risk. Alshatti (2015)and Septiani & Lestari (2016)show the results that CAR has a positive and significant effect on ROA. Putri et al. (2018)states that CAR has a significant positive effect on profitability (ROA).

H1: Capital Adequacy Ratio has a positive and significant effect on profitability

Funds sourced from the wider community or Third Party Funds are the most important source of funds for the operational activities of a bank and are a measure of the success of a bank if it is able to finance its operations from this source of funds. By increasing the TPF, the funds allocated for credit extension will also increase, thus increasing bank income which will have an impact on increasing the profitability of the bank. Asri & Suarjaya (2018), show that third party funds have a positive and significant effect on profitability.

H2: Third party funds have a positive and significant effect on profitability.

Loan to deposit ratio is the ratio used to measure the level of bank lending. The higher the credit extended by the bank, the higher the chances of obtaining a profit. Payment of interest earned from customer credit payments will increase bank profits. The increase in the amount of profit can increase the profitability of the bank. The higher the LDR, the higher the bank's profitability. Harun (2016)shows the results that LDR has a positive and significant effect on ROA.

H3: Loan to Deposit Ratio has a positive and significant effect on profitability.

Bank size is an indicator used to see the size of a bank. The size of the company will have an impact on the revenue received by the company. The bigger the size of a bank, then the bank's profitability will increase. Vernanda & Widyarti (2016), large companies in general have large total assets and are able to generate large profits as well. The bigger the size, the greater the profitability of the bank. Meidiyustiani (2016)shows that company size has a significant positive effect on profitability. Purba & Yadnya (2015), Astutiningsih & Kajeng Baskara (2019)show that bank size has a positive and significant effect on profitability. Malik et al. (2015)found that bank size has a positive effect on profitability.

H4: Bank size has a positive and significant effect on profitability.

III. METHODS

The scope of this research is carried out in banking companies on the Indonesia Stock Exchange (BEI) using financial reports published on the Indonesia Stock Exchange website. The independent variable (X) used in this study is CAR, TPF, LDR, bank size. Dependent variable (Y) in this study is profitability as measured by ROA. The population in this study are 44 banks. Purposive sampling technique is used with consideration such

as banking companies on the IDX that publish full annual financial reports for three consecutive years, 2016-2018. The sample in this study amounted to 18 banking companies. The data collection method used is the non-participant observation method. The data is analyzed using multiple linear regression

IV. RESULTS AND DISCUSSION

The number of observational data used was 54 data in a three-year period (2016-2018). The average (mean) value of ROA is 1.6411 with a standard deviation of 1.2096. The standard deviation value that is smaller than the average value indicates a low gap or variation from the ROA data that is the study sample. The lowest ROA variable value is -0.77 percent owned by Bank AgrisTbk in 2018 and the highest value is 4 percent is Bank Central Asia Tbk in 2016 and 2018.The average (mean) value of the CAR is 20.5613 with a standard deviation of 5.0812. The standard deviation value that is smaller than the average value indicates that there is a low gap or variation from the CAR data that is the study sample. The lowest CAR variable value is 3.21 percent owned by Bank AgrisTbk in 2018 and the highest value is 29.58 percent is Bank Rakyat Indonesia AgroniagaTbk in 2017.

The average (mean) value of the TPF variable is 128,142,556,8148 with a standard deviation of 220,662,822,5461. A standard deviation value that is greater than the average value indicates a high gap or variation from the TPF data that is the study sample. The lowest TPF variable value was 1,989,542 million rupiah owned by Bank MitraniagaTbk in 2016 and the highest value of 944,268,737 million rupiah was Bank Rakyat Indonesia (Persero) Tbk in 2018. The average (mean) value of the LDR is 79.7617 with a standard deviation of 16.8101. The standard deviation value that is smaller than the average value indicates a low gap or variation from the LDR data which is the study sample. The lowest LDR variable value was 41.99 percent owned by Bank MitraniagaTbk in 2018 and the highest value of 104.15 percent was Bank Pan Indonesia Tbk in 2018.The average (mean) value of the bank size is 17.8061 with a standard deviation of 1.6654. The standard deviation value that is smaller than the average value indicates a low gap or variation from the bank size data that is the sample of the study. The lowest bank size variable value was 14.61 owned by Bank MitraniagaTbk in 2016 and the highest value was 20.98 was Bank Rakyat Indonesia (Persero) Tbk in 2018.

Table 1. Results of Multiple Linear Regression Analysis

Model		***Unstandardized Coefficients***		***Standardized Coefficients***	**T**	**Sig.**
		B	**Std. *Error***	**Beta**		
1	(Constant)	-6,731	1,401		-4,804	,000
	CAR	,068	,020	,285	3,450	,001
	TPF	1,464E-9	,000	,267	2,326	,024
	LDR	,000	,007	,003	,032	,975
	BANK SIZE	,380	,107	,524	3,553	,001

Source: SPSS output, 2020

Based on Table 1.The equation of multiple linear regression results is obtained as follows:

$Y = -6{,}731 + 0{,}285\ X_1 + 0{,}267X_2 + 0{,}003\ X_3 + 0{,}524\ X_4$

β1 = 0.285 means that if CAR increases by 1 percent, then ROA will increase by 28.5 percent, assuming the other variables are constant. β2 = 0.267 means that if TFP increases by 1 percent, then ROA will increase by 26.7 percent, assuming the other variables are constant. β3 = 0.003 means that if the LDR increases by 1 percent, then ROA will increase by 3 percent, assuming the other variables are constant. β4 = 0.524 means that if the Bank Size increases by 1 percent, then ROA will increase by 52.4 percent assuming the other variables are constant. The F test shows that the value of F is 38.881 with a significance of 0.000 which is smaller than α = 0.05. This means that the regression model used in this study is feasible to use and simultaneously the four independent variables (CAR, TFP, LDR, bank size) have a significant effect on the dependent variable (ROA).

The regression coefficient value of the capital adequacy ratio with a positive direction is 0.285 with a significant level of 0.001. The results of this significance indicate that the significance level is less than the level α = 0.05. This means that the capital adequacy ratio has a positive and significant effect on return on assets, so that the first hypothesis in this study is accepted.The regression coefficient value of third party funds with a positive direction is 0.267 with a significant level of 0.024. The results of this significance indicate that the significance level is less than the level α = 0.05. This means that third party funds have a positive and significant effect on return on assets, so that the second hypothesis in this study is accepted.

The value of the loan to deposit ratio regression coefficient with a positive direction is 0.003 with a significant level of 0.975. The results of this significance indicate that the significance level is more than the level α = 0.05. This means that the loan to deposit ratio has a positive and insignificant effect on return on

assets, so that the third hypothesis in this study is rejected. The regression coefficient value of the bank size with a positive direction is 0.524 with a significant level of 0.001. The results of this significance indicate that the significance level is less than the level α = 0.05. This means that bank size has a positive and significant effect on return on assets, so that the fourth hypothesis in this study is accepted.

The R square value is 0.760. This means that 76.0 percent of the variation in ROA can be explained by the independent variables CAR (X1), TFP (X2), LDR (X3), and bank size (X4) while 24.0 percent is explained by other factors. The results of the analysis show that the LDR has no significant effect on profitability, indicating that the greater the LDR owned by a bank, does not necessarily reflect the large profits the bank will get. The LDR ratio fluctuates with an overly large range, resulting in a gap as reflected in the excessively high and low LDR for each banking company at each period.

V. CONCLUSION

Capital Adequacy Ratio has a positive and significant effect on profitability in banking companies on the IDX for the 2016-2018 period. Third Party Funds have a positive and significant effect on profitability in banking companies on the IDX for the 2016-2018 period. Loan to Deposit Ratio has a positive and insignificant effect on profitability in banking companies on the IDX for the 2016-2018 period. Bank size has a positive and significant effect on profitability in banking companies on the IDX for the 2016-2018 period.

Bank management is expected to always maintain a good level of capital adequacy because the higher the CAR, the better the bank's ability to bear the risk of any risky earning assets, so the higher the profit earned and the bank's performance will also increase. They are also expected to manage sources of funds from the community effectively and efficiently. Management of these sources of funds can be done by redistributing the funds collected in the form of credit to the public, distribution in the form of credit will certainly generate income in the form of credit interest, increased credit interest income contributes to profits and bank management can invest their funds in profitable assets, so that this This has an impact on increasing profitability which will also improve its financial performance. Banks are expected to increase lending in order to increase company profits by paying attention to the quantity of lending and maintaining the offered loan interest rate. Because the higher the LDR of a bank, the bank's profitability will also increase, and its financial performance will remain good. Banks with large sizes are expected to manage their assets well. The bigger the total assets, the bigger the bank, which indicates an increase in profitability. Bank management is expected to always maintain the CAR, TFP, LDR, and bank size components in accordance with the standards set by Bank Indonesia as the bank authority in Indonesia.

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