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THE IMPACT OF FUNDING RISK ON RISK TAKING COMMERCIAL BANKS IN INDONESIA

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ABSTRACT

This study aims to determine the impact of funding liquidity risk and profitability on the risk taking of commercial banks in Indonesia. Sampling using purposive sampling technique on the financial statements. The population of this research is 45 banks. The dependent variable in this study is bank risk taking. The independent variables in this study are funding liquidity risk, profitability, liquidity risk, size, efficiency, credit risk, and asset growth. This study uses descriptive statistical analysis and panel data regression analysis. The results of this study find that profitability and credit risk affect bank risk taking, while the variables of funding liquidity risk, liquidity risk, size, efficiency and asset growth have no effect on bank risk taking.

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1. INTRODUCTION

Banks must have the ability to convince the public (agent of trust) that the money they save is guaranteed safe and banks can return public funds at any time when the public will withdraw their funds, so that banks become agents of trust, banks must always have liquid funds. Bank risk taking needs to be considered in the viability of a bank.

Yuniari (2017) defines bank risk-taking as an important factor for the survival of a bank, therefore bank risk-taking must pay attention to several factors that can influence bank risk-taking decisions. Banking risk is uncertainty about the profits received. The correct definition of risk from the bank's point of view is exposure to income uncertainty.

Liquidity risk has long been recognized as a significant threat to the management of financial institutions and the stability of the financial system. Liquidity seen from the LDR ratio, namely the ratio to assess banking liquidity, decreased three times.

During a period of 5 years there was a decline of three times so banks must manage liquidity risk and to ensure against liquidity shocks. Acharya & Naqvi (2012) show that the higher the level of bank liquidity, the higher the risk-taking behavior of the bank. According to Khan, et al (2017) banks with high deposits are considered banks that have low liquidity risk because they have sufficient funds to carry out their obligations.

According to Gunandi & Aditya (2015) liquidity risk is the risk that arises due to excessive credit distribution which will cause an increase in banking operational costs. As a result, the need for large funds for lending can lead to a decrease in bank liquidity. Liquidity risk management is one of the most important activities carried out by banks, lack of liquidity in one bank not only causes the bank to experience liquidity risk but can have a wider effect on the banking system as a whole.

Funding liquidity risk plays an important role in the history of banking crises. Drehmann & Nikolaou (2013) define funding liquidity as the ability to meet obligations immediately, therefore funding liquidity risk can be interpreted as the possibility that within a certain period of time in the future, the bank cannot immediately fulfill its obligations. Smaoui, et al (2020) stated that lower funding liquidity risk means higher risk taking, while according to Strahan (2010) funding liquidity is referred to as the ability to get cash in a short time. Khan, et al (2017) stated that funding liquidity is an important factor that causes bank risk-taking behavior which will have a detrimental impact on the overall stability of the financial system.

The size of the bank is the size of the bank which is determined by the company's assets. Large banks tend to be diversified, thereby reducing the risk of bankruptcy. Nasution (2020) bank size is seen from the total company assets used for bank operational activities. If the bank has large total assets, the management is more flexible in using existing assets. Viewed from the management side, the convenience it has in managing the bank will increase the value of the bank so that in taking bank risk the management has no difficulty.

Hassan, Unsal & Tamer (2016) define credit risk as the possibility of losses that can be incurred by banks due to the failure of credit users to fulfill obligations made within the required time frame. Smaoui, et al (2020) stated that higher credit risk does not necessarily lead to a higher bankruptcy risk or the higher the credit risk of lower bank risk taking, the higher the credit risk due to the looser credit terms, the more low ability of equity owned by the bank. The banking system needs to identify sources of banking risk, where banks are faced with several financial risks. According to Kero (2013), this financial risk includes the possibility that customers suddenly withdraw their deposits (liquidity risk), the borrower will not return the loan on time (credit risk). Credit risk and liquidity risk are not only the most important risks faced by banks, but are also directly related to what banks do and why banks fail.

Asset growth is defined as the percentage change in total assets from the end of the fiscal year from the previous year, to the end of the current year. An increase in assets followed by an increase in operating results will further increase the confidence of external parties in the company. Each bank has a different strategy in increasing the growth of its assets, but almost every bank increases the growth of their assets including paying attention to risk taking.

Kusuma, et al (2019) define profitability as the company's ability to earn profits through its business operations using asset funds owned by the company, companies that have a high level of profitability every year, have a tendency to use their own capital compared to other companies that have a high level of profitability. using debt.

2. METHOD

Types of research

This type of research is quantitative research. According to Sugiyono (2014) quantitative research is research that uses research instruments and data analysis is quantitative or statistical in nature with the aim of testing predetermined hypotheses.

Place and time of research

The research location is at the Indonesian Commercial Bank and the research time is 5 years.

Population and Sample

The population of this study is 45 commercial banks listed on IDX. Sampling in this study using purposive sampling technique. According to Sugiyono (2014) purposive sampling technique, namely a sampling technique using certain criteria or considerations.

Definition of Variable Operational Concept

Bank Risk Taking

According to Yuwonoputro & Syaichu (2019), bank risk-taking refers to the extent to which banks are willing to take risks, whether they are more risk-taking or less risk-taking in determining managerial decisions. Taking a high risk from a bank can result in the bank going bankrupt. Smaoui, et al (2020) proxy for bank risk taking as measured by the z-score:

$$\text{LNZSCORE} = Ln\left(\frac{\text{ROA}\left(\frac{equity}{assets}\right)}{\sigma ROA}\right)$$

Funding Liquidity Risk

According to Prince (2017) when banks do not have cash and other liquid assets to pay obligations within a certain time, funding liquidity risk will arise. Funding liquidity risk describes the bank's inability to meet its obligations at maturity. This results in the loss of customer trust. Profitability Isgiyarta & Aryani (2020) defines profitability can measure the company's ability to earn profits with the level of sales, assets and efficiency of capital use. If the company's profits increase regularly, the company can manage assets effectively and efficiently so as to produce high profitability.

Liquidity Risk

According to Paramita (2020) the inability of banks to meet short-term obligations can pose a risk of liquidation because they do not have sufficient assets.

Size

According to Sok-gee (2016) larger banks have better access to financial products and loan customers which in turn contributes to better portfolio diversification and hence, reduced bank risk.

Efficiency

According to Hidayat (2014) efficiency is a comparison between output and input or the amount produced from the results of an input produced. A company can be said to be efficient if the company can produce greater output when compared to other companies by using the same amount of input or producing the same output, but the number of inputs used is less than the number of inputs used by other companies.

Credit Risk

According to Paramita (2020) credit risk will arise when the borrower is unable to pay the principal or cash flow in accordance with the conditions set out in the credit agreement.

Asset Growth

According to Isgiyarta & Aryani (2020) the company's ability to maintain its business position in economic development can be seen from the growth of company assets.

3. RELUST AND DISCUSSION

Descriptive Statistics Results

Descriptive analysis provides an overview or descriptive of a data seen from the mean, median, maximum, minimum, and standard deviation values.

The LNZSCORE standard deviation value is 1.32 which is smaller than the average value, it indicates LNZSCORE has a low level of data variation. The FLR standard deviation value is 0.45 smaller than the average value, so the FLR indicates a low level of data variation. The value of the standard deviation of 0.14 is greater than the average value, so the ROA indicates a high level of variation in the data. The average value of LR owned by banks is -0.13, this shows that for every Rp. 1 banking asset, Rp. -0.13 for liquidity risk. The standard deviation value of 0.45 is greater than the average value, so LR indicates a high level of data variation.

Panel Data Regression Data Analysis

In panel data analysis there are three regression models used, namely Common Effect, Fixed Effect, and Random Effect.

Common Effect

Here are the results of the Common Effect regression analysis that can be seen, LNZSCORE with a probability of 0.49, ROA has a negative effect of -1.47 on LNZSCORE with a probability of 0.00, LR has no influence on LNZSCORE with a probability of 0.66, SIZE has no influence on LNZSCORE with probability 0.26, CIR has no effect on LNZSCORE with probability 0.66, LLR has a negative effect of -13.20 on LNZSCORE with probability 0.00, ASSETG has no effect on LNZSCORE with probability 0.91.

Fixed Effect

Here are the results of the Fixed Effect regression analysis that can be seen, FLR has no effect on LNZSCORE with a probability of 0.96, ROA has a negative effect of -1.49 on LNZSCORE with a probability of 0.00, LR has no effect on LNZSCORE with a probability of 0, 97, SIZE has no effect on LNZSCORE with probability 0.55, CIR has no effect on LNZSCORE with probability 0.42, LLR has a negative effect of -13.53 on LNZSCORE with probability 0.04, ASSETG has no effect on LNZSCORE with probability 0.59.

Random Effect

Here are the results of the Random Effect regression analysis that can be seen FLR has no effect on LNZSCORE with probability 0.67, ROA has a negative effect of -1.19 on LNZSCORE with probability 0.00, LR has no effect on LNZSCORE with probability 0.78, SIZE has no effect on LNZSORE with probability 0 .48, CIR has no effect on LNZSCORE with a probability of 0.45, LLR has no effect on LNZSCORE with a probability of 0.13, ASSETG has no effect on LNZSCORE with a 0.30 probability.

Selection of Panel Data Regression Estimation Technique

Fixed Effect Significance Test

The results of the Fixed Effect significance test can be seen from the Cross-section F value of 0.00 or <0.05 so it can be concluded that the fixed effect model is more appropriate to use than the common effect model.

Hausman test

The results of the Hausman test can be seen in the Chi-Square probability value of 1.00 > which is 0.05 or Chi-Square statistic 0.00 < Chi-Square table 14.02. From the results of the significant fixed effect test and the random effect test with the Hausman test, it can be concluded that the fixed effect test is not better because the probability level is not significant to , which is 0.05.

Classic assumption test

Normality test

The normality test aims to test whether in the regression model, the variables in the study are normally distributed or not. Decision making with Jarque-Bera test is if the probability value is > 5%, then the variables in the study are normally distributed. The probability value of the J-B test is greater than a significant value of 0.05, so it can be concluded that the data is normally distributed.

Heteroscedasticity Test

The heteroscedasticity test aims to test whether in the regression model there is an inequality of variance from one residual to another observation. There is no heteroscedasticity problem in the Glejser test on the independent variables, namely the FLR, ROA, LR, SIZE, CIR, LLR, and ASSETG variables because the significant value is above the value of 0.05. All correlations of the independent variables are not more than 0.9 then it can be concluded that the independent variable is independent of the multicollinearity problem.

Autocorrelation Test

The autocorrelation test aims to test whether in the linear regression model there is a correlation between the confounding errors in the previous time or space. The results of the autocorrelation test that have been carried out with the BG test are based on the residual value of the Common Effect method. From the results of the autocorrelation test in table 11 Prob level. Chi-Square is 0.4256 > from a significance value of 0.05, there is no autocorrelation problem.

Panel Data Analysis Discussion

The results of panel data regression in this study are using the Common Effect regression model. The FLR variable has a coefficient value of 0.29 with a positive relationship towards LNZSCORE. This shows that every increase in the FLR variable will decrease LNZSCORE. If there is an increase of 1% or one unit, it will decrease the LNZSCORE variable by 0.29 assuming the other variables ROA, LR, SIZE, CIR, LLR, and ASSETG remain.

The ROA variable has a coefficient value of -1.47 with a negative relationship towards LNZSCORE. This shows that every increase in the ROA variable will decrease LNZSCORE. If there is an increase of 1% or one unit, it will decrease the LNZSCORE variable by 1.47 assuming the other variables FLR, LR, SIZE, CIR, LLR, and ASSETG remain.

The LR variable has a coefficient value of 0.18 with a positive relationship towards LNZSCORE. This shows that every increase in the LR variable will decrease LNZSCORE. If there is an increase of 1% or one unit, it will decrease the LNZSCORE variable by 0.18 assuming the other variables FLR, ROA, SIZE, CIR, LLR, and ASSETG remain.

The SIZE variable has a coefficient value of -0.05 with a negative relationship towards LNZSCORE. This shows that every increase in the SIZE variable will decrease LNZSCORE. If there is an increase of 1% or one unit, it will decrease the LNZSCORE variable by 0.05 with the assumption that the other variables FLR, ROA, LR, CIR, LLR, and ASSETG are fixed.

The CIR variable has a coefficient value of 0.00 with a positive relationship towards LNZSCORE. This shows that every increase in the CIR variable will decrease LNZSCORE. If there is an increase of 1% or one unit, it will decrease the LNZSCORE variable by 0.00 with the assumption that the other variables FLR, ROA, LR, SIZE, LLR, and ASSETG remain.

The LLR variable has a coefficient value of -13.20 with a negative relationship towards LNZSCORE. This shows that each increase in the LLR variable will decrease the LNZSCORE. If there is an increase of 1% or one unit, it will decrease the LNZSCORE variable by 13.20 with the assumption that the other variables FLR, ROA, LR, SIZE, CIR, and ASSETG are fixed.

The ASSETG variable has a coefficient value of -0.05 with a negative relationship towards LNZSCORE. This shows that every increase in the ASSETG variable will decrease LNZSCORE. If there is an increase of 1% or one unit, it will decrease the LNZSCORE variable by 0.05 with the assumption that the other variables are FLR, ROA, LR, SIZE, CIR, and LLR remain.

F Uji test

This test looks at the results of the significance test which is below 5% (0.05). If the value of sig. < 0.05 then Ha is accepted, but if the value of sig. > 0.05 then Ho is accepted. Based on the table of significance test (F-Statistic) of 0.00 < 0.05, then Ha is accepted. Meanwhile, the value in the F distribution table at the 5% significance level is df: 0.05 (k - 1), (n - k) = (7-1), (215-7) the value of the F table is 05. Because The calculated F value is 15.85 > the F table value is 05 and the calculated F probability value is 0.00 less than the 0.05 value.

Coefficient of Determination Test

Ghozali (2012) explains that the coefficient of determination test is used to determine how far the model's ability to explain the variation of the dependent variable. The value of the coefficient of determination is between zero and one. A small value of R2 means that the ability of the independent variables in explaining the variation of the dependent variable is very limited. A value close to one means that the independent variables provide almost all the information needed to predict the variation of the dependent variable.

Discussion

FLR has no effect on LNZSCORE, this shows that funding liquidity risk has no effect on reducing bank risk taking, because banks have easy access to funding so they can fulfill obligations immediately, therefore banks are far from risk.

Profitability has a negative effect on LNZSCORE, this shows that a high level of profitability will result in lower bank risk taking, because companies that have a high level of profitability every year, have a tendency to use their own capital compared to using debt so as to reduce bank risk.

LR has no effect on LNZSCORE, because banks are able to meet liquidity to meet their obligations when they fall due, the higher the ratio, the lower the liquidity risk faced by banks, and banks are able to identify changes in market conditions that affect the ability to liquidate assets quickly with minimum losses. so that the condition of banking liquidity is maintained.

SIZE has no effect on LNZSCORE, because large banks are better able to secure non-deposit funding, in other words, bank size prevents banks from taking more risks and increases banking stability.

CIR has no effect on LNZSCORE, banks that are able to manage assets efficiently will get good profitability, efficiency is the ability of banks to be precise without wasting their resources, banking operations are not disrupted due to asset efficiency.

LLR has a negative effect on LNZSCORE, where banks channel too much credit, including channeling credit that is of less quality, this credit distribution causes many loans to default, so that the amount of capital originating from the issuance of shares and retained earnings will decrease because too much is used for financing. closing bad loans made by banks so that banking risk is higher. ASSETG has no effect on LNZSCORE, which means that asset growth does not necessarily affect bank risk taking because banks with good asset growth indicate good managerial abilities.

4. CONCLUSION

FLR has no effect on LNZSCORE, Profitability has no effect on LNZSCORE, LR has no effect on LNZSCORE, SIZE has no effect on LNZSCORE, because large banks are better able to secure non-deposit funding, in other words bank size prevents banks from taking more risks and improves banking stability. CIR has no effect on LNZSCORE, LLR has no effect on LNZSCORE, ASSETG has no effect on LNZSCORE. For further research, it is recommended to increase the number of observation periods so that the population is larger and the samples taken are more representative of the research.

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