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THE MEDIATING EFFECT OF CAPITAL ADEQUACY RATIO ON THE RELATIONSHIP BETWEEN NON-PERFORMING LOAN AND RETURN ON ASSET

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Abstrak: Setiap perusahaan memiliki kecenderungan hanya untuk mencari keuntungan sedangkan, tujuan perusahaan tidak hanya untuk memaksimalkan keuntungan dan memaksimalkan pemegang saham atau pemiliknya tetapi juga berusaha untuk memaksimalkan kekayaan pemegang saham mereka. Ini berarti bahwa perusahaan perlu memberi manfaat kepada pemangku kepentingan mereka, dan salah satu pemangku kepentingan perusahaan adalah masyarakat di sekitar perusahaan. Tujuan dari penelitian ini adalah untuk menganalisis faktor yang mempengaruhi pengembalian aset bank di Indonesia tepatnya Indeks Infobank15. Penelitian ini bersifat deskriptif dengan menggunakan NPL, CAR sebagai variabel independen dan ROA sebagai variabel dependen. Keuangan yang digunakan dalam penelitian ini adalah untuk penggunaan data keuangan dalam penelitian dari laporan tahunan dan laporan keuangan dari tahun 2014 - 2018. Analisis data menggunakan analisis statistik seperti uji statistik F, uji t, dan analisis regresi. Hasil penelitian menunjukkan bahwa semua bank di Indonesia dalam penelitian sehat dalam hal modal minimum, kredit macet analisis telah digunakan dan hasilnya sangat baik. Hasil rata-rata untuk CAR diatas standard 8% untuk modal minimum untuk bank. Hasil rata-rata NPL di bawah standar minimum 5% yang menunjukkan bahwa bank dapat mengelola kredit macet mereka. Data statistik deskriptif juga menunjukkan bahwa ROA memiliki rata-rata di atas 1,5% standar Bank Indonesia. Hasil penelitian menunjukkan bahwa ada hubungan yang signifikan antara NPL, CAR on ROA bank di Indonesia pada Indeks Infobank15 dari tahun 2014-2018.

Kata Kunci: NPL, CAR, ROA

Introduction

Every company has a tendency to only seek profits whereas, the company's goal is not only to maximize profits and maximize shareholders or their owners but also try to maximize the wealth of their stakeholders. This means that companies need to benefit their stakeholders, and one of the company's stakeholders is the community around the company.

The Bank is one of the institutions needed by the public in all activities such as transaction activities and savings and loan activities is the Bank. Banks as institutions become a very useful forum for the community, so that even throughout the world, banks have been trusted to be a solution for the public regarding their finances. In the Law of the Republic of Indonesia Number 10 of 1998 concerning the banking industry, it is said that banks are business entities

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that collect funds from the public in the form of deposits and distribute them to the public in the form of loans and / or other forms in order to improve the lives of many people. (Kasmir, 2014, p. 24). For banks to be beneficial to stakeholders and the public, banks must first have good financial performance and in other words, banks must be healthy and function well.

Murhadi (2015) states that the performance of a company can be analyzed from its financial statements. Financial statements contain information about financial position, financial performance, and changes in financial position that are very useful in decision making. It is very important for investors and shareholders to know the financial condition of a company. In addition to investors and shareholders who need these financial statements, financial managers also need financial statements from the company so that managers can use the information contained in the financial statements so that decisions related to investment, financing, and company operations can be determined. The ability of banks to carry out their functions is to receive money from the public in the form of savings or savings, time deposits and current accounts, so that this becomes the funds collected and channeled back to the community in the form of loans or loans can be seen from the analysis of financial statements. (Cashmere, 2012). In every business activity carried out, of course, the first time you want is to make a profit. Various ways that can be done by banks to get maximum profit or profit, one of which is that banks must have large capital. The maximum profit can increase bank capital so that bank operations can be carried out. And running a business, banks must be able to achieve company goals in general, namely to generate profits (Taswan, 2010, p. 151).

Financial ratios are part of financial statements that show a company's performance. According to Kasmir (2003: 279), profitability ratios are used to measure the level of business efficiency and profitability achieved by the bank concerned. In other words, profitability ratios are important financial ratios to determine the ability of banks to earn profits and measure bank performance. One of the banking profitability ratios is Return on Assets. (Taswan, 2010).

Asset return is a ratio that shows the ratio between income and total bank assets, this ratio shows the level of asset management efficiency carried out by the bank concerned (Pandia, 2012; Darmawi, 2014). The greater the bank's Asset Return (ROA), the greater the bank's profitability and the better the bank's position in terms of asset use. In fact, what happens in companies is that ROA in small banks has decreased.

As reported in Kontan news by Sitanggang (2019), each bank relies on bank credit and will begin to be vigilant if it starts to slow down as happened in the second quarter of 2019. Bank Indonesia (BI) notes as of April 2019 loans grew by 11% down 0.5% % of the previous month period. In addition to slowing credit, the bank's net interest margin (NIM) ratio has also shrunk. Data from the Financial Services Authority (FSA) in the Indonesian Banking Statistics (SPI) as of March 2019 recorded that the banking industry's NIM was at the level of 4.86%. The position shrank from the last December 2018 period of 5.14% or March 2018 which was 5.07%. Nevertheless, the bank's profitability ratio is still relatively high. One of them is in terms of return on assets (ROA).

Bank BTN will release IDR 3.14 trillion bonds, this is the coupon rate

As of March 2019 recorded bank ROA reached 2.6% or higher than the stable March-December 2018 period of 2.55%. One of them is certainly supported by ROA IV commercial bank business group (BUKU) IV with a core capital of more than Rp 30 trillion which is quite high, reaching 3.11% as of March 2019.

From the above case, it can be seen how the difficulty of the bank if declining bank credit can reduce the ratio of return on assets, but it is found that the ratio does not decrease because it is supported by adequate capital.

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Significant of the Study

The use of this research is very important for the writer, in gaining knowledge and practical experience in expanding research in various countries as well as in analyzing the company's financial statements and their development. This study is also important for university researchers, in supporting institutional programs for their faculties. As additional information, this research can also be used as a decision-making tool for bank, investors, and other readers.

Literature

Financial ratios are numbers obtained from comparisons of extracts from one financial statement post with another that have a relevant and significant relationship (Harahap, 2004). Meanwhile, according to Ediningsih (2004) financial ratios are comparisons between two elements of financial statements that show indicators of financial health at a certain time. Financial ratios are very important for external analysts who judge companies based on published financial statements. This assessment covers issues of liquidity, solvency, profitability, management efficiency, and the company's prospects for the future. CAR or often referred to as the bank's capital adequacy ratio, is a ratio to show how banks can finance their activities with capital ownership. It is interesting to see how adequate capital from a bank that can be seen through the CAR ratio can affect the bank's goal of maximizing profit which can be seen through profitability ratios such as ROA. NPL is a financial ratio that is used as a proxy for credit returns given to bank depositors, in other words NPL is the level of bad credit at the bank. This ratio shows that the ability of bank management in managing non-performing loans is provided by banks. The smaller the Non Performing Loan (NPL), the smaller the credit risk borne by the bank. Banks play the role of implementing monetary policy and achieving financial system stability, so a healthy, transparent and accountable banking system is needed. (Indonesian Banking Booklet 2009). The fundamental purpose of the banking business is to obtain optimal benefits by providing financial services to the public. For shareholders to invest in the bank aims to get income in the form of dividends or benefit from an increase in the price of shares owned. (Mudrajad and Suhardjono, 2002) It is important for banks to always maintain good performance, especially maintaining high levels of profitability, being able to distribute dividends well, business prospects that are always developing, and able to meet prudential banking regulation requirements well (Mudrajad and Suhardjono, 2002). If a bank can maintain its performance well, it can increase the value of shares in the secondary market and increase the amount of funds from third parties.

An increase in the value of shares and the amount of funds from third parties is one indicator of increasing public confidence in the bank concerned. The trust and loyalty of fund owners to banks is a very helpful factor and makes it easier for bank management to develop good business strategies. Fund owners who lack trust in the bank concerned have very low loyalty. This is very unprofitable for the bank concerned, because the owner of the funds can withdraw funds at any time. It is important to evaluate the performance of the company, both by management, shareholders, the government, and other parties concerned and related to distribution showing that financial ratios are useful in assessing the financial condition of banking companies. Financial ratios are also useful in predicting corporate profits.

The predictive power of financial ratios in predicting earnings so far is indeed very useful in assessing the company's performance (performance) in the future. The predictive power of financial ratios was found differently by some researchers. But whether all existing financial

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ratios have the ability to predict earnings, someone has done research. The discussion below regarding the research hypothesis consists of the results of previous studies on CAR, NPL, LDR, and ROA.

Hypothesis of the Study

CAR, NPL, LDR are ratios related to CAMEL ratios that evaluate the health of banks (Simanjuntak & Hutabarat, 2016). CAR or often referred to as the bank's capital adequacy ratio, is a ratio to show how banks can finance their activities with capital ownership. Loan to Deposit Ratio (LDR) is defined as how much bank funds are released into credit, while NPL is the level of bad loans at the bank. Some previous studies seek the relationship between CAR and ROA (Hindarto, 2011; Catur Wahyu Endra Yogianta, 2013; Harun, 2016). Other studies, used loan to deposit ration in their to find its relationship on profitability of a bank (Werdaningtyas, 2002; Merkusiwati, 2007; Suyono, 2005; Usman, 2003, Edwar, Yokeu, Bernadin, 2016). This study use NPL as the basis independent variable and added CAR as its mediating variable on return on asset as its dependent variable. Based on the background description of the problem above, the hypothesis in this study is as follows:

Financial institutions are very important in economic development because funds are needed to implement them. (Kuncoro and Suhardjono, 2002). Article 3 of the Banking Law states that the main function of banks in Indonesian banking is to collect and distribute public funds. (Fahmi, 2014).NPL is a financial ratio that is used as a proxy for credit returns given to bank depositors, in other words NPL is the level of bad credit at the bank. This ratio shows that the ability of bank management in managing non-performing loans is provided by banks. The smaller the Non Performing Loan (NPL), the smaller the credit risk borne by the bank, the aspect of supervision decreases, so that the Non Performing Loans (NPL) is greater or the credit risk is greater (Mawardi, 2005). Research on the effect of Non Performing Loans (NPL) shows different results. Among other things, research conducted by Mawardi (2005) shows that Non Performing Loans (NPL) has a negative and significant effect on Return on Assets (ROA). While research conducted by, Suyono (2005) shows the results that Non Performing Loans (NPL) are negative and not significant to Return On Assets (ROA).

H1: There is a relationship between NPL and Profitability

CAR or often referred to as the bank's capital adequacy ratio, is a ratio to show how banks can finance their activities with capital ownership. It is interesting to see how adequate capital from a bank that can be seen through the CAR ratio can affect the bank's goal of maximizing profit which can be seen through profitability ratios such as ROA. (Abba, Okwa, Soje and Aikpitanyi, 2018). Moreover, working capital to finance operations, as an instrument to drive ratios, and as a tool for business expansion. Research on the capital aspects of a bank is more to find out how or bank capital is sufficient to support its needs (Merkusiwati, 2007). In this study, capital adequacy is studied based on the Capital Adequacy Ratio (CAR) ratio. Capital Adequacy Ratio (CAR) at a certain level determines that banks have sufficient capital capacity to reduce risk due to an increase due to an increase or increase in asset assets that are categorized as production results and also contain substances (Werdaningtyas, 2002). Research conducted by Werdaningtyas (2002), Mawardi (2005) and Suyono (2005) shows the results that Capital Adequacy Ratio (CAR) has a positive and significant effect on Return on Assets (ROA). While Mawardi (2005) shows that the Capital Adequacy Ratio (CAR) has a positive and insignificant influence on Return On Assets (ROA) and Sarifudin (2005) which shows the results of a

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positive and insignificant Capital Adequacy Ratio (CAR) ratio related to Return On Asset Assets (ROA) While Mawardi (2005) shows that the Capital Adequacy Ratio (CAR) has a positive and not significant effect on Return On Assets (ROA) and Sarifudin (2005) which shows positive and insignificant results of the Capital Adequacy Ratio (CAR) related with Return On Asset Asset (ROA).

H2: There is a relationship between CAR and Profitability

Method of the Study

To limit the breadth of discussion in this study, researchers limit research in terms of the scope and limitations of the research problem. This research was conducted on banks listed at Infobank15 Indeks that also listed at the Indonesia Stock Exchange. This study uses panel data taken from annual reports and financial reports of fifteen Indonesian banks that perform under the index from five-year data from 2014-2018 with a total sample of 75 data. The use of panel data five years in a row provides advantages for measuring changes that occur between time points (Cavana et al as seen in Alzahrani Che-Ahmad, 2015). Data taken from operational variables used in this study consisted of independent variables and dependent variables. The independent variables used in this study are Capital Adequacy Ratio (CAR), Non Performing Loans (NPL). While the dependent variable is Return on Assets (ROA). The samples used in the study of fifteen banks listed in Infobank15 Index are: AGRO, BBCA, BBKP, BBNI, BBRI, BBTN, BBYB, BDMN, BJBR, BJTM, BMRI, BNGA, INPC, MCOR, and PNBN.

Analysis of variables uses the formula to:

- 1. Dependent Variable (Profitability)
 - a. Return on Assets as the first dependent variable with the standard ROA> 1.5%.
- 2. Independent Variables
 - a. Capital Adequacy Ratio, with CAR> 8% standard.
 - b. Non Performing Loans, with NPL <5% standard

Statistical analysis was performed using descriptive statistics from Mean, Standard Deviation, Minimum and Maximum, Correlation Matrix, Regression analysis, F-test, and t-test.

The economic model is used to develop the company's profitability model or its ability to make a profit. The variables proposed for the model include the following functional equations:

ROA
$$it = \beta 0 + \beta$$
NPL + $ei + uit$ (1)
ROA $it = \beta 0 + \beta$ 1NPL + β 2CAR + $ei + uit$ (2)

Where:

ROAit = profitability Return on Asset

CAR = capital adequacy ratio NPL = non performing loan

e = error term

i = indicating data for the i bank

t = time indicator

Result of the Study

Descriptive Statistic

Tabel 1 menunjukkan karakteristik variabel penelitian berdasarkan profil banknya.

Table 1. **Descriptive Statistic**

	N	Minimum	Maximum	Mean	Std. Deviation
CAR	75	.17	29.58	17.7503	5.80687
NPL	75	.01	9.92	1.9289	1.51927
ROA	75	-2.83	4.73	1.7139	1.26896
Valid N (listwise)	75				

Based on table 1 the results show that the research variables have good average results. In general, the average yield for CARs on banks in the Infobank Index15. The results obtained are found above the 8% standard for bank minimum capital. On the contrary, the average NPL results show that banks on the Infobank Index15 have a low non-performing loan of 1.92 %% compared to the standard NPL of 5%. This shows that banks in Indonesia can manage their bad loans.

Descriptive statistical data also shows that ROA at Bank Indonesia has an average of 1.71% which is above 1.5% of Bank Indonesia standards.

Therefore, based on the results of Descriptive statistics, state banks in Indonesia show that they have good financial performance based on the given standards.

Table 2. **Regression Model**

			Change Statistics				
Model	R		R Square Change		df1	df2	Sig. F Change
1	.246 ^a	.061	.061	4.722	1	73	.033
2	.629 ^b	.396	.335	39.944	1	72	.000

Table shows that in model 1, there is a low relationship between CAR and ROA with r = .246, while in model 2 there is indication of a higher relationship which read that there is a strong relationship netween NPL and CAR on ROA with r = 0.629.

Now, what we get is our variables, in stages in which they are enter. We have some models, and The R Square in model 1 in terms of CAR that is accounted for 6.1% and for the second step there is an accounted of 33.5% additional percentage with R Square resulted in 39.6%.

Table 3. ANOVA^c

Mode	1	Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	7.239	1	7.239	4.722	.033 ^a
	Residual	111.921	73	1.533		
	Total	119.159	74			
2	Regression	47.174	2	23.587	23.592	.000 ^b
	Residual	71.985	72	1.000		
	Total	119.159	74			

a. Predictors: (Constant), NPL

b. Predictors: (Constant), NPL, CAR

c. Dependent Variable: ROA

The table above shows that the first model in hypothesis 1 is accepted where NPL, have a significant correlation to profitability based on Return on Assets with an F-count of 4.722 and a p-value of 0.033 at $\alpha = 5\%$. In addition, the second model is accepted because the F-count is 23.592 with a p-value of 0.000 at $\alpha = 5\%$, so there is significant relationship between NPL, CAR, on ROE.

Table 4. Coefficients^a

		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
Model		В	Std. Error	Beta			
1	(Constant)	2.111	.232		9.098	.000	
	NPL	206	.095	246	-2.173	.033	
2	(Constant)	.023	.380		.062	.951	
	NPL	319	.079	383	-4.065	.000	
	CAR	.130	.021	.595	6.320	.000	

a. Dependent Variable: ROA

In here how we can see why it is mediating relationship. NPL predict significantly its relationhip on ROA. Lets look at the coefficient, what it means, once NPL change then ROA will change by -.206. While model 2, where CAR added, NPL still significant with coefficient 0.319 and CAR is signicant with coefficient .130. In addition, based on the t-test above H1 it is accepted that there is a significant relationship between NPL and ROA, and H2 is accepted that CAR and ROA are significant. For regression analysis, based on the table above, the results indicate that the regression model for this study is:

ROA1 = 2.111 - 0.206 NPL

ROA2 = 0.023 - 0.319 NPL + 0.130 CAR

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Regression model 2 shows that an increase in NPL by 1 point will decrease ROA by 0.319, and an increase in CAR by 1 point will increase ROA by 0.130.

CAR or often referred to as the bank's capital adequacy ratio, based on the results showing that state-owned banks and leading banks in Indonesia can finance their activities with capital ownership. The results show the CAR ratio can affect the ability of banks to make a profit as seen in the profitability ratio of their ROA.

The results also show that CAR in the country is at least twice the required standard of 8% with an average of 17% which indicates they want to have sufficient capital capacity to reduce risk (Werdaningtyas, 2002). These results are proven to be supported by previous studies such as those conducted by Udom and Eze (2018).

Conclusion and Recommendation

Conclusion

In this study the researcher found that the effect of NPL, CAR on ROA was very good because he found significant results between these variables. Average yields for Indonesian state-owned banks and leading banks in Singapore are above the 8% standard for minimum capital for a bank. NPLs also produce below the minimum standard of 5% which shows that banks in Indonesia can manage their bad loans. On the other hand, banks in Indonesia from descriptive statistical data also show that ROA has an average above 1.5% of Bank Indonesia standards. Therefore, banks in Indonesia have good financial performance from 2014-2018.

Recommendation

The researcher sees that the relationship between NPL, CAR and ROA is very good so the researcher recommends Indonesian bank investors to own shares in state-owned companies and leading banks listed on the Indonesia and Singapore exchanges. In terms of management decision making for their stakeholders, the banking industry has supported the community not only in business matters but also in a humanitarian way, in terms of scholarships and also other social responsibility actions. On the other hand the bank although this is a common thing, but based on this study found non-performing loans can erode the return on company assets. Therefore, banks are expected to be able to pursue plans and strategies in overcoming the problem of non-performing loans.

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