

**THE ANALYSIS OF CREDIT RISK EFFECT ON BANK'S
PROFITABILITY AT PT. BANK CENTRAL ASIA, Tbk**

Journal

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ABSTRACT

The purpose of this study are 1) To describe the ratio of CAR, LDR, BOPO and NPL have an effect on bank profitability either partially or simultaneously at PT. Bank Central Asia, Tbk 2) To describe the dominant factor affect bank profitability at PT. Bank Central Asia, Tbk. The type of research conducted is explanatory research (explanation) ie the researcher explains the causal relationship between the variables through hypothesis testing. Techniques used in collecting data is done through documentation. Data analysis methods to determine the effect of CAR, LDR, BOPO and NPL ratio to bank profitability either partially or simultaneously at PT. Bank Central Asia, Tbk is used multiple regression method with data panel model and as data processing tool using Eviews 7 program.

Based on the results of research and discussion that has been done then can be drawn conclusion as follows: 1) Ratio of CAR, LDR, BOPO and NPL have an effect on bank profitability either partially or simultan at PT. Bank Central Asia, Tbk. 2) Based on the analysis results can be seen that the CAR has a regression coefficient of 0.409551, LDR of 0.144030, BOPO of 0.144030 and NPL of 0.103040. Based on the results of the comparison shows that CAR has the greatest influence on bank profitability at PT. Bank Central Asia, Tbk.

Keywords: CAR, LDR, BOPO, NPL, and PROFITABILITY BANK

Banking is a company relation to the community in its activities. Banking activities are influenced by the trust of customers or the wider community. If there is turbulence in the body of the bank there will be a strong reaction from the public. Bank is considered as the driving force of a country's economy. The function of banks as financial institutions is vital, for example it is a place in the creation of money circulation to support business activities, a place to save money, to make payments or billing and many other financial services. In running its business as a financial institution, daily banking activities cannot be separated from the financial field.

CAMEL ratio is a relationship or comparison between a certain amount to another amount resulting in a ratio analysis which can provide a good picture of bad state or financial position of a bank. The benefits of Financial Ratios for Predicting Bankruptcy, Machfoedz (2004) examined the benefits of financial ratios in predicting future corporate earnings. The financial ratios used are cash flows / current liabilities, net worth and total liabilities / fixed assets, gross profit / sales, operating income / sales, net income / sales, quick assets / inventory, operating income / total liabilities, net worth / sales, current liabilities / net worth, and net worth / total liabilities. It was found that the financial ratios used in the model are useful for predicting earnings over the course of a year, but are not useful for predicting earnings for more than one year.

Profitability is an important factor in assessing bank soundness. The development of profit obtained by banks can be known through the bank's financial statements, the parties concerned may conduct financial statement analysis in order to obtain information about the performance and soundness of the bank. A healthy level of profitability is one of the goals of every bank because profitability is used as a tool to measure how much management's ability to generate return on assets embedded in the company and also demonstrate management's ability to reduce operational costs

In this study the level of profitability is shown by bank's ability to generate profits and it will depend on the ability of bank management in managing assets

with existing liabilities. The ratio used is CAR, NPL, NPM, BOPO, LDR, NIM. Some research concerning profitability in the banking world, one of which was conducted by Kusumawati (2005) on the influence of financial variables and total assets on profitability in regional development banks in Indonesia. The result shows that the variables included in financial ratios in CAMEL ratio and total assets are able to affect bank profitability. In addition, Harjono (2006) also conducted a study on the Influence Analysis of CAMEL Ratio and Size to Profit Growth at National Private Banks in Indonesia. Another research was also done by Lely (2007) on the Evaluation of CAMEL Effect on Company's Performance (ROA) on 17 banks listed on the Jakarta Stock Exchange in the period of 1997-2001. Other research was conducted by Mariana (2007) about the study profitability of PT. Bank Syariah Mandiri Tbk which is size-based and financial ratios. It was conclude that financial ratios and firm size can influence bank's profitability during the observation period.

The ability and success of PT. Bank Central Asia, Tbk (BCA) in maintaining its performance in the banking sector gained international recognition. PT. Bank Central Asia Tbk (BCA) was awarded the Best Bank in Indonesia and the Best Asian Bank in Finance Asia Country Awards for Achievement 2017 and again it was awarded as the Best Bank in Indonesia at this time in the event of Euromoney Awards for Excellence 2017. Euromoney Awards for Excellence is an prestigious award initiated by Euromoney Magazine, a reference media that has been more than 50 years studying relevant financial issues in various countries. PT Bank Central Asia Tbk (BCA) also won awards in the 2017 ASEAN Marketing Summit through two awards sessions, namely Brand Asia Award 2017 and Top Performer in ASEAN Award 2017 (ekonomi.kompas.com). Award received by PT. The Bank Central Asia, Tbk (BCA) provides evidence of the bank's ability to improve performance in the banking business sector Based on the description of the above research background, then the main issues in this study are: 1) Is the ratio of CAR, LDR, BOPO and NPL have an effect on bank's profitability either partially or simultaneously at PT. Bank Central Asia, Tbk? 2) What is th most dominat variable affecting bank's profitability at PT. Bank Central Asia, Tbk?

Research by Purwana Taunay (2007) entitled “ the Influence Analysis of Capital Adequacy Ratio (CAR), Loan To Deposit Ratio (LDR), Size, Bopo on Bank Profitability (A Comparative Study on Domestic and Foreign Banks in the Period of January 2003 to December 2007). The results showed that Capital Adequacy Ratio (CAR) and Loan to Deposit Ratio (LDR) variables have positive and significant effect on profitability at domestic bank while in foreign bank only Size has positive and significant effect on profitability. The research also shows the adjusted value of R² of domestic banks by 90.2%, foreign bank by 45.1% and joint state banks and foreign banks by 39.5%. F test results show that in domestic banks, foreign banks, as well as combined domestic banks and foreign banks independent variables together significantly affect the dependent variable. The Chow Test results show that there are differences in the effect of changes in Capital Adequacy Ratio (CAR), Loan to Deposit Ratio (LDR), size, BOPO on profitability between domestic banks and foreign banks.

Fitriani Prastiyaningtyas (2010), Factors Affecting Banking Profitability (Studies on Public Banks Go Public Listed in Indonesia Stock Exchange 2005-2008). From the result of hypothesis test simultaneously (F test) show that CAR, NPL, BOPO, LDR, NIM, and Credit share have significant influence to bank profitability at commercial bank go public with level of signifikansi 0.000. While based on partial hypothesis test result (t test) at commercial bank go public show that variable of CAR, NPL, BOPO, NIM, and Credit share have significant effect to bank profitability. While the LDR variable is not significant to banking profitability. The adjusted value of R² in the regression model of bank go public is obtained at 0.779. This shows that the influence of independent variables are CAR, NPL, BOPO, LDR, NIM, and Loan Share to dependent variable (ROA) of 77.9% while the rest of 22.1% is influenced by other factors. In addition the value of R² is 0.796. If the value of R² is closer to 1 then the independent variables (CAR, NPL, BOPO, LDR, NIM, and Credit Share) are increasingly stronger in explaining the dependent variable (ROA).

CAR is the capital adequacy that shows the bank's ability to maintain sufficient capital and the bank's management capability in identifying, measuring,

controlling and controlling risks arising that may affect the size of the bank's capital. Capital is the source of the first party fund, which is the amount of funds invested by the owner for the establishment of a bank. If the bank is already operating then capital is one of the most important factors for business development and accommodate the risk of loss. In order for banks to thrive in a healthy and competitive manner in international banking, bank capital must always follow an internationally accepted measure, determined by Banking for International Settlements (BIS), the Capital Adequacy Ratio (CAR) of 8%. Capital is used to assess how much the bank's ability to assume risks that may occur. Banks that have a high risk level will be more solvable. Vice versa banks that have a small risk to identify the bank is less solvable.

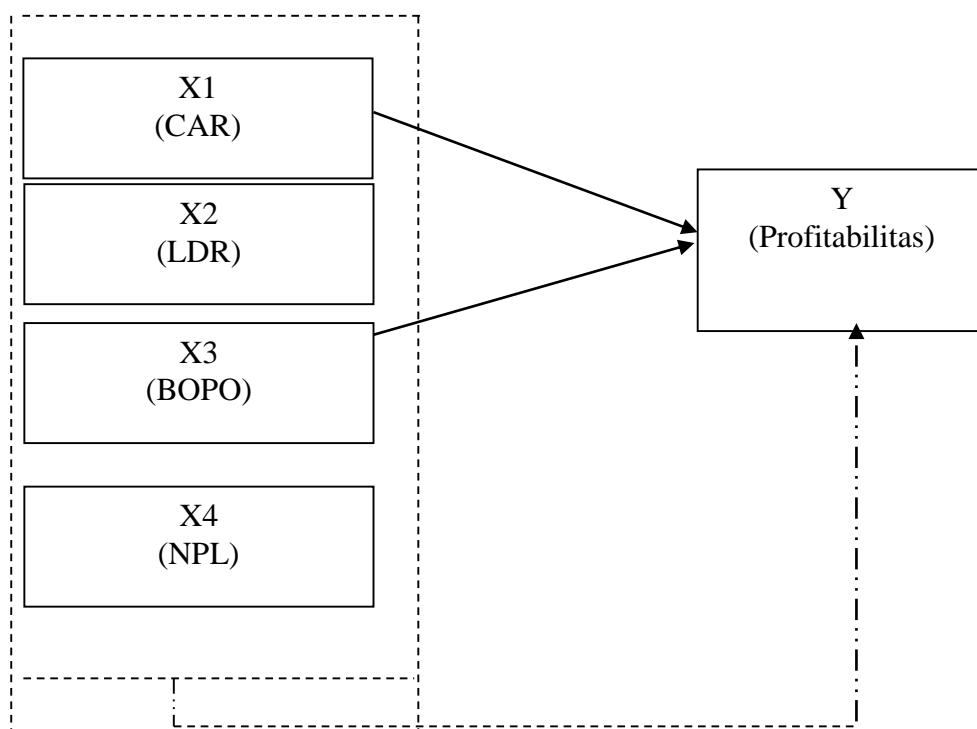
LDR is the ratio between the total amount of credit granted to the bank with funds received by the bank. The higher the LDR ratio means the bank lends out all its funds, which the bank's contribution to lending in the form of interest income and interest income can affect the amount of profitability obtained by the bank. Loan disbursement is the main activity of banks, therefore the main source of bank income comes from this activity. The greater distribution of funds in the form of credit compared with the deposit or savings of the community in a bank brings the consequences the greater the risk to be borne by the bank concerned. The ratio of LDR is the ratio of the ratio between the amount of funds disbursed to the community (credit) with the amount of public funds and own capital used. This ratio illustrates the ability of banks to repay the withdrawals by depositors' customers by relying on the credits given as a source of liquidity. The higher this ratio the lower the ability of bank liquidity.

BOPO is measured to determine the operational burden spent by the bank compared to the operating income obtained by the bank. If the company's operating expenses are high and its operating income is lower then it will make the BOPO value to be high. This ratio is often called the efficiency ratio is used to measure the ability of bank management in controlling operational costs to operations. The smaller this ratio means the more efficient the operational costs. The smaller this ratio means the more efficient the operational costs incurred by the bank so that

the probability of a bank in the less problematic condition and it experiences increased profitability (Lukman Dendawijaya, 2001

This research employs a correlational design that aims to examine the influence of factors that include CAR, LDR, BOPO and NPL on bank profitability At PT. Bank Central Asia, Tbk. The model of the research mindset is illustrated as follows :

figure 2.1 research franmework



NOTE :

- : partial effect
- - - - -→ : simultaneous effect

RESEARCH METHOD

The type of research conducted is explanatory research ie the researcher explains the causal relationship between the variables through hypothesis testing. This research is not called descriptive research but research hypothesis testing or

explanatory research (explanation). Techniques used in collecting data is done through documentation, ie studying and copying records or documents related to the required data in the form of corporate financial statements covering balance sheet or statement of financial position and income statement, sourced from PT. Bank Central Asia, Tbk. Data analysis Technique, Multiple linear regression analysis To know the effect of CAR, LDR, BOPO and NPL ratio to bank's profitability either partially or simultaneously at PT. Bank Central Asia, Tbk then u multiple regression method is used. This section analyzed the data about the effect of CAR, LDR, BOPO and NPL ratio on profitability of PT. Bank Central Asia, Tbk. Based on the data from the results of the study then the complete results of multiple linear regression analysis that has been done can be seen on table 1 below:

Table 1: Results of multiple linear regression analysis

Coefficients ^a								
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	3,637	1,694		2,147	,038		
	NPL	,047	,016	,409	2,874	,006	,974	1,036
	BOPO	-,036	,016	-,298	-2,179	,035	,980	1,025
	LDR	,195	,080	,349	2,447	,019	,973	1,036

a. Dependent Variable: ROA

Source: Data Processed, 2017

The result of calculation of multiple linear regression analysis that has been done shows the effect of independent variable to dependent variable is big. It can be seen on the coefficient of determination (R²) that is equal to 0.208 which is approaching 1. Thus, it means that profitability of PT. Bank Central Asia, Tbk. can be explained about 20.8% by variable CAR, LDR, BOPO and NPL. While the rest of about 79,2% is explained by other variables which are not included in this research model.

Multiple correlation coefficient R (multiple corelation) illustrates the strength of the relationship between CAR, LDR, BOPO and NPL variables together with the profitability variable of PT. Bank Central Asia, Tbk is 0.457. This means that the relationship between the overall independent variable with the dependent

variable is very close because the value of R is close to 1. Based on the results of the above regression analysis, it can be formulated a multiple linear regression equation as follows: $Y = 8,264 + 0,004X_1 + 0,047X_2 - 0,036X_3 + 0,195X_4$. From the multiple linear regression equation above, it can be interpreted as follows: Y = The dependent variable whose value will be predicted by the independent variable. In this study, the dependent variable is profitability of PT. Bank Central Asia, Tbk whose value is predicted by the ratio of CAR, LDR, BOPO and NPL $a = 8,264$ is a constant value, that is estimation from profitability of PT. Bank Central Asia, Tbk, if the independent variables consisting of CAR, LDR, BOPO and NPL variables have values equal to zero. So it can be said that if there is no influence of the ratio of CAR, LDR, BOPO and NPL then profitability of 8.264 influenced by factors outside these variables. $b_1 = 0.004$ is the amount of CAR variable contribution that affect the performance of banks listed in Indonesia Stock Exchange.

The regression coefficient (b_1) is 0.004 with a positive sign. If the CAR variable changes or increases one unit then profitability of PT. Bank Central Asia, Tbk will rise by 0.004. The results of the analysis show that CAR has a positive impact on the performance improvement of banks listed on the Indonesia Stock Exchange. $b_2 = 0.047$ is the amount of LDR variable contribution affecting profitability of PT. Bank Central Asia, Tbk. The regression coefficient (b_2) is 0.047 with a positive sign. If the LDR variable changes or increases one unit then profitability of PT. Bank Central Asia, Tbk will decrease by 0.047.

The result of analysis shows that LDR has negative impact to profitability of PT. Bank Central Asia, Tbk. $b_3 = 0.195$ is the amount of BOPO variable contribution affecting profitability of PT. Bank Central Asia, Tbk. The regression coefficient (b_3) is 0.195 with a positive sign. If the variable BOPO change or increase one unit then profitability of PT. Bank Central Asia, Tbk will rise by 0.195. The results of the analysis show that BOPO has a positive impact on the performance improvement of banks listed on the Indonesia Stock Exchange. $b_4 = 0.195$ is the amount of contribution of NPL variable affecting profitability of PT. Bank Central Asia, Tbk. The regression coefficient (b_3) is 0.195 with a positive sign. If the NPL variable changes or increases one unit then the profitability of PT.

Bank Central Asia, Tbk will rise by 0.195. The results of the analysis show that NPLs have a positive impact on increasing profitability of PT. Bank Central Asia, Tbk. e = is the residual value or the probability of error from the model of regression equation, which is caused by the possibility of other variables that may affect the variable Y but they are not included in the equation model.

Hypothesis Test Results

Test Analysis Result F

To test the significance whether the independent variable model has an influence on the dependent variable in the research model formulation then F test is used that is by comparing F arithmetic with Ftable. From the results of multiple regression analysis using $Df1 = 3$ and $Df2 = 41$ obtained F table of 2.670. While the calculated F is 8.622 so that from the above calculation can be seen that H_0 is rejected and H_a is accepted.

Table 4.9: F Test Results

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6.808	4	1.702	31.383	.000 ^b
	Residual	25.853	21	1.231		
	Total	32.661	25			

a. Dependent Variable: Tingkat profitabilitas bank

b. Predictors: (Constant), NPL, BOPO, CAR, LDR

Thus, it shows that the independent variables are CAR, LDR, BOPO and NPL variables have a significant influence on the profitability of PT. Bank Central Asia, Tbk

a. T Test Analysis Result

To test the influence of each independent variable, namely CAR, LDR, BOPO and NPL variables have a significant effect on the profitability of PT. Bank Central Asia, Tbk then it used t test (t - test) by comparing the tcount with ttable. With the degree of degree of freedom of 95% ($\alpha = 5\%$) it

obtained ttable of 1.9766. In table 4.8 below the comparative results between the value of tcount with ttable is presented

Table 2 Comparison Table Between Tcount Value With ttable

Coefficients ^a								
Model	Unstandardized Coefficients			Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta				Tolerance	VIF
1	(Constant)	8.264	2.839		2.911	.008		
	CAR	.004	.025	.193	2.861	.004	.975	1.033
	LDR	.047	.016	.406	2.874	.006	.973	1.038
	BOPO	-.036	.016	-.298	-2.180	.035	.952	1.051
	NPL	.195	.080	.349	2.448	.020	.893	1.012

a. Dependent Variable: Tingkat profitabilitas bank

The results of the influence analysis of each variable can be described as follows:

1. The Effect of CAR on bank's profitability at PT. Bank Central Asia, Tbk

Based on the results of data analysis that has been done it can be seen that CAR variables have a significant influence on bank profitability at PT. Bank Central Asia, Tbk. Capital can be calculated using CAR (Capital Adequacy Ratio). This ratio is used as an indicator of the bank's ability to cover assets due to losses on bank assets using its own capital. CAR is a comparison between own capital and risk-weighted assets (RWA). Bank Indonesia sets a standardized value for CAR ratio of 8%. The higher this ratio means that the capital owned by the bank includes in supporting the fixed assets and inventory so that the possibility of banks have a higher performance is higher. The existence of a significant influence indicates that the bank has a capital adequacy ratio that shows the ability of banks in maintaining adequate capital and bank management capabilities in identifying, measuring, supervising and controlling risks that arise that may affect the amount of bank capital. With good management of a bank will continue to increase capital by taking into account the capital health indicator that is CAR, then profitability will also increase. Conversely, if the CAR of a bank decreases then profitability will also decrease. This fact can show that if the bank is not able to manage the CAR then the profit of the company can not be done optimally.

This capital factor (CAR) serves to assess the bank's ability to absorb losses that can not be avoided anymore and can also be used to assess the size of the bank's wealth or wealth owned by its shareholders. The higher this ratio means that the capital owned by the bank covers in supporting the fixed assets and inventory so that the possibility of banks have a higher performance is higher. The results of this study support the results of research conducted by Mariana (2007), which proves the financial ratios of CAR has a positive and significant impact on profitability and based on research done by Lely (2007), it showed that CAR has a significant effect on Return on Assets (ROA).

2. Effect of NPL on bank's profitability at PT. Bank Central Asia, Tbk

One of the ratios used to determine the quality of a bank's productive assets is the ratio of NPL (Non Performing Loans). That ratio is used to measure the level of problem of a credit. This ratio indicates the collectibility of a bank in collecting back the loans issued by the bank until it is paid off. NPL represents the percentage of non-performing loans (with substandard, doubtful, and loss criteria) of total loans issued by banks. Bank Indonesia has set the default value for NPL ratio of 5%. The higher this ratio, the worse the credit quality of the bank, the higher the number of non-performing loans, the likelihood of the bank having lower performance is greater.

Based on the results of data analysis that has been done, it can be seen that the variable NPL has a significant influence on the profitability of banks at PT. Bank Central Asia, Tbk. With these results means that the profitability of banks at PT. Bank Central Asia, Tbk will rise with the nature of the same relationship with the assumption that other variables have value equal to zero if there is a change in the NPL.

NPLs are used to assess the quality of earning assets, ie the investment of bank funds in rupiah or foreign currency in the form of credit, securities, placements with other banks and inclusion. The assessment is conducted to see if productive assets are used to generate maximum returns. In addition, asset quality assessment is intended to assess the condition of bank assets, including the anticipation of the default risk of credit risk that will arise.

If the lower NPL then the bank will be more profitable. On the contrary if the NPL level of the bank is higher, it will suffer losses caused by the return of bad credit. Research conducted Harjono (2006) showed that NPL has a significant effect on profit growth. In addition, a research Fitriani Prastiyaningtyas (2010) also gives results that NPL has a significant effect on ROA

Based on the results of data analysis that has been done it can be seen that LDR variable has a significant influence on the profitability of banks at PT. Bank Central Asia, Tbk. With these results it means that the profitability of banks at PT. Bank Central Asia, Tbk will rise with the nature of a unidirectional relationship with the assumption that other variables have values equal to zero. The liquidity factor is used to assess the bank's ability to fulfill its obligations. A bank is declared liquid if the bank can fulfill its debt obligations, can repay all customer deposits, and can fulfill the loan request without suspension. The ratio used to assess the liquidity factor of a bank is the ratio of LDR (Loan To Deposit Ratio) which is used to measure the ability of banks to pay all public funds and capital itself by relying on loans that have been distributed to the public. LDR can be obtained by calculating the ratio between Total Loan and Total deposit, with Bank Indonesia regulation, the standard value for LDR ratio is 85-110%. The higher this ratio, the lower the bank's liquidity capability so that the possibility of a bank has a lower performance is greater.

The results of the analysis show that with the higher LDR ratio means the bank lends all its funds, where the contribution obtained by the bank on the provision of credit in the form of interest income. Interest income can affect the amount of profitability obtained by the bank. Research by Restiyana (2011) shows that LDR has a significant influence on ROA during the period 2004-2006. The existence of a significant influence shows that with the increasing LDR, the greater the achievement of profit banks. According Muljono (2009), it is stated that the bank is a lending institution, then the activities are closely related to the nature of credit, arrangement of procedures

and procedures of crediting, credit analysis, determination of credit ceiling and credit security. The main purpose of lending is to get high returns, and the other purpose is bank security so that the bank remains trusted by the public, it affects the increasing of profit change. Astuti's (2008) study on government banks and private banks shows that LDR has a significant influence on ROA over the 2004-2006 period. And based on the results of research Lely (2007) it shows that the LDR has a significant effect on company's performance (ROA).

Based on the results of data analysis that has been done can be seen that the variable BOPO have a significant influence on the profitability of banks at PT. Bank Central Asia, Tbk. With these results means that the profitability of banks at PT. Bank Central Asia, Tbk will rise, with the unidirectional nature of the relationship with the assumption that other variables have values equal to zero High operational costs will result in low profitability. Purwana Taunay (2007) shows that BOPO has a significant influence on ROA on Domestic and Foreign Banks Period from January 2003 to December 2007. According to Irfan Fahmi (2012: 49) The Effect of Operational Income Operating Cost (BOPO) on profit as follows: "That the bank can improve its operational cost to earnings ratio by reducing the cost that will actually increase profit in the future ". Then Dendawijaya (2009: 120) explains that BOPO is an operational cost ratio used to measure the level of efficiency and ability of banks in conducting its operations. Large BOPO less efficiency will result in lower profits

CONCLUSION AND SUGGESTION

Based on the results of research and discussion that have been stated then there are some conclusions that can be drawn as follow: 1) The ratio of CAR, LDR, BOPO and NPL has an effect on bank's profitability either partially or simultaneously at PT. Bank Central Asia, Tbk 2) Based on the results of beta coefficient (standardized coefficients) each variable can reveal the magnitude of the influence of each variable, for the CAR of 0.193, LDR by 0.406 and

BOPO of -0.298 and NPL of 0.349. Based on beta coefficient, each variable shows that Non Performing Loan has the biggest influence profitability at PT. Bank Central Asia, Tbk. Based on the results of analysis and discussion of the results of research that has been done, there are some suggestions as follows: 1) For investors, It is expected for investors or potential investors to maintain their investment in bank shares and for potential investors to focus their investment activities on PT. Bank Central Asia, Tbk. The effort is done as a concrete step of the bank to provide guarantees on investments made by investors. 2) For Indonesian Banking, The results of this study are expected to be used as a basis in determining policies related to the business of maintaining and improving financial performance so that it can be used as an interest for potential investors to invest their capital in the bank to provide support in the development of banking operational activities in Indonesia. 3) For Other parties, For others in this case is the academics who are interested to continue this research is expected to improve it by using other variables that affect the bank's profit.