

# The Effect of Loan to Deposit Ratio and Capital Adequacy Ratio on Profitability at PT Bank Tabungan Negara, Tbk in Makassar

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**Abstract:** This study explains the effect of the Loan to Deposit Ratio and the Capital Adequacy Ratio on Profitability (Return on Asset) at PT Bank Tabungan Negara (Persero) Tbk KC Makassar. This study uses a multiple linear regression analysis model using the SPSS. The results showed a multiple regression equation where  $Y = -0.074 + 0.009 X1 + 0.049 X2$  and based on the partial test (*t* test) The significant value for the effect of the Loan to Deposit Ratio ( $X1$ ) on Return on Assets ( $Y$ ) is  $0.063 > 0.05$  and *t* value  $2.017 > t$  table 1.753, so it can be concluded that the hypothesis is accepted, which means there is a positive but insignificant influence between the Loan to Deposit Ratio on the Return On Asset ( $Y$ ) variable. As for the effect of the Capital Adequacy Ratio ( $X2$ ) on Return on Assets ( $Y$ ) is  $0.120 > 0.05$  and the *t* value is 1.656  $< t$  table 1.753, so it can be concluded that the hypothesis is rejected, which means there is no significant influence between Loan Capital. Adequacy Ratio to the Return On Asset ( $Y$ ) variable. Hypothesis testing concludes that the Loan to Deposit Ratio and the Capital Adequacy Ratio together have a significant effect on Return on Assets. This can be proven by knowing the significant value of  $0.004 < 0.05$  and the value *F* count  $8,507 > F$  table 3, 74.

**Keyword:** Loan to Deposit Ratio, Capital Adequacy Ratio, Profitability

## 1. Introduction

In principle, a bank is an industry that operates in the field of trust, this can be seen from the philosophy that underlies bank business activities is the trust of the public. Based on the background and differences in the results of previous studies, the researcher wants to re-examine the factors that influence bank profitability as measured by Return On Assets, especially at PT. State Savings Bank Tbk. The choice of the State Savings Bank as the object of research is because in the present we see that in some areas there are housing which are currently growing rapidly. And most of the State Savings Banks play an active role in funding in terms of credit, so researchers want to know the effect of the Loan to Deposit Ratio and Capital Adequacy Ratio on the Profitability (Return On Asset) achieved by the Bank.

Profitability is the ability of a bank to generate operating profits with its own capital and foreign capital used to generate this profit. According to Margaretha (2009: 61), bank profitability ratio analysis is a tool to analyze or measure the level of business efficiency and profitability achieved by the bank concerned. Analysis of the profitability ratios of a bank consists of Return on assets (ROA), Return on Equity (ROE), operating expense ratios, and Net Profit margin (NPM).

Although there are various indicators of profitability assessment that are commonly used by banks, this time the researcher will use the Return on Asset ratio, on the grounds that the Return on Asset Ratio takes into account how the ability of bank management to obtain profitability and overall managerial efficiency as well as the bank's health assessment conducted by In terms of profitability, Bank Indonesia is implemented using the Return on Assets indicator. According to a good 2004 Bank Indonesia circular letter, Return On Assets, the value is more than 1.25%.

In the banking world, the liquidity ratio can be known by the Loan to Deposit Ratio. The loan to deposit ratio is the ratio of loans to third party funds received by the bank concerned. Kasmir (2008: 225) in his book entitled Financial Statement Analysis argues that the Loan to Deposit ratio is a ratio used to measure the composition of the amount of credit given compared to the amount of public funds and capital used. The maximum amount of loan to deosit ratio according to government regulation is 110%.

Capital Adequacy Ratio is a ratio that shows how far all bank assets that are at risk are also financed from the bank's own capital funds in addition to obtaining funds from sources outside the bank, or the bank's performance ratio to measure the adequacy of the bank's capital to support assets. which contains risks (Loen and Ericson, 2008: 122). Or Capital Adequacy Ratio is the ratio of bank performance to support assets that contain risk, for example, loans.

## 2. Material and Method

This research was conducted at PT Bank Tabungan Negara (Persero) Tbk KC Makassar, which is located on JalanKajaolalido Number 4 Subdistricts of Makassar, South Sulawesi. Meanwhile, the research time starts from March to April 2018.

The type of data used in this research is quantitative data, which is data obtained in the form of numbers from bank financial reports. Sources of data in this study are secondary data, which are data obtained through company documents and other reports of relevance to this study, including bank financial report data, in this case the Financial Balance Sheet and Profit and Loss Report for the last ten years since 2009 to 2018.

In this study, multiple linear regression analysis was used to prove the extent of the relationship between the Loan to

Deposit Ratio and the Capital Adequacy Ratio. The equation for multiple linear regression analysis in general to test the hypothesis in this study is as follows:

$$Y = a + b_1X_1 + b_2X_2 + e$$

Mathematically, the Loan to Deposit Ratio, Capital Adequacy Ratio, and Return on Assets can be formulated as follows:

$$LDR = \frac{\text{Total Loan}}{\text{Total Deposit} + \text{equity}} \times 100\%$$

$$CAR = \frac{\text{Total Bank Capital}}{\text{Risk Weighted Assets}} \times 100\%$$

$$ROA = \frac{\text{Profit Before Tax}}{\text{Total Assets}} \times 100\%$$

### 3. Result and Discussion

#### Loan to Deposit Ratio

In this chapter, the problem discussed is how much influence the Loan to Deposit Ratio and Capital Adequacy Ratio on Profitability at PT Bank Tabungan Negara (Persero) Tbk KC Makassar, based on the analysis method described in the previous chapter. The maximum amount of loan to deposit ratio according to government regulation is 110% and the lower limit of the Loan to Deposit Ratio is set at 78%. To obtain maximum results, the data required and will be used is ten (10) years.

**Table 1:** Total Loans, Total Deposits, and Equity in 2009-2018 (In Million Rupiah)

Tahun	Total Loan	Total Deposit	Equity
2009	31.468.636	28.595.514	3.078.470
2010	40.029.401	32.850.682	5.461.516
2011	48.702.920	40.197.354	5.185.141
2012	59.337.756	45.575.326	11.033.735
2013	75.410.705	62.642.840	12.135.774
2014	92.386.308	71.955.647	12.275.581
2015	106.271.277	76.045.858	12.276.835
2016	127.732.158	87.957.857	12.288.504
2017	150.221.960	103.085.532	12.293.670
2018	181.002.783	124.797.440	12.293.670

**Table 2:** Recapitulation Loan to Deposit Ratio in 2008-2017

Tahun	Loan to Deposit Ratio
2009	99,35%
2010	104,48%
2011	107,31%
2012	104,82%
2013	100,84%
2014	109,68%
2015	120,32%
2016	127,41%
2017	130,19%
2018	132,03%

The amount of the Loan to Deposit Ratio at PT Bank Tabungan Negara (Persero) Tbk from 2009 - 2018 has fluctuated. This can be seen from the results of calculations in 2009, the position of the Loan to Deposit Ratio was 99.35%, and in 2010 it had increased by 104.48% and continued to increase in 2010 by 107.31%. However, in 2011 it decreased by 104.82%. And it fell again in 2012 by 100.84%. Until 2013 to 2018 there was a very significant increase, in 2014 amounting to 109.68%, 2015 amounting to

120.32%, in 2016 it was 127.41%, and in 2017 it was 130.19% and continues to experience an increase in 2018 to reach 132.03%. However, this requires the full attention of the bank because the amount of the Loan to Deposit Ratio is above the maximum limit.

#### Capital Adequacy Ratio

Based on Bank for International Settlement (BIS) Standards, the current Capital Adequacy Ratio is set at a minimum of 8%.

**Table 3:** Total Bank Capital and Risk Weighted Assets for the Year 2009-2018 (In Million Rupiah)

Tahun	Total Bank Capital	Risk Weighted Assets
2009	3.224.981	19.981.855
2010	5.576.488	25.634.825
2011	6.069.570	36.265.214
2012	6.968.366	46.373.034
2013	9.433.162	53.321.389
2014	10.353.005	66.261.700
2015	11.171.458	76.332.641
2016	13.893.026	81.882.087
2017	20.219.637	99.431.853
2018	22.094.944	117.092.266

**Table 4:** Recapitulation Capital Adequacy Ratio in 2009-2018

Tahun	Capital Adequacy Ratio
2009	16,13%
2010	21,75%
2011	16,74%
2012	15,03%
2013	17,69%
2014	15,62%
2015	14,64%
2016	16,97%
2017	20,34%
2018	18,87%

The amount of Capital Adequacy Ratio at PT Bank Tabungan Negara (Persero) Tbk from 2009 - 2018 has also fluctuated. This can be seen from the results of the calculation in 2009 the position of the Capital Adequacy Ratio was 16.13%, but in 2010 there was a significant increase, namely 21.75%. However, in 2011 it decreased and returned to the position of 16.74%. And has increased in 2012 amounted to 15.03% and in 2013 17.69%. In 2014 it fell again by 15.62%, until in 2015 it reached the point of 14.64%. The years 2016-2017 have increased, namely 16.97% and 20.34%. However, in 2018 it decreased by 18.87%. It is clear that the position of the Capital Adequacy Ratio fluctuates or fluctuates. Based on Bank For International Settlement (BIS) standards, the amount of the Capital Adequacy Ratio is set at a minimum of 8%. Meanwhile, the value of the Capital Adequacy Ratio is said to be good because it is above the predetermined minimum level.

#### Return on Assets

It is known that the greater the Return on Assets of a bank, the greater the level of profit the bank will achieve and the better the bank's position in terms of asset use. According to a good 2004 Bank Indonesia circular letter, Return On Assets, the value is more than 1.25%.

**Table 5:** Profit before Tax and Total Assets in 2009-2018  
(In Million Rupiah)

Tahun	Profit Before Tax	Total Assets
2009	722.409	44.992.171
2010	730.027	58.516.058
2011	1.250.222	68.385.539
2012	1.522.259	89.121.459
2013	1.857.425	111.748.593
2014	2.140.771	131.169.730
2015	1.548.172	144.575.961
2016	2.541.886	171.807.592
2017	722.409	44.992.171
2018	3.861.555	261.365.267

**Table 6:** Recapitulation Return on Assets in 2009-2018

Tahun	Return on Assets
2009	1,61%
2010	1,25%
2011	1,83%
2012	1,71%
2013	1,67%
2014	1,63%
2015	1,07%
2016	1,48%
2017	1,60%
2018	1,48%

The amount of Return on Asset at PT Bank Tabungan Negara (Persero) Tbk from 2009 - 2018 has also fluctuated. This can be seen from the results of the calculation in 2009 the position of Return on Assets was 1.61%, however in 2010 it decreased by 1.25%. However, in 2011 there was an increase of 1.83%. And decreased in 2012 amounted to 1.71% and in 2013 1.67%. In 2014 it fell again by 1.63%, until in 2015 it reached the point of 1.07%, meaning that in 2015 the position of Return on Assets did not reach the target, because the good Return On Assets was more than 1.25%. However, in 2016-2017 again managed to increase, namely 1.48% and 1.53%. However, in 2018 it decreased by 1.48%. It is very clear that the position of Return On Assets fluctuates or fluctuates and this goes hand in hand because the Loan to Deposit Ratio and Capital Adequacy Ratio also fluctuate.

#### Multiple Linear Regression Analysis

**Table 7:** Regresion Analysis  
Coefficients<sup>a</sup>

Model	B	Beta	t	Sig.
1 (Constant)	233.738		2.757	.028
LDR	-.006	-.315	-.868	.414
CAR	-.010	-.102	-.282	.786

Based on the data above, the regression equation is as follows:

$$Y = 233,738 + (-0,006) X_1 + (-0,010) X_2 + e$$

The regression equation above can be explained as follows:

- 1) A constant of 233,738; This means that if the Loan to Deposit Ratio (X1) and Capital Adequacy Ratio (X2) are 0, then the Return On Asset value is 233,738.
- 2) Loan to Deposit Ratio (X1) variable regression coefficient of -0.006; This means that if the Loan to Deposit Ratio (X1) increases by 1%, the Return On

Asset value will decrease by 0.006, assuming other independent variables are constant.

- 3) Capital Adequacy Ratio variable regression coefficient (X2) Capital Adequacy Ratio of -0.010; This means that if the Capital Adequacy Ratio (X2) increases by 1%, the Return On Asset value will decrease by 0.010, assuming the other independent variables are constant.

#### The Effect of Loan to Deposit Ratio and Capital Adequacy Ratio on Profitability at PT Bank Tabungan Negara, Tbk in Makassar

If the Loan to Deposit Ratio increases, the Return on Assets decreases. Or if the Loan to Deposit Ratio decreases, the Return on Assets will increase. This occurs because the credit disbursed to the public is greater than the capital owned by the bank so that the risk held by the bank is higher which will actually decrease the bank's profit. If the Capital Adequacy Ratio increases, the Return on Assets will decrease. Or if the Capital Adequacy Ratio decreases, the Return on Assets has increased. This is because the Capital Adequacy Ratio shows an indicator of a bank's ability to cover the decline in its assets as a result of bank losses. If a bank's profit increases, the Capital Adequacy Ratio used by the bank decreases. Conversely, if profit decreases, the Capital Adequacy Ratio increases because to cover bank losses it is borne by the bank's Capital Adequacy Ratio.

#### 4. Conclusion

- 1) Loan to Deposit Ratio has no effect on Profitability (Return on Assets).
- 2) Capital Adequacy Ratio has no effect on Profitability (Return on Assets).

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