

BANKING INTERMEDIATION PERFORMANCE, ASSET QUALITY AND EFFICIENCY ON PROFITABILITY (STUDY IN BANK TABUNGAN NEGARA (PERSERO), TBK. PERIOD 2010 – 2016,

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ABSTRACT

This study is to analyze the effect of banking intermediation performance, assets quality, and efficiency on profitability. The indicator used for banking intermediation performance is a loan to deposit ratio (LDR); asset quality is Non Performing Loans (NPLs); efficiency with the ratio of operating expense to operating income (OEOI) while profitability with the return on assets (ROA).

Descriptive and verificative methods were used in this study. The published financial statements of PT. BTN period 2010-2016 periods are data sources that are processed with multiple linear regression.

The results showed that partially LDR had a positive and significant effect on ROA; NPLs have a negative but not significant effect on ROA, and OEOI has a negative and significant effect on ROA. Simultaneously LDR, NPLs and OEOI effect on ROA.

Keywords: *loan to deposit ratio (LDR), non-performing loans (NPL), the ratio of operating expenses to operating income (OEOI), return on assets (ROA).*

INTRODUCTION

PT. Bank Tabungan Negara (BTN) is a state-owned commercial bank's that focused on financing housing plays a very important role in the economy. The role is mainly seen how wide BTN can apply intermediary function. An indicator to measure the implementation of banking intermediation is the ratio of loans to deposits or loans to deposits ratio (LDR) (Buchory, 2016). During the period of 2010-2016 BTN has implemented an optimal intermediation function. This is indicated by the average Loan Deposit Ratio (LDR) for the period 2010-2016 of 107.78% and LDR Bank BTN reached on December 31, 2016, is 102.66% higher than the national banking (90.70%) and other bank groups.

One of Bank BTN's goals is to create profits. ROA is used to measure the bank's ability to create profits. ROA achieved by the period of BTN 2010 - 2016 is 1.67% while ROA December 2016 is 1.76% slightly lower than the national banking industry (Financial Services Authority, Republic of Indonesia, Indonesian Banking Statistics, Volume 16 No. 1 December 2017). This means that BTN's profitability has not been optimal. The low profitability of BTN might be caused by the LDR. Besides LDR, NPLs and OEOI allegedly also cause low ROA. Furthermore, the average NPL achieved by BTN for 2010 - 2016 was 4.03% higher than the national banking (2.93%) and other bank groups. While the efficiency can be seen from the ratio OEOI on average achieved by BTN for the 2010-2016 period is 84.32% higher than national banking (82.22%) and other bank groups.

The problem in this study was formulated in a research question: What is the influence of LDR, NPLs, and OEOI on ROA?

REVIEW OF LITERATURE

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The main objective of the bank is to achieve maximum profitability. Aggregate bank profitability is measured and compared by ROA (Koch, 2014). ROA is the ratio between profit and assets owned by a bank. The higher the ROA value indicates that the bank is better at generating profitability. Bank Indonesia as a regulator and banking supervisor in Indonesia also uses this ROA ratio to measure the rate of return on assets. Based on Bank Indonesia regulation, adequate ROA is above 1,25%.

The Effect of LDR on The ROA

The implementation of financial intermediation in banking can be seen from the bank's ability to transform savings received into credit or loans (Rose, 2013). The indicator that can be used to measure banking intermediation is loans to deposits ratio (LDR). Buchory study (2016) found that banking intermediation affects the performance of the bank including profitability. Similarly, research conducted by Lusiana (2017) that LDR has a significant effect on ROA. Whereas according to Purwoko the influence of LDR is not significant on ROA.

The Effect of NPLs on The ROA

Asset quality is one of the most critical areas in determining the overall condition of a bank. The primary factor affecting overall asset quality is the quality of the loan portfolio and the credit administration program (FDIC, 2018). Therefore, asset quality must be properly managed. Some bank assets are financial assets derived from public savings. Failure to maintain the quality of assets other than banks will have difficulty in refunds to depositors, the bank will also reduce profitability.

One indicator that can be used to assess asset quality is the ratio of Non Performing Loans to total Loans (NPLs). Several previous studies found that NPLs had a negative and significant effect on profitability (Adeusi, 2014; Sinha, 2014; Ahmad, 2014; Artarina, 2013, and Lusiana, 2017). Meanwhile, according to Buchory (2016) NPLs have a positive effect on ROA even though it is not significant

The Effect of OEOI on The ROA

Efficiency is one way banks manage their resources effectively. Efficiency becomes important for banks because with efficiency in addition to saving costs incurred will also increase profitability. Therefore operational efficiency is a concern for bank management. Although efficiency is the responsibility of each bank, the monetary authorities have an interest in efficiency because of the bank's operational efficiency, ultimately the credit interest rate that will affect the national economy. Banking efficiency can be measured by using the ratio of operating income to operating costs (OEOI). A bank is said to be efficient if the OEOI ratio is lower than 94% (Bank Indonesia, 2005). Several previous studies found that Several previous studies have found that OEOI has a positive and significant effect on ROA. (Sinha, 2014; Francis, 2013, and Artarina, 2013). While the results of other studies found that the operational efficiency has a significant negative effect on bank profits as measured by ROA (Purwoko, 2013; Buchory, 2016; Chatarine, 2014 and Lusiana, 2017).

HYPOTHESES

Noting the purpose of research and theories used then the hypothesis of this study is:

- H1: LDR has a positive effect on ROA*
- H2: NPLs have a negative effect on ROA*
- H3: OEOI has a negative effect on ROA*
- H4: LDR, NPLs, and OEOI have the effect on ROA*

RESEARCH METHODOLOGY

This research uses a descriptive and verificative method. The data sourced from published financial statements of PT. BTN period 2010-2016 (calculated quarterly) and the Indonesian Banking Statistics Volume 16 No. 1 December 2017. Data analysis techniques using multiple regression. Whereas to test hypotheses using t-test and f-test statistic. The regression equation used is as follows:

$$Y = a + \beta X_1 + \beta X_2 + \beta X_3 + e \quad (1)$$

Where, Y = Return On Assets (ROA); a = A constant which is the value of the variable Y when the variable X is 0 (zero); β = Coefficient of the regression line; X_1 = LDR; X_2 = NPLs; X_3 = OEOI; and, e = Residual

RESULTS AND DISCUSSION

Based on the data period 2010 – 2016 the development of LDR, NPLs, OEOI, and ROA were achieved by PT. Bank Tabungan Negara (Persero) Tbk. (see Table 1) can be described as follows:

The average value of LDR achieved period 2010 – 2016 amounted 107.74% and December 31, 2016, is 102.66% higher than the national banking (90.70%), and other bank groups. The lowest value of LDR BTN 102.57% is achieved on Q4/2011, while the highest LDR is 108.86% at Q4/2014. The high LDR achieved by BTN means there is some lending that is sourced outside the DPK such as bonds, government funds even from equities.

The average value of NPLs achieved period 2010 – 2016 amounted 4.03% and December 31, 2016, is 2.84% higher than national banking (2.6%) and other bank groups. The lowest value of NPLs BTN 2.75% is achieved on Q4/2011 and the highest in Q4 / 2012 was 4.09%. The NPLs faced by BTN is still within Bank Indonesia's tolerance limit of 5%. But BTN must be able to control the asset quality especially credit because it will affect bank profitability

The average value achieved OEOI period 2010 – 2016 amounted 84.38 % and December 31, 2016, is 82.48%, slightly higher than the national banking industry (82.22%) and other bank groups. The highest value of OEOI BTN 88.97% is achieved on Q4/2014 and the lowest OEOI amounted to 80.74% achieved on Q4/2012. Based

on the average OEOI achieved by BTN, it is still below the tolerance set by Bank Indonesia, but BTN must continue to improve efficiency, for example by improving the structure of third-party funds and unnecessary cost savings.

The average value of ROA achieved period 2010 – 2016 amounted 1.67% and December 31, 2016, is 1.76%. If compared with national banking (2.23%) then the ROA achieved by BTN is lower. The lowest value of ROA is 1.61% on Q4/2015, while the highest ROA is 2.05% Q4/2010.

Years	LDR	NPLs	OEOI	ROA
Q4/2010	108.42	3.26	83.28	2.05
Q4/2011	102.57	2.75	81.75	2.03
Q4/2012	100.90	4.09	80.74	1.94
Q4/2013	104.42	4.05	82.19	1.79
Q4/2014	108.86	4.01	88.97	1.14
Q4/2015	108.78	3.42	84.83	1.61
Q4/2016	102.66	2.84	82.48	1.76

Source: Published Financial Statements, period 2010 - 2016, www. Bank BTN co.id., processed

Based on the results of statistical data processing (see Table 2), the equation can be formulated:

$$ROA = 8.071 + 0.019LDR - 0.60NPLs - 0.97OEOI \quad (2)$$

Furthermore, the equation is described as follows:

- The constant value of 0.871 positive. This means that if LDR, NPL, and OEOI have zero values, then ROA will increase by 8,071. The LDR regression coefficient is 0.019, indicating a positive relationship means that if the LDR increases one unit, assuming other variables remain, ROA increases 0.019 and vice versa. The regression coefficient for NPL is -0.06 and OEOI, is -0.097 shows a negative relationship, which means that if there are additional NPLs and OEOI assuming other variables remain ROA decreases by 0.06 and 0.097 and vice versa.
- Correlation Coefficient (R) between LDR, NPLs and OEOI, with ROA, is 0.904, meaning that the correlation level is in strong correlation (Sugiyono, 2009). And the coefficient of determination (R-Square) was 0.817 or 81.7% indicating that LDR, NPLs and OEOI accounted for 81.7% of the ROA, while the remaining 18.3% not examined in this study.
- From the results of statistical tests obtained a t-test value of 3.341 is greater than t-table (2.074) with a significant value of 0.03 below 0.05. Thus the H1 hypothesis is accepted. This means that the LDR has a positive and significant influence on ROA. The results of this study support the previous research conducted by Lusiana (2017) states the LDR has a positive and significant impact on ROA. But contrary to the results of research Purwoko (2013) LDR whereas no significant effect on ROA. The partial test results of the effect of NPL on ROA show the t-test value -1.290 is lower than t-table (2.064) with a significant value of 0.209 above 0.05. Thus the H2 hypothesis which states that NPL has a negative effect on ROA can be accepted. The results of this study support the previous research by Adeusi (2014); Sinha (2014); Ahmad (2014); Puwoko (2013); Artarina (2013) and Lusiana (2017). But contrary to the results of Buchory (2016) states that NPL has a positive influence but not significant ROA. And the partial test results of the effect the OEOI on ROA shows the t-test value of -7.90 is lower than t-table (2.064) with a significant value of 0.000 was below 0.05. Thus hypothesis H3 which states OEOI has a negative effect on ROA is acceptable. This means that the OEOI has negative effects and significant effect on the ROA. The results of this study support the previous research conducted by Purwoko (2013); Buchory (2016); Chatarine (2014) and Lusiana (2017). But contrary to the results of Sinha (2014); Francis (2013); and Artarina (2013) which states that OEOI has a significant effect on ROA.
- Based on the F-test in Table 2, F-count was 41.580 greater than the F-table (3.028) with a significance value of 0.000 is below 0.05. Thus the hypothesis H4 which states LDR, NPLs, and OEOI have an effect on ROA is acceptable. This means that the LDR, NPLs, and OEOI simultaneously significant effect on ROA. The results of this study support the previous research conducted by Purwoko (2013); Artarina (2013) and Buchory (2016).

Description	Value	LDR	NPLs	OEOI
Regression Coefficients	8.071 (Constant)	0.019	-0.060	-0.097
Correlation Coefficient (R)	0.904			
Determination Coefficient (R-Square)	0.817			
Partial Significance Test (T-test)	7.808	3.341	-1.29	-7.90
Significance Value (Sig.)	0.000	0.003	0.209	0.000

Simultaneous Significance Test test)	41.580			
Significance Value (Sig.)	0.000			

Source: Output SPSS Ver. 23.0.

CONCLUSION

The conclusion of the study shows that partially LDR has a positive significant effect on ROA; NPLs has a negative effect but not significant effects on ROA; OEOI has negative significant effects on ROA; Simultaneously that variable LDR, NPLs, and, OEOI have a significant effect on ROA. The amount of influence of the independent variable is 81.7% while the remaining 18.3% influenced by other variables not examined in this study

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