 Costs and Operational Revenue, Loan to Deposit Ratio Against Return on Assets

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ABSTRACT

This study aims to examine the effect of Operating Costs and Income, Loan to Deposit Ratio on the Return On Asset of Foreign Exchange Public-Private Banks listed on the Indonesia Stock Exchange during the 2015–2018 period. This study is a quantitative study using financial reports on public foreign exchange companies listed on the Indonesia Stock Exchange as a data source. This study's population is 25 foreign exchange public-private banks listed on the IDX. This study uses purposive sampling to determine the sample to produce 21 banking companies. Data were analyzed using multiple linear regression methods and descriptive statistics.

This study's results indicate that simultaneously Operational Costs, Operational Income, and Loan to Deposit Ratio have a significant effect on Return on Assets. Operational Costs Operational Income has a significant negative impact on Return on Assets. The third hypothesis shows that the Loan to Deposit Ratio has a positive and insignificant effect on Return on Assets.

Keywords - Operating Costs and Income, Loan to Deposit Ratio, Return on Asset

INTRODUCTION

Banking has a significant role in improving the national economy (1). This role is realized through the central role of intermediary institutions between creditors and debtors. Banks as intermediary institutions have the part of channeling funds from parties who have excess funds (creditors) to parties who need funds (debittur) (2). Banks are also a means to help people carry out banking activities or save money or investment.

Foreign Exchange National Private Commercial Bank is a bank that mostly comes from and is owned by private parties (3). National foreign exchange private commercial banks have obtained a letter of appointment from Bank Indonesia so that they can carry out banking business activities in the form of foreign currency and can conduct transactions between countries. The deed of the founders shows ownership by the private sector so that the distribution of profits is also for the private sector. Therefore profitability must always be maintained so that financial performance is good; it is required to utilize all available resources so that there are no errors in performing its implementation.
Therefore, both the banking sector’s good performance using the entire sector owned is expected to provide excellent feedback to the banking world (4).

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One of the indicators to assess banking financial performance is Return On Assets. According to BI Circular No. 3 / 30DP NP dated December 14, 2001, the ratio of profit can measure the Return On Asset ratio before tax to total assets (total assets). The greater the return On assets, the better the financial performance because the return rate (Return) is getting bigger (6).

Another indicator in assessing financial performance is calculating this ratio by comparing operating costs and operating Income (7). This ratio is used to measure the level of efficiency and ability of the Bank in carrying out its operational activities in one current period (8). The Bank carries out operational efficiency to find out whether the Bank in its operations related to the main business of the Bank is carried out correctly (following the expectations of management and shareholders). It is used to show whether the Bank has used all of its production factors appropriately and effectively (9). The smaller the total operational costs of the Bank compared to the entire operating income obtained indicates that the Bank can manage its operations well. The more efficient bank operations will affect the profits or profits that the Bank gets. The more efficient the Bank runs its operations, the more the Bank will increase. This is supported by Yanti 2015, which concluded that the higher the Ratio of Operating Costs to Operational Income impacts decreasing Return on Assets. On the contrary, the lower the Ratio of Operational Costs per Operating Income impacts increasing Return On Assets. Thus the relationship between Operational Cost Per Operating Income and Return On Asset is negative; that is, the smaller the Operating Cost Per Operating Income, the Return on Assets will increase because the Bank can reduce its operational costs (10).

The loan to deposit ratio is the ratio between the total amount of credit provided by the Bank and the Bank’s funds. The higher the loan to deposit balance, the higher the Bank’s profit (assuming the Bank is able to channel its credit effectively). The Bank’s performance will also increase (11). Thus, the loan’s size to deposit Ratio of a bank will affect the Bank’s performance. Research by Nur Cholis Madjid (2013), the partial test results for the loan’s liquidity to Deposit Ratio show a positive and significant effect on Return on Assets (12). Provision of funds in banking companies is intended to use them in the form of lending. This is done to get interest income on loans that are distributed. The
greater the lending carried out, the greater the interest income, but this has a significant risk. Therefore, banking companies need to look at the credit distribution level through the Loan to Deposit Ratio.

Furthermore, Pompong B. Setiadi (2010) explains a significant positive relationship between the Loan to Deposit Ratio and the profitability of Return on Assets. The Deposit Ratio loan provides the most considerable positive contribution to a bank's Return on Assets. This means that the Bank is very concerned and is very superior in managing the Loan to Deposit Ratio. The management of the loan to deposit ratio is a mainstay in increasing Return on Assets (13).

This can be found in M Tahir's research that there is a significant positive relationship between profitability and firm size with dividend payments. Simultaneously, government ownership has a negative association with dividend payments. Investment opportunities, liquidity, and managerial ownership show an insignificant relationship with dividend payments. This suggests that dividend payout policy depends on business strategy, including investment and financing decisions. Financial managers must consider these factors when formulating a company's dividend policy.

**Literature Review**

**Financial statements**

Financial statements are several pieces of paper with numbers written on them, but it's also essential to think about the real assets that underlie the numbers (14). In general, the purpose of making a bank's financial statements is to provide financial information about the number of assets and types of assets owned; Provide financial details about the number of liabilities and types of liabilities both short and long term; Provide financial information about the amount of capital and types of bank capital at a particular time; Provide financial information about business results that are reflected in the amount of Income (Return) earned and the sources of the Bank's Income; Provide financial details about the number of costs incurred and the types of expenses incurred in a certain period; Provide information about changes that occur in assets, liabilities, and capital of a bank (15).

**Bank**

Bank, as a financial institution that markets products in the form of services, has a significant role as a financial intermediary, which is to transfer funds from parties with excess funds (surplus) to parties who lack funds (deficit) (16). Also, banks are institutions that function to smooth financial traffic.

The Bank is an agency that aims to carry out various transactions related to finance, such as securing money, making investments, sending money, making payments, or making collections. (12).

Hasibuan (2008) defines that a bank as a business fund that collects funds from the public in the form of savings and distributes them to the people in the form of credit and other documents to improve the standard of living of the people at large (17).
Operating Costs and Income

Operational efficiency ratio analysis uses the following calculations: Operational costs are costs associated with bank business activities, namely interest costs, other foreign exchange costs, labor costs, depreciation, and additional costs; Operating income is all income that is a direct result of bank business activities that are received, such as interest, fees and commissions, other foreign exchange income and other Income (18).

Efficiency issues are related to cost control issues. Operational efficiency means that the costs incurred to generate profits are less than the profits derived from the use of these assets. Banks that are unable to improve their level of business efficiency will lose their competitiveness in mobilizing public funds and channeling these funds in the form of business capital. The Ratio of Operating Costs can measure efficiency to Operating Income.

The definition of operational costs to operating income is comparing operating expenses and operating income in measuring the level of efficiency and the Bank’s ability to carry out its operations (19).

Return on Assets

In determining the soundness level of a bank, Bank Indonesia is more concerned with assessing the amount of Return on Assets because Bank Indonesia as a banking supervisor and supervisor prioritizes the profitability value of a bank as measured by assets whose funds are mostly derived from public savings (20).

Return on Assets measures the company’s ability to generate profits with costs to finance these assets (21).

Return on Assets is a ratio used to measure a company’s ability to generate profits from investing activities (22).

METHODOLOGY

TYPES OF RESEARCH

This research’s research type is quantitative research using financial reports on Public Foreign Exchange Private Banking companies listed on the Indonesia Stock Exchange as a data source (23). Quantitative analysis is carried out using numbers, statistical processing. Quantitative research methods are classified as non-experimental or descriptive, survey, comparative, and correlational.

Population and Sample Research

This study’s population is the foreign exchange public-private banks listed on the Indonesia Stock Exchange for 2015-2018, namely 25 banks listed on the Indonesia Stock Exchange. The sample was taken by using purposive sampling technique with the following criteria: Foreign Exchange Public-Private Banks that issued audit financial reports in 2015-2018 and listed on the Indonesia Stock Exchange; The financial statements are reports with an annual period (ending December 31); The Foreign Exchange Public-Private Bank has a positive profit during the 2015-2018 research period.
Operational Definition of Variables

After selecting samples with the above considerations or criteria, 25 companies were obtained.

Dependent / Bound Variable (Y)

This research discusses the performance of national private banks listed on the IDX in 2015-2018 by measuring the level of bank profits, which is proxied by the Rentability Ratio, namely Return on Assets as the dependent variable, which can be formulated as follows:

\[
\text{ROA} = \frac{\text{NET PROFIT}}{\text{TOTAL ASSETS}} \times 100%
\]

Independent / Independent Variable (X)

This study's independent variable is the Bank's financial ratios prepared by the Bank and regularly reported to Bank Indonesia and published. The economical rates that are the independent variables in this study are financial ratios, which consist of two aspects, namely:

Operating Expenses / Operating Income

The comparison between operating costs and operating income can be formulated as follows:

\[
\text{BOPO} = \frac{\text{OPERATIONAL EXPENSES}}{\text{OPERATIONAL INCOME}} \times 100\%
\]

Long Deposit Ratio

The ratio between the total amount of credit extended by the Bank and the funds received by the Bank is formulated as follows:

\[
\text{LDR} = \frac{\text{THIRD-PARTY CREDIT TOTAL}}{\text{THIRD-PARTY FUNDING TOTAL}} \times 100\%
\]

Data Analysis Method

Data analysis using multiple regression (multiple regression) to test the effect of independent variables on the dependent variable. The hypothesis in this study was tested using SPSS 16 for windows. Data analysis using multiple regression (multiple regression) to test the effect of independent variables on the dependent variable. The hypothesis in this study was tested using SPSS 16 for windows.

Multiple linear regression is linear regression in which a dependent variable (variable X). Multiple linear regression statistical test is used to test the significance or not the relationship of more than two variables through the regression coefficient (24). The multiple linear regression equation is formulated as follows
\[ Y = a + b_1X_1 + b_2X_2 + e \]

Information:
- \( Y \) = Profitability Return On Assets
- \( a \) = Constant
- \( b_1, b_2 \) = regression coefficient
- \( X_1 \) = variable Operating Expenses Operating Income
- \( X_2 \) = Variable Loan To Deposite Ratio
- \( e \) = Confounding variable (error)

Results and Discussion
Multiple Linear Regression Analysis

The data used is on an interval or ratio scale, then the results of multiple linear regression analysis are obtained as in Table 1 as follows:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T Count</th>
<th>T table</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>152.251</td>
<td>66.676</td>
<td>2.283</td>
<td>2.119</td>
<td>0.025</td>
</tr>
<tr>
<td>Operating Expenses</td>
<td>-0.015</td>
<td>0.006</td>
<td>-0.261</td>
<td>-2.420</td>
<td>0.018</td>
</tr>
<tr>
<td>Operating Income (X1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loan To Deposite Ratio (X2)</td>
<td>0.009</td>
<td>0.006</td>
<td>0.160</td>
<td>1.482</td>
<td>0.142</td>
</tr>
</tbody>
</table>

\[ R^2 = 0.084 \]
\[ \text{Adjusted } R^2 = 0.061 \]
\[ \text{Durbin-Waston} = 1.469 \]
\[ F\text{-count} = 3.646 \]
\[ F\text{-table} = 3.52 \]
\[ \text{Sig F} = 0.031 \]

Source: SPSS output

Based on the results of the Multiple Linear Regression analysis in Table 1, the following equation can be obtained:

\[ Y = 152.251 - 0.015X_1 + 0.009X_2 \]

The regression equation can be explained as follows: 1) The constant value is (152,251). It shows that if there is no influence from the independent or continuous variables, then the value of the profitability of Return on Assets is 152.251%. 2) The importance of Operational Costs to Operating Income is (-0.015), indicating that if other
independent variables do not increase, operational costs to Operational Income have increased by Rp. 1.00, the value of Profitability Return on Assets will decrease by Rp. 0.015%. 3) The importance of Return on Assets is (0.009), indicating that if the other independent variables do not increase, the Return on Assets has increased by Rp. 1.00, the value of Profitability Return on Assets will increase by 0.009%.

From the multiple linear regression equation above, it can be explained that the constant value is (152,251). This indicates that if the independent variables are assumed to be consistent or equal to zero, the dependent variable Return On Assets is 152.251%. Then, for the sign and its significance, the ratio of operating expenses to operating income has a negative and significant approach. Simultaneously, the Loan to Deposit Ratio has a positive and meaningful direction. Thus, the analysis of the independent variable's effect on the dependent variable that have been carried out is only the Loan To Deposit Ratio, which is not following the proposed hypothesis, both the direction of the sign and its significance.

The Simultaneous Influence of Operating Expenses, Operating Income, and Loan To Deposit Ratio on Return On Assets

From the research results, it is found that all the independent variables of the ratio of operating expenses to operating Income and the Ratio of Loan to deposit ratio have a significant effect on the dependent variable Return on Assets. The results of the F test show that the value of F-count = 3.646> F-table = 3.52 then it is stated that Ho is rejected and the probability value (sig) = 0.031 <alpha value = 0.05, it is significant.

The study results show that the operating expense variable simultaneously with operating Income and the Loan to deposit ratio have a significant effect on return on assets. The cost of operating expenses is the most common measure used to calculate the balance between managing costs and operating income. This ratio is used to measure the level of efficiency and ability of the Bank in carrying out its operational activities in one current period. The Bank carries out operational efficiency to determine whether the Bank in its operations related to the main business of the Bank is carried out correctly (following the expectations of the management and shareholders) and is used to show whether the Bank has used all its production factors appropriately and effectively.

This can be found in research conducted by VO (2019). The export intensity and export growth have a significant and positive relationship with stock returns. However, the export market coverage does not substantially connect with stock returns at the 0.05 level. Profitability, financial leverage, and exchange rates have a positive relationship, while interest rates and GDP have no connection with stock returns at the 0.05 significance level. This finding implies that investors should consider export intensity rather than export growth and export market coverage as the selection of stocks for fishery export companies to invest in; Managers should increase the power of exports to increase the stock price or market value of the company.

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Loan to deposit ratio is the ratio between the total amount of credit provided by the Bank and the funds received by the Bank, so that the higher the loan to deposit balance, the higher the Bank’s profit (assuming the Bank can channel its credit effectively), with an increase in bank profits, then bank performance also improved (26). Thus, the size of a bank's loan to deposit ratio will affect the Bank’s performance.

**Partial Influence of Operating Expenses Cost of Operating Income to Return On Assets**

The first hypothesis states that the ratio of operating expenses to operating income has a significant and negative effect on return on assets. The research result shows that the ratio has a negative and significant effect on the return on assets ratio so that the hypothesis can be accepted. As the result of the t value is -2.420 < t table 2.119 and the significance value is 0.018 < alpha 0.05.

This study found that operating income has a negative and significant effect on the development of return on assets in Indonesian banks. This is following the researchers' framework, where the ratio of operating costs is the ratio between operating expenses and operating income. This means that the lower the cost of operating expenses, the operating income, the more efficient the Bank’s performance is in controlling its operational costs. With the existence of cost efficiency, the Bank’s profits will be even greater. On the other hand, the increasing ratio reflects a bank's inability to reduce operating costs and increase its operating income, which can cause losses because banks are less efficient in managing their business (SE. Intern BI, 2004).

This can be found in research conducted by DANG & TRAN (2019) that accounting distortion is the main factor affecting stock returns, not a determinant of growth. The two determinants of accounting distortion and development explain the impact of accrual anomalies on earnings and future stock returns. Experimental evidence confirms the existence of abnormal accruals on the Vietnamese stock market. Aggregate accruals are negatively correlated with future operating income and future stock returns. However, after considering the factors that contribute to the impact of future profitability and stock returns, the study results suggest that accounting distortions can lead to low earnings sustainability, not growth.

Achieving a high level of efficiency is the hope of each Bank because achieving efficiency means that management has succeeded in efficiently using its resources. The high ratio of operating expenses to operating income indicates that banks have not been able to utilize their help or have not efficiently carried out their operational activities, resulting in decreased profitability. The smaller the ratio of operating expenses to
operating income, the more efficient the Bank is in carrying out its business activities so that the opportunity to obtain higher profits will be higher. The ratio of operating expenses to operating income shows that the management of a commercial bank has been able to optimize its operational activities to reach an efficient level. These findings support the research results of Sabir et al. (2012), Asyriah Arifuddin (2012), and Bambang Sudiyatno (2010). They examined the cost of operating expenses on operating income to return on assets. They found the research results that showed that operating expenses affected operating income—significant negative on return on assets (28).

This study indicates that banking companies use the ratio of operating expenses to operating income to measure efficiency in carrying out their operations to provide the results expected by the Bank by comparing Operating Costs and Operating Income. If the value of operating expenses increases in operating income, the return on assets ratio will decrease. Of course, it will affect the Foreign Exchange Public Private Banking company's revenue.

**Effect of Partial Loan to Deposit Ratio on Return on Assets**

The second hypothesis states that the loan to deposit ratio positively and significantly affects return on assets. The research results show that the Loan to deposit ratio has a positive but not significant impact on return on purchases, so the hypothesis that the Loan to deposit ratio has a positive and significant impact on return on assets cannot be accepted because the significance value is more significant than alpha 0.05. The results of the partial test (t-test) between the variable loan to deposit Ratio and the variable Return on assets show the t value of 1.482 < t table 2.119 and a significance value of 0.142 > 0.05, and this means that the loan to deposit ratio has no significant and positive effect to the return on assets of the Foreign Exchange Public-Private Bank.

This study found that the Loan to deposit ratio has a negative and significant effect on the development of return on assets in Indonesian banks. This is not following the researcher's framework, where an increase in the loan to deposit ratio means an increase in the interest income earned by the Bank. An increase in the loan-to-deposit rate means that profitability increases, indicating more significant profit growth. This study's results are not in accordance with the frame of mind that an increased loan to deposit ratio should increase the growth of return on assets. This condition shows that the higher the loan to deposit balance, the more risky the Bank's liquidity is. If the percentage of lending to third-party funds is between 80% -110%, the Bank can have the right profitability level. However, this can impact the decline in the return rate on assets of commercial banks going public if loans are disbursed in return. The results of this study are supported by the research of Fakhrudin Maula (2012), Hardiyanti (2012), and Asyriah Arifuddin (2012), whose research results found that the Loan to deposit ratio has a significant effect on increasing return on assets and rejects the research results found by Bambang Sudiyatno (2010), whose research results found that the loan to deposit ratio has no significant effect on return on assets (29).
The results of this study indicate that the loan to deposit ratio is related to how far the Bank's ability to pay back withdrawals made by depositors by relying on loans as liquidity. The loan to deposit balance as this is an indicator of a bank's vulnerability and capability, the greater or the increase in this ratio, the more liquid and income Return on assets will increase in performing its performance. However, it must be supported by the management’s ability to manage effectively and efficiently, so that able to pay its debts and make a profit.

CONCLUSION
This study concludes that the F Test calculation results state that all the variables of free operating expenses, operating income, and the loan to deposit ratio simultaneously significantly affect the return on assets variable in Foreign Exchange Public-Private Banking companies listed on the IDX. Meanwhile, the t-test calculation results show that the variable operating expenses free operating income partially has a significant adverse effect on the return on assets variable in Foreign Exchange Public-Private Banking companies listed on the IDX. The lower the ratio of operating expenses to operating income, it can be said that the operational activities carried out by the Bank are more efficient. If all the activities carried out by the bank run efficiently, then the profits will be even more significant, which will improve the Bank's financial performance. The t test calculation results state that the independent variable loan to deposit ratio partially has a positive and insignificant effect on the return on assets variable in Foreign Exchange Public-Private Banking companies listed on the IDX. Thus the level of liquidity of a bank affects the financial performance of the Bank. The more optimal the Bank’s liquidity level is, the bigger the third-party funds channeled in the form of credit. The bigger the glory, the bigger the profit that will be obtained. So that the Bank's financial performance will increase.

Suggestion
Recommendations for banking companies should maintain the stability between income and fees so that the Bank can get the maximum profit by increasing the revenue obtained from interest income on lending and interest on savings, current accounts, and deposits. Then from the operational cost sector, bank management needs to reduce operating costs by validating every expense that the Bank wants to incur, for example, avoiding the cost of estimating losses that are too large, so that these sources of funding can have a positive impact on the company's ability to generate optimal profits. Furthermore, banking companies are expected to manage funds originating from loans in the form of debt (liabilities) by expanding the distribution of customer funds in the form of credit. Bank management should continue to supervise the provision of credit. If there are indications of congestion or problematic distinction inhibiting the increase in profits, it can be minimized immediately. And for investors, it is expected that in determining investment
decisions to consider companies that have a Return On Asset value or the rate of return generated by the company in carrying out its activities.

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