Analysis of Factor Affecting Profitability of State Owned Banks in Indonesia and Notable Bank in Singapore as Basis for Bank Management Decision Making to Its Stakeholder

Eddy Winarso¹ and Francis M. Hutabarat²

¹Accounting Department, Economic Faculty, Widyatama University, Bandung – Indonesia
²Accounting Department, Economic Faculty Advent Indonesia University, Bandung - Indonesia

Keywords: Capital Adequacy Ratio (CAR), Loan to Debt Ratio (LDR), Non Performing Loan (NPL), Return on Assets (ROA), Return on Equity (ROE), Notetable Bank

Abstract: Every firm has tendency only to seek profit whereas, the objective of a firm is not only to maximize profit and maximize their shareholder or owner but also seek to maximize the wealth of their stakeholder. This mean that a firm needs to benefit their stakeholder and one of the stakeholders of a firm is the community around the company. The purpose of the study is to analyze the factor affecting return on asset of state owned banks in Indonesia and notable bank in Singapore combined. The study is descriptive using CAR, NPL and LDR as their independent variable and ROA and ROE as their dependent variable. The financial used in the study is for financial data use in the study from annual report and financial statement from year 2013 – 2017. Data analysis using statistic analysis such as descriptive statistic, t test, and regression analysis. The result shows that all state owned banks in Indonesia and notable bank in Singapore are healthy in terms of their minimum capital, non performing loan and their function well in LDR ratio and in their return on asset in this study also several ratios have been used and the results are very good, including CAR, NPL, LDR and ROA. The mean results for CAR are 18.5% for Indonesia and 16% for Singapore banks which is above 8% standard for minimum capital for a bank. NPL mean result is 2.5% for Indonesia and < 1% for Singapore which is below the minimum standard of 5% which shows that BUMN bank can manage their non-performing loans. On the other hand, BUMN bank also shows that they perform their function well in giving loans and receiving deposits from their customer as shows in LDR ratio of 91.124% for Indonesia and 85% for Singapore which is between 78-100% standard of Bank Indonesia. The descriptive statistic data also show that ROA has mean of 2.972% for Indonesia and 1.02% for Singapore that is above 1.5% standard of Bank Indonesia. The result shows that there is a significant relationship between CAR, NPL, LDR and ROA of state owned banks in Indonesia and notable bank Singapore combined from year 2013-2017. The results however are not significant for Return on Equity.

1 INTRODUCTION

Every firm has tendency only to seek profit whereas, the objective of a firm is not only to maximize profit and maximize their shareholder or owner but also seek to maximize the wealth of their stakeholder. This mean that a firm needs to benefit their stakeholder and one of the stakeholders of a firm is the community around the company.

Bank is one institution that needed by the community in all activities such as transaction activities and savings and loan activities is Bank. Bank as an institution becomes a very useful container for the community, so that even throughout the world, banks have been trusted to be a solution for the community regarding their finances. In the Republic of Indonesia Law Number 10 of 1998 concerning banking industry, it is said that banks are business entities 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). In order for bank to be beneficial to its stakeholder and the community, first bank need to have good financial performance and in other words, it need to be healthy and function well?

Murhadi (2015) stated that the performance of a company can be analyzed from its financial
Financial statements contain information about financial position, financial performance, and changes in financial position that are very useful in making a decision. 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, the financial manager also requires 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 checking accounts, so that this becomes a fund collected and channeled back to the community in the form of loans or loans can be seen from financial statement analysis. (Kasmir, 2012)

In every business activity carried out, of course, the first time you want is to get a profit. Various ways that can be done by a bank to get maximum profit or profit, one of which is a bank must have large capital. Maximum profit can increase bank capital so that bank operations can be carried out. And running a business the bank 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 company performance. According to Kasmir (2003:279), profitability ratio is used to measure the level of business efficiency and profitability acquired by the bank concerned. In other words, profitability ratios are important financial ratios to determine the ability of banks to earn profits and measure the performance of a bank. One of the banking profitability ratios is Return on Assets. (Taswan, 2010)

Return on assets is the ratio that shows the ratio between earnings and the total assets of the bank, this ratio shows the level of efficiency of asset management carried out by the bank concerned (Pandia, 2012; Darmawi, 2014). The greater the Return on Assets (ROA) of a bank, 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 the ROA in small banks has decreased.

A case stated in Kompas (2017) reported that PT Bank Bukopin Tbk posted a profit that decreased by 14 percent compared to the previous period. The report also stated that the capital adequacy ratio (CAR) increased to 16.34 percent and in addition to the increase in CAR, the level of liquidity is still well maintained as loan to deposit ratio or the ratio of credit to deposits (LDR) is 75.07 percent. On the other hand, news by Kompas (2018), stated that PT Bank Tabungan Pensiunan Nasional Tbk (BTPN) achieved a net profit of Rp 1.2 trillion in 2017. This figure fell 30 percent compared to the previous year's achievement. While total funding increased 5 percent to Rp. 76.5 trillion, with the composition of third party funds (DPK) up 3 percent to Rp. 67.9 trillion. Then the company's total assets rose 5 percent to Rp. 95.5 trillion. And it was found that the capital adequacy ratio (CAR) reached 24.6 percent.

In other cases, Bank is known to also beneficial to the community by bringing its responsibility in the form of Scholarship, education endowment, and other form of fund to the society in Indonesia. (IDN Times, 2018)

Thus from the above case it can be seen that the condition of changes in CAR and the LDR appear to have a change in the profit of a bank. Based on the existing background, the researchers feel the need to conduct research with the title: Analysis of Factor Affecting Profitability of State Owned Banks in Indonesia and Notable Bank in Singapore as Basis for Bank Management Decision Making to Its Stakeholder.

**Significant of the Study**

The uses of this study are significant for the authors, in gaining knowledge and the practical experience in expanding research on different countries as well as in analyse company's financial statements and their development. The study also significant for researcher universities, in supporting the institution program for their faculty. As additional information, the study can also be used as a decision-making tool for companies, investor and other readers.

### 2 LITERATURE

Financial ratios are numbers obtained from the comparison of the extracts of one financial statement post with another that has a relevant and significant relationship (Harahap, 2004). Whereas according to Ediningsih (2004) financial ratios are comparisons between two elements of financial statements that show an indicator of financial health at a certain time. Financial ratios are very important for external analysts who assess a company based on published financial statements. This assessment includes the problems of liquidity, solvency, profitability, management efficiency and prospects for the company in the future. CAR or often referred to as the bank’s capital adequacy ratio, is a ratio to shows how
A bank is able to finance its activities with ownership of its capital. It is interesting to see how the adequate capital of banks that can be seen through CAR ratios can affect banks' purpose which it maximize profit that can be seen through profitability ratio such as ROA. NPL is a financial ratio that is used as a proxy against the return credit given to bank depositors in other words the NPL is the level of bad debts at the bank. This ratio shows that the bank's management capabilities in managing troubled credits provided by the bank. The smaller the Non Performing Loan (NPL), then the small credit risk borne by the bank. The bank has a role as the implementation of monetary policy and the achievement of financial system stability, so that a healthy, transparent and accountable banking system is needed. (Indonesian Banking Booklet 2009) The purpose of the banking business fundamentals is to obtain optimal benefits by providing financial services to the public. For shareholders to invest in the bank aims to earn income in the form of dividends or get a profit 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 a high level of profitability, being able to distribute dividends well, business prospects that are always developing, and able to fulfill prudential banking regulation provisions well (Mudrajad and Suhardjono, 2002). If a bank can maintain its performance well then it can increase the value of shares in the secondary market and increase the amount of funds from third parties.

The increase in the value of shares and the amount of funds from third parties is one indicator of increasing public trust in the bank concerned. Trust and loyalty of the owner of the fund to the bank is a very helpful factor and makes it easier for the bank management to develop a good business strategy. Fund owners who lack trust in the bank concerned are very low in loyalty. This is very unfavorable for the bank in question, because the owners of funds can withdraw funds at any time. It is important to evaluate company performance, both by management, shareholders, the government, and other parties with an interest in and related to distributions how that financial ratios are useful in assessing the financial condition of a banking company. Financial ratios are also useful in predicting company profits.

The strength of predictions of financial ratios in predicting profits so far is indeed very useful in assessing company performance (performance) in the future. The strength of financial ratio predictions was found differently by several researchers. But whether all existing financial ratios have the ability to predict profits, someone has already done their research. Below discussion regarding hypothesis of the study is comprised of results of previous studies regarding CAR, NPL, LDR, and ROA.

**Hypothesis of the Study**

Based on the background description of the problem above, the hypothesis in this study are as follows:

**H1:** There is a relationship between CAR and Profitability

NPL is a financial ratio that is used as a proxy against the return credit given to bank depositors in other words the NPL is the level of bad debts at the bank. This ratio shows that the bank's management capabilities in managing troubled credits provided by the bank. The smaller the Non Performing Loan (NPL), then the small credit risk borne by the bank.
hence the aspect of supervision is decreasing, so that Non-Performing Loans (NPL) are getting bigger or credit risk is getting bigger (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 influence on Return on Assets (ROA). While the 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

According to Kuncoro and Suhardjono (2002), financial institutions are very important in economic development because funds are needed to implement them. Article 3 of the Banking Law says that the main function of bank in Indonesia banking is to collect and channel public funds. (Fahmi, 2014). It is interesting to see how the function of banks that can be seen through LDR ratios can affect the its purpose which it maximize profit that can be seen through profitability ratio such as ROA. LDR have a positive and significant effect on bank profits, the results of the study of Werdaningtyas (2002) is that a Loan to Deposit Ratio (LDR) has a negative and significant effect on profitability (ROA). Loan to Deposit Ratio (LDR) is also defined as how much bank funds are released into credit (Merkusiwati, 2007). Research on the effect of the Loan to Deposit Ratio (LDR) shows different results. Among others, research conducted by Suyono (2005) shows the results of the Loan to Deposit Ratio (LDR) has a positive and significant effect on Return on Assets (ROA). Usman (2003) shows the results of the Loan to Deposit Ratio (LDR) have a positive and significant effect on bank profits. On the other hand, the result of the study of Werdaningtyas (2002) is a Loan to Deposit Ratio (LDR) that has a negative and significant effect on profitability (ROA).

H2: There is a relationship between LDR and ROA

CARS, NPL, LDR are ratios that related to the CAMEL ratio which evaluate the health of a bank (Simanjuntak & Hutabarat, 2016). CAR or often referred to as the bank’s capital adequacy ratio, is a ratio to shows how a bank is able to finance its activities with ownership of its capital. Loan to Deposit Ratio (LDR) is defined as how much bank funds are released into credit, while NPL is the level of bad debts at the bank. It is interesting to see how the adequate capital of banks that can be seen through CAR ratios, bad debt level of bank and how much bank funds are released into credit can affect banks purpose which it maximize profit that can be seen through profitability ratio such as ROA. Previous studies stated that there is no significant relationship between CAR and ROA (Hindarto, 2011; Catur Wahyu Endra Yogianta, 2013; Harun, 2016). On the other hand there is a relationship between LDR and ROA (Catur Wahyu and, other study stated that there is a relationship between CAR and ROA (Edwar, Yokue, Bernadin, 2016). Previous study stated that there is no significant relationship between LDR and ROA (Catur Wahyu Endra Yogianta, 2013; Hindarto, 2011; Harun, 2016). Other studies stated that there is a relationship between LDR and ROA (Endra Yogianta, 2013; Harun, 2016) and also between NPL and CAR toward ROA (Anwar & Murwaningsari, 2017).

H2: There is a relationship between CAR, NPL, LDR, and ROA

To limit the breadth of the discussion in this study, researchers limit research in terms of the scope and limitations of research problems. This research was conducted at state-owned banks listed on the Indonesian Stock Exchange and notable bank in Singapore. The study used panel data that was taken from annual report and financial statement of four state-owned bank Indonesia and three notable bank in Singapore of five year data from 2013-2017 with total sample of 35 data. The use of panel data of two consecutive years give advantage to measurement of the changes that take place between points in time (Cavana et al as seen in Alzahrani Che-Ahmad, 2015). The data taken from the operational variables used in the study comprise of independent variables and dependent variables. The independent variables used in this study are the Capital Adequacy Ratio (CAR), Non Performing Loan (NPL) and the Loan to Deposit Ratio (LDR). While the dependent variable is Return on Assets (ROA) and Return on Equity (ROE). The sample used in the study from four state-owned banks that are listed at Indonesia Stock Exchange are: Bank Mandiri (BMNI), Bank BNI...
(BBNI), Bank BRI (BBRI), and Bank BTN (BBTN), from Banking sub sector, while the three notable bank in Singapore are: OCBC Bank, DSB Bank and UOB Bank.

Analysis of the variables using formula for:

1. Dependent Variable (Profitability)
   a. Return on Asset as first dependent variables with standard ROA > 1.5%.
   b. Return on Equity for the second dependent variables with standard ROE > 12%.

2. Independent variable
   a. Capital Adequacy Ratio, with CAR > 8% standard.
   b. Non Performing Loan, with NPL < 5% standard.
   c. Loan to Deposit ratio, with LDR 78-100% standard.

The statistical analysis is done using Descriptive statistics of Mean, Standard Deviation, Minimum and Maximum, Correlation Matrix, Regression analysis, F-test, t-test, and Kolmogorov-Smirnov.

The economic model is used to develop a model of a company’s profitability or its ability to gain profit. The variable proposed for the model includes the following functional equation:

\[
ROA_{it} = \beta_0 + \beta_1 CAR + \beta_2 NPL + \beta_3 LDR + \epsilon_i + \mu_{it} \quad (1)
\]

\[
ROE_{it} = \beta_0 + \beta_1 CAR + \beta_2 NPL + \beta_3 LDR + \epsilon_i + \mu_{it} \quad (2)
\]

Where:
- \( ROA_{it} \) = profitability Return on Asset
- \( ROE_{it} \) = profitability Return on Equity
- \( CAR \) = capital adequacy ratio
- \( NPL \) = non performing loan
- \( LDR \) = loan to deposit ratio
- \( \epsilon \) = error term
- \( i \) = indicating data for the i bank
- \( t \) = time indicator

4 RESULT OF THE STUDY

4.1 Descriptive Statistic

Table 1 shows the characteristic of variables of the study based on its bank profile whether they are from Indonesia or Singapore stock exchange origin.

<table>
<thead>
<tr>
<th>Group Statistics</th>
<th>Profile</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Indonesia</td>
<td>20</td>
<td>18.5065</td>
<td>5.9021</td>
<td>( \cdot )7919</td>
</tr>
<tr>
<td></td>
<td>Singapore</td>
<td>15</td>
<td>16.4267</td>
<td>8.5813</td>
<td>.22157</td>
</tr>
<tr>
<td>CAR</td>
<td>Indonesia</td>
<td>20</td>
<td>2.5765</td>
<td>8.2675</td>
<td>1.8487</td>
</tr>
<tr>
<td></td>
<td>Singapore</td>
<td>15</td>
<td>.8741</td>
<td>6.7207</td>
<td>1.7353</td>
</tr>
<tr>
<td>NPL</td>
<td>Indonesia</td>
<td>20</td>
<td>91.1390</td>
<td>9.1516</td>
<td>1.99349</td>
</tr>
<tr>
<td></td>
<td>Singapore</td>
<td>15</td>
<td>85.1738</td>
<td>1.69436</td>
<td>0.43748</td>
</tr>
<tr>
<td>LDR</td>
<td>Indonesia</td>
<td>20</td>
<td>1.0240</td>
<td>1.08742</td>
<td>0.24316</td>
</tr>
<tr>
<td></td>
<td>Singapore</td>
<td>15</td>
<td>1.0240</td>
<td>1.0398</td>
<td>0.2685</td>
</tr>
<tr>
<td>ROA</td>
<td>Indonesia</td>
<td>20</td>
<td>20.7400</td>
<td>6.51415</td>
<td>1.45661</td>
</tr>
<tr>
<td></td>
<td>Singapore</td>
<td>15</td>
<td>11.2400</td>
<td>1.30701</td>
<td>0.33747</td>
</tr>
</tbody>
</table>

Based on the table 1 the result shows that the variables of the study have good mean results. Generally, the mean results for CAR in Indonesia is higher than in Singapore with Indonesia at 18.5065% and Singapore 16.4267% which is both above 8% standard for minimum capital for a bank. NPL mean result on the other hand shows that Singapore has lower non performing loans with .87% than its Indonesia counterparts which is 2.5765% which is both below the minimum standard of 5%. This shows that State-owned bank in Indonesia and notable bank in Singapore can manage their non-performing loans. Moreover, State-owned bank in Indonesia shows that they perform their function well in giving loans and receiving deposits from their customer as shows in LDR ratio of 91.124% which between 78-100% standard of Bank Indonesia while Singapore notable bank is at 85%. The descriptive statistic data also show that ROA in Indonesia state-owned bank has a mean of 2.972% that is above 1.5% standard of Bank Indonesia and also above those in notable bank in Singapore which is 1.02%. The same goes for ROE in Indonesia 20.7% which is higher than in Singapore at 11.2%.

Therefore, based on the result of the Descriptive statistic, state-owned bank in Indonesia shows that they have good financial performance in comparison with their notable bank in Singapore.
Table 2. Normality Test

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA</td>
<td>2.1371</td>
<td>1.27354</td>
</tr>
<tr>
<td>ROE</td>
<td>16.6686</td>
<td>6.86795</td>
</tr>
</tbody>
</table>

Table 2 above shows that the test distribution is normal using Kolmogorov-Smirnov normality test for the dependent variable of the study based on Asymp. Sig. > 0.05. Therefore, the data is normally distributed.

Table 3. Regression Model

<table>
<thead>
<tr>
<th>Model</th>
<th>Coefficients</th>
<th>Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>T</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>5.314</td>
<td>1.401</td>
</tr>
<tr>
<td>CAR</td>
<td>0.139</td>
<td>1.444</td>
</tr>
<tr>
<td>NPL</td>
<td>0.516</td>
<td>2.037</td>
</tr>
<tr>
<td>LDR</td>
<td>-0.074</td>
<td>-2.034</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>23.114</td>
<td>999</td>
</tr>
<tr>
<td>CAR</td>
<td>0.434</td>
<td>738</td>
</tr>
<tr>
<td>NPL</td>
<td>1.500</td>
<td>972</td>
</tr>
<tr>
<td>LDR</td>
<td>-0.190</td>
<td>-854</td>
</tr>
</tbody>
</table>

The regression model indicates that the increase of CAR by 1 point will increase ROA by 0.139, and the increase of NPL by 1 point will increase ROA by 0.516, and the increase of LDR by 1 will decrease ROA by 0.074.

CAR as often referred to as the bank’s capital adequacy ratio, based on the result shows that state-owned bank and notable bank in Indonesia and Singapore are able to finance its activities with ownership of its capital. The result shows CAR ratios can affect bank’s ability to gain profit as seen in its ROA profitability ratio.

The result also shows that the CAR in both country is at least twice the required standard of 8% with mean of 18% and 16% respectively for Indonesia state-owned bank and notable bank in Singapore which indicate they want to have sufficient capital capacity to reduce risk (Werdaningtyas, 2002). This result is shown to be supported by previous study such as conducted by Udom and Eze (2018).

5 CONCLUSION

In this study the researcher found that the effect of CAR, NPL, LDR on ROA was very good because it found significant results between these variables. The mean results for both Indonesian state-owned bank and notable bank in Singapore are above 8% standard for minimum capital for a bank. NPL also resulted below the minimum standard of 5% which shows that state-owned bank in Indonesia and notable bank in Singapore can manage their non-performing loans.

On the other hand, state-owned bank in Indonesia and notable bank in Singapore also shows that they perform their function well in giving loans and receiving deposits from their customers as shows in LDR ratio between 78-100% standard of Bank Indonesia. The descriptive statistic data also show that ROA has mean above 1.5% standard of Bank Indonesia. Hence, the state owned bank in Indonesia and notable bank in Singapore has good financial performance from year 2013-2017.
RECOMMENDATION

The researcher saw that the relationship between CAR, NPL, LDR and ROA was so good that researchers recommended Indonesia and Singapore bank investors to hold shares in state-owned companies and notable bank listed on the Indonesian and Singapore stock exchange. In terms of management decision making for their stakeholder, the banking industry has supported the community not only in the business sense but also in humanity way, in terms of scholarship and also other social responsibility action. It is best for bank state-owned bank in Indonesia to always help the community around and Indonesia as a whole. This is also applied to Singapore notable bank stakeholder.

REFERENCES


Republic of Indonesia Number 10 of 1998 concerning banking industry


Taswan, (2010), Manajemen Perbankan. Yogyakarta: UPP STIM YKPM.

