EFFECT OF THE APPLICATION OF RISK MANAGEMENT ON FINANCIAL PERFORMANCE

CASE STUDY ON PT. BANK ABG, TBK

Tuk Yulianto

Bank AMAR
tukyulianto@yahoo.com

Received: January, 2022; Accepted: February, 2022; Published: March, 2022

ABSTRACT

The economic recession that occurred in Indonesia in 2020 due to the Covid-19 pandemic has suppressed the performance of the national banking system. Almost all banking performance indicators experienced a significant decline. This condition also applies to PT. Bank ABG Tbk (ABG Bank). To mitigate the risk of losses arising from bank business activities, the Financial Services Authority (OJK) since January 2004 has required every commercial bank to implement risk management effectively. This study aims to determine whether the application of risk management at Bank ABG is proxied by the ratio of Operating Costs to Operating Income (BOPO) for operational risk, the ratio of Non Performing Loans (NPL) for credit risk and Loan to Deposit Ratio (LDR) for liquidity risk. has a significant effect on the profitability of ABG Bank which is proxy by the ratio of Return on Assets (ROA). This research is a case study, using quantitative methods with secondary data sourced from the financial statements of ABG Bank for 2018-2020 which are accessed directly from ABG Bank. The analysis technique uses multiple linear regression. The results of the study concluded that there was a very high influence between the implementation of Risk Management on Financial Performance and the variable that had a significant effect was Operational Risk (BOPO). Meanwhile, credit risk (NPL) and liquidity risk (LDR) have no significant effect.

Keywords: Bank, Risk Management, Financial Performance.

Introduction

World economic conditions since the second quarter of 2020 experienced turbulence due to the Covid-19 pandemic. Many financial institutions and regulators are unprepared for this crisis, especially related to liquidity issues and readiness to deal with a period of very high uncertainty that threatens the sustainability of life and the country's economy and business institutions in a country.

The issue of sustainability and development in a country is strongly related to the healthy and strong banking sector conditions. Therefore, the banking system has always been an important issue in a country's economy. In Indonesia, the strategic role of banking is reflected in 79% of its economic assets in the banking sector as the main economic hardener (OECD, 2015). With the Covid-19 pandemic, national banking performance in 2020 recorded a significant decrease compared to the previous year, where the CAR ratio reached: 23.89%, BOPO: 86.58%, LDR: 82.54%, Net Interest Margin (NIM): 4.45% and ROA: 1.59%. Given the strategic position of the bank and the very high economic
contraction due to the Covid 19 pandemic, the bank must have organizational resilience and financial resilience to be able to continue to grow and operate in a prudent, namely by implementing effective risk management (Tampubolon, 2004).

OJK through OJK Regulation No. 18 /POJK.03/2016 on the Implementation of Risk Management for Commercial Banks, stipulates that all commercial banks must implement risk management effectively which involves: 1. active supervision of the Board of Directors and Board of Commissioners; 2. Adequacy of risk management policies and procedures and determination Risk limit; 3. Adequacy of risk management identification, measurement, monitoring, and control processes, as well as Risk Management information systems; And 4. A comprehensive internal control system. The implementation of Risk Management must include 8 risks, namely: 1) credit risk, 2). Operational risk, 4). liquidity risk, 5). Legal risks, 6). Reputational risk, 7). Strataejik risk and 8). Compliance risk (OJK,2016).

Bank ABG as a bank that operates conventionally since 1991 and transformed digitally since 2014 where its shares are 70% publicly owned and 30% by Singapore's Tolaram Group as a Controlling Shareholder, also experiencing significant performance pressures. For this reason, the role of Risk Management in its operational activities needs to be continuously improved to mitigate risks that can affect its financial performance.

Based on the background description of the above problem, the main purpose of this study is to find out whether the implementation of Risk Management in BANK ABG is proxyed with the ratio of Operating Expenses to Operating Income (BOPO) for operational risk indicators, Non Performing Loan ratios. (NPL) for credit risk indicator and Loan to Deposite Ratio (LDR) for liquidity risk indicators significantly affect the profitability of BANK ABG in 2020 which is proxied with a Return on Asset (ROA) ratio. While the benefits of the results of this study are expected that BANK MANAGEMENT ABG can understand comprehensively and measure the effect of implementing Risk Management, especially those related to the main risks, namely operational risks, risks and liquidity risks to its financial performance so that it can make efforts to make efforts to improve and improve future performance based on the findings of research results.

LITERATURE REVIEW
Agency Theory.

The basic assumption of agency theory is that individuals will maximize their future interests and have the resources and be innovative in doing so. The issue raised by agency theory is how a manager or shareholder can take advantage of a corporate action (Schroeder, Clark, &Cathey, 2014). The emphasis in theory is that the interests of managers and shareholders are often not the same. An agency herein is defined as a consensual relationship between two parties in which one party agrees to act on behalf of the other party. In agency theory, there is an innate assumption that there will be a conflict of interest between the owner (principal) and the manager (agent) due to the existence of conflicts between the two parties.

This agency relationship incurs costs for the owner which includes activities: (1) organizational supervision; (2) the binding of the manager; and (3) residual loss. Spending on surveillance activities is intended so that the principal can control the behavior of the agents. Binding costs are defined as
expenses to ensure that agents will not take decisions that could harm shareholders. Lastly, even though the principal has already issued the two types of fees above, agents can still take actions that can reduce shareholder value where these losses are. It is referred to as residual loss (Schroeder, Clark, & Cathey, 2014).

**Risk**

OJK defines Risk as the potential loss due to the occurrence of a particular event (OJK, 2016). While the category of banking risk according to OJK ameliputi: 1) Credit Risk is the risk due to the failure of other parties in fulfilling obligations to the Bank, including Credit Risk due to debtor failure, credit concentration risk, counterparty credit risk, and settlement risk. 2). Market Risk is risk to balance sheet positions and administrative accounts, including derivative transactions, due to overall changes in market conditions, including risk of changes in option prices.

Liquidity Risk is the risk resulting from the Bank's inability to meet obligations maturing from cash flow funding sources and/or from high-quality liquid assets that can be collateralized, without interfering with the Bank's financial activities and conditions.

Operational Risk is the risk due to insufficiency and/or malfunction of internal processes, human error, system failure, and/or external events affecting the Bank's operations. 5). Compliance Risk is the risk due to the Bank not complying with and/or not implementing laws and regulations. Legal risk is the risk of lawsuits and/or weakness of juridical aspects. 7). Reputational risk is the risk due to the declining level of stakeholder trust stemming from negative perceptions of the Bank. 8). Strategic risk is the risk of inaccuracies in the making and/or implementation of a strategic decision and failure to anticipate changes in the business environment.

**Risk Management**

Firmansyah (2010) said that risk management is a process of anticipating risks so that losses do not occur to the organization. The Financial Services Authority (OJK) in OJK Regulation No. 18/POJK.03/2016 regarding the Application of Risk Management to Commercial Banks, defines Risk Management as a set of methodologies and procedures used to identify, measure, monitor, and control risks arising from all business activities of the Bank (OJK, 2016).

Risk management is also defined as a rational experiment to reduce or avoid loss or injury (William, Smith, & Young, 1998). The purpose of implementing risk management is so that risk management in the bank's business activities can still be controlled at limits that are acceptable and beneficial to the Bank.

The implementation of risk management is expected to provide benefits, both to banks and bank supervision authorities. For banks, the application of risk management can be: 1). Increase shareholder value, 2). provide an overview to the bank manager of possible future bank losses; 3) improve systematic retrieval methods and processes based on the availability of information; 4) used as a basis for more accurate measurement of bank performance; 5) to assess the risks inherent in the bank's relatively complex instruments or business activities; and 6) create a robust infrastructure in order to improve the Bank's competitiveness (Tampubolon, 2004).

The Financial Services Authority through OJK Regulation No.18/POJK.03/2016 on the Implementation
of Risk Management for Commercial Banks states that the increasing risk faced by banks, the Bank needs to control risk by improving the quality of its risk management implementation. Efforts to improve the quality of risk management implementation are aimed at protecting the interests of the Bank itself and its stakeholders, especially its customers (OJK, 2016).

In implementing risk management, banks perform several stages of the process. According to Falkner & Hiebl (2015) and Rahman (2015), the risk management process includes: 1) risk identification; 2) risk analysis; 3) selection of techniques; 4) selection of strategies; 5) Control. Identification of potential risks must be done continuously and systematically using a variety of methods or tools such as checklists and financial statements. Meanwhile, according to OJK, the risk management process that must be carried out by banks is by the stages of identification, measurement, monitoring, and risk control of risk factors (risk factors) that are material (OJK, 2016).

**Bank’s Financial Performance**

Orazalin, Mahmood, & Lee (2016) in his research on banks listed on the Russian Stock Exchange (RST) stated that corporate governance has an influence on the performance of banks before and after the financial crisis where there is an increase in governance practices in the company. Battaglia, Fiordelisi, & Ricci (2016) research related to the adoption of Enterprise Risk Management (ERM) related to bank risk reduction and bank profitability. By analyzing banks in Europe from 2005 to 2013, it was found that after the implementation of ERM, banks experienced an increase in risk adjusted profits and overall risk reduction. How to measure the effectiveness of a bank’s risk management is to measure the profitability of the bank. According to Kuswadi (2005) the bank’s profitability can be measured through profitability ratios which include Net Profit Margin (NPM), Gross Profit Margin, Return on investment (ROI), return on Asset (ROA) and return on

\[
ROA = \frac{\text{Laba Setelah Pajak (di setelah pajak)}}{\text{Rata-Rata Total Asset}}
\]

**2.1. Previous Research**

According to Lestari, risk management has a significant effect on organizational performance (Lestari, 2013) While Dini Attar, Islahuddin, M. Shabri argues that there is a significant influence between NPL, LDR on financial performance that is proxied with ROA and ROE. Furthermore, Capital Adequasi Ratio (CAR), Net Interest Margin (NIM), and LDR have a significant effect on profitability, NPL and BOPO negatively and significantly affect profitability. CAR and NIM variables have a positive influence on financial performance, while BOPO and NPL variables have a negative influence. Of the four variables, the most influential on profitability are nim variables (Dini Attar, Islahuddin, M. Shabri, 2015).

**3. Research Methods**

According to Lestari, risk management has a significant effect on organizational performance (Lestari, 2013) While Dini Attar, Islahuddin, M. Shabri argues that there is a significant influence between NPL, LDR on financial performance that is proxied with ROA and ROE. Furthermore, Capital Adequasi Ratio (CAR), Net Interest Margin (NIM), and LDR have a significant effect on profitability, NPL and BOPO negatively and significantly affect profitability. CAR
and NIM variables have a positive influence on financial performance, while BOPO and NPL variables have a negative influence. Of the four variables, the most influential on profitability are NIM variables (Dini Attar, Islahuddin, M. Shabri).  

1. Operational Risk (operation risk) in proxies with a ratio of Operating Expenses to Revenue (BOPO). BOPO ratio is a ratio that describes the efficiency of banking in carrying out its activities. Operating expenses are interest costs given to customers while operating income is interest obtained from customers. The smaller the value of BOPO means that the more efficient the bank in operating. The number is calculated per position (not yearly). Credit Risk in proxies with Non Performing Loan (NPL) ratio Credit is credit as stipulated in the OJK Regulation regarding the assessment of the quality of assets of commercial banks, excluding credit to other banks. While problematic credit is Credit with less current quality, doubtful and bad does not include credit to other banks as stipulated in the OJK Regulation respecting the quality of Commercial Bank Assets.

\[
BOPO = \frac{\text{Beban Operasional}}{\text{Pendapatan Operasional}}
\]

2. Liquidity risk in proxies with Loan to Deposit Ratio (LDR). An LDR is a ratio that measures a bank’s ability to meet short-term obligations. If the value of the LDR is too high, it means that the bank does not have sufficient liquidity to cover. The definition of credit is credit as stipulated in the OJK Regulation on the quality of Commercial Bank Assets (excluding credit to other banks). While Third party funds include Current Accounts, Savings and Deposits (excluding between banks).

\[
LDR = \frac{\text{Total Kredit}}{\text{Dana Pihak Ketiga}}
\]

3. Financial performance in proxies with Return on Asset (ROA) profitability ratio. The ROA (Return On Assets) ratio is a ratio that measures the ability of banks to generate profits. Its function is to see how effective banking is in using its assets in generating income. The greater the value of ROA means that the better the ability of banking in generating profits.

\[
NPI = \frac{\text{Kredit Bermasalah}}{\text{Total Kredit}}
\]

**Analysis of Research Results and Discussion**

This study uses descriptive analysis to describe statistical data that has been collected without intending to make a generally accepted conclusion or generalization (Priyatno, 2014). Descriptive statistical measurements are listed in table 1.

<table>
<thead>
<tr>
<th>Table 1. Descriptive Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source: Processed results of researchers.</td>
</tr>
</tbody>
</table>

From table 1 above it can be seen that the amount of data from each variable is 36 data. **The Operational Risk variable as measured by BOPO** has an average value of 94.23% and a standard deviation of 4.23. The highest BOPO value of 100.08% occurred in February 2018, this means that Bank ABG suffered an operating loss in the month. Operating losses in February 2018 are still helped by non-operating profits so that overall Bank ABG still earns a profit. High BOPO figures show
that BANK ABG faced high operational risks in February 2018. The lowest BOPO value was 84.77% which occurred in December 2019. The low bopo in December 2019 caused Bank ABG to have the highest profit during the period 2018-2020 which was shown by ROA gain of 4.32%. Low BOPO figures in December 2019 show that BANK ABG faces low operational risks.

The Credit Risk variable as measured by NPL Gross has an average value of 4.94% with a standard deviation rate of 0.87. The average gross NPL of 4.94% still meets the maximum limit provisions in accordance with Bank Indonesia Regulation No. 17/11/PBI/2015 (Bank Indonesia, 2015) which states that the NPL ratio is gross. It should be less than 5% (5 percent). Bank ABG has experienced gross NPL that exceeds 5% in some periods, and the highest occurred in December 2020 at 6.93%. The high gross NPL indicates that BANK ABG faces high credit risk, and this results in banks needing to add backup formation (CKPN) for problem credit. The lowest Gross NPL of 3.22% was achieved in September 2019, and the low gross NPL in September 2019 indicates that Bank ABG's credit risk decreased.

Liquidity Risk Variable as measured by LDR. has an average value of 113.22% standard deviation of 17.16. This indicates that there is still a discrepancy with ROA is a ratio used to measure the ability of bank management to make profits by utilizing the total assets held.

What is meant by Profit Before Tax is Profit before Tax deductible. While the average Total Asset is the sum of total assets each month divided by the number of months. sufficient liquidity but lower income, because as it is known the banking world earns income through channeled credit. Conversely, if the value of the LDR is too low it means that the bank has its obligations to the customer (DPK).

Bank Indonesia (2016) stipulates that the lower limit of the target LFR (loan to funding ratio) is 80% and the upper limit of the target LFR is 92%. The highest LDR occurred in November 2018 at 149.21%, and this indicates that the liquidity risk faced by Bank ABG is high. The lowest LDR of 74.32% occurred in December 2020 indicating that liquidity risk decreased.

The Bank Performance Variable as measured by ROA has an average value of 1.75% with a standard deviation value of 1.02. The highest ROA of 4.32% occurred in December 2019 which means the bank's performance this month was the best performance during 2018-2020. The lowest ROA occurred in May 2018 at 0.60%. The low ROA in May 2018 shows that the bank's performance in this period was the worst during 2018-2020.

Table 2. Multiple Linear Regression Analysis Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>NPLG</td>
<td>-0.034</td>
<td>0.078</td>
<td>0.664</td>
</tr>
<tr>
<td>BOPO</td>
<td>-0.224</td>
<td>0.013</td>
<td>0.000</td>
</tr>
<tr>
<td>LDR</td>
<td>0.004</td>
<td>0.003</td>
<td>0.167</td>
</tr>
</tbody>
</table>

In simultaneous tests, SPSS results can be proven in table 2, which shows significance (sig.) 0.000, so it can be stated that independent variables projected by BOPO, NPL Gross, and LDR together/simultaneously have a significant influence on the performance of banks, namely ROA. In other words, that operational risk, credit risk and liquidity risk can affect the magnitude of the profitability performance of Bank ABG. The R2 coefficient of determination of 0.94
indicates that 94% of the changes that occurred in bank ABG's ROA were caused by operational risk, credit risk and liquidity risk simultaneously, while the remaining 6% was due to other factors not studied. In table 2 it is shown that the BOPO regression coefficient is -0.224 which means that if the BOPO increases by 1% it will decrease the ROA by 0.224%. Gross NPL regression coefficient is -0.034 which means that if gross NPL increases by 1% it will decrease ROA by 0.034%. The regression coefficient of LDR is 0.004 which means that if the LDR increases by 1% it will increase the ROA by 0.004%

To test the significance of each variable effect on a bank's performance, researchers used a partial test (t test) as shown in table 2.

Table 3. Test conclusion

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Explanation of hypothesis</th>
<th>Significance</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>BOPO has a significant effect on ROA at 95% confidence level</td>
<td>0.000</td>
<td>H1 accepted</td>
</tr>
<tr>
<td>H2</td>
<td>NPL significantly affects ROA at 95% confidence level</td>
<td>0.664</td>
<td>H2 rejected</td>
</tr>
<tr>
<td>H3</td>
<td>LDR significantly affects ROA at 95% confidence level</td>
<td>0.167</td>
<td>H3 rejected</td>
</tr>
</tbody>
</table>

Based on Table 3, the BOPO variable has a significance of 0.000 or less than 0.05 which means BOPO has a significant negative influence on ROA.

Other high BOPO indicates high operational risk, so it can also be concluded that operational risk has a significant negative influence on bank performance as measured by ROA. Thus hypothesis 1 is accepted. Gross NPL variables have significance of 0.664 or greater than 0.05 which means gross NPL has an insignificant negative influence on ROA. On the other hand, high Gross NPL indicates high credit risk, so it can also be concluded that credit risk has an insignificant negative influence on bank performance as measured by ROA. Thus hypothesis 2 is rejected. The LDR variable has a significance of 0.167 or greater than 0.05 which means the LDR has an insignificant positive influence on ROA. On the other hand, a high LDR indicates a high liquidity risk, so it can also be concluded that liquidity risk has an insignificant positive influence on the performance of banks as measured by ROA. Thus hypothesis 3 is rejected.

Operating Expenses to Operating Income (BOPO)
The BOPO ratio is used to measure the level of efficiency and ability of the Bank in carrying out its operational activities. Considering the main activity of the bank in principle is to act as an intermediary that collects and distributes funds to the public, the bank's costs and income are dominated by interest costs and interest income. Any increase in operating costs will result in reduced pre-tax profits which will ultimately decrease the profit or profitability (ROA) of the bank concerned (Wijaya Fine, 2003). Thus the results of this study support or have been in accordance with the theory that BOPO negatively affects ROA or operational risk negatively affects bank performance.

Non Performing Loan (NPL) Gross
The Gross NPL ratio is used to measure a bank's ability to manage the quality of its assets, particularly assets in the form of credit. Based on the existence of installment payment arrears, the bank's credit portfolio can be grouped into smooth, special attention, less smooth, doubtful and stuck. Gross NPL indicates how much credit falls into the category of less current, doubtful and bad or often termed as problematic credit. The higher the Gross NPL, the bank has an obligation to form a backup load (CKPN), so that this obligation can lower the bank's profit. Thus the results of this study support or have been in accordance with the theory that Gross NPL negatively affects ROA or credit risk negatively affects bank performance.

Ahmad Buyung Nusantara (2009) also
argued in his research where NPL, CAR, LDR have a positive effect on bank profitability, BOPO variables negatively affect bank profitability, and NPL, CAR has no significant effect. Fitriani (2010) Variable CAR, LDR, NIM, and credit share positively affect financial performance. NPL variable, BOPO negatively affects financial performance.

**Loan to Deposit Ratio (LDR)**

Credit performance in microfinancial institutions can be attributed to financial management practices especially with the competitive advantages of such institutions. In research Nkundabanyanga, Akankunda, Nalukenge, & Tusiime (2017) found that there is a positive relationship between competitive advantage and credit performance. McIver (2005) identified several real and financial options that could help transfer non-performing loans from state-owned commercial banks to asset management companies. This ensures the existence of non-performing assets that remain under the control of commercial banks. LDR and liquidity risk are not

It only affects the performance of the bank but also the reputation of the bank. A bank can lose the trust of customers if funds are not available at the time needed by the customer. In addition, a low level of liquidity may lead to penalty rates by the competent financial authorities. For this, it is important for banks to maintain their liquidity levels (Arif & Anees, 2012). Based on the above discussion it can be interpreted that banks must maintain liquidity levels due to two main factors: (1) customer confidence, and (2) regulatory compliance. Liquidity levels that are not in accordance with what is expected can lead to penalty for compliance violations and can ultimately cause customers to lose trust. Therefore, the liquidity level of a bank does not have a significant influence on profitability due to the company's imperative to maintain liquidity regardless of the level of profitability that occurs.

**Conclusion Conclusions and Suggestion**

1. There is a significant influence between the application of risk management to the performance of banks in proxies with the Return on Assets (ROA) ratio.

2. Variables that have a significant effect are operational risks that are proxyed with BOPO financial ratios, while credit risk projected by gross NPL financial ratio and liquidity risk proxies with LDR financial ratios have no significant effect on bank performance.

**Advice:**

1. PT. Bank ABG Indonesia Tbk needs to improve risk management, both with inherent risk control and by improving the quality of its risk management implementation to achieve expected financial performance especially through an increase in the ROA ratio.

2. To achieve the expected ROA ratio, control of operational risk is controlled by controlling the operating expense ratio of operating income.

3. Considering that BOPO is identical to ROA, then furthermore for future research BOPO variables are recommended to be placed as variable intervening.

**REFERENCES**


Orazalin, N., Mahmood, M., & Lee , K. J. (2016). Corporate governance,


