The Role of Self Assessment as Moderating Variable in the Effect of Risk Management and Leverage on Financial Performance

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Abstract.

The impact of the COVID-19 pandemic caused significant problems in the banking industry’s profit and loss report which showed a decline of 18.565 billion which occurred in 2020. At the beginning of 2019, the profit and loss statement of banking companies was 34.478 billion but now at the end of 2020, the profit and loss statement of banking companies is 15.913 billion (Indonesian Banking Statistics - July 2021, 2021). The purpose of this study was to determine the role of self-assessment as a moderating variable in the influence of risk management and leverage on financial performance. This research was conducted in banking companies listed on the Indonesia Stock Exchange for the 2016-2020 period. The sampling technique in this study used purposive sampling. The research method used is a quantitative approach using multiple regression analysis and moderate regression analysis (MRA) using the SPSS version 25 program. The results of this study are credit risk (NPL), leverage (DER), and hurt financial performance (ROA); liquidity risk (LDR) does not affect financial performance (ROA), self-assessment can moderate the influence of credit risk (NPL), liquidity risk (LDR) and leverage (DER) on financial performance (ROA). The researcher hopes that this research can provide implications and support for the development of accounting science, especially in the field of financial accounting related to risk management and leverage.

Keywords: credit risk (NPL), liquidity risk (LDR), leverage (DER), financial performance (ROA)

1. Introduction

In a country where there is an economic system, the banking industry plays an important role in supporting the progress of the country’s economy. According to Law Number 10 of 1998 concerning Banking, a Bank is a business entity that collects funds from the public in the form of deposits and distributes them to the public in the form of credit and/or other forms to improve people’s living standards. (Bank Indonesia Regulation Number 11/25/PBI/2009, 2021). According to[3]Bank is a type of business that in its activities...
ICEsRE collects funds owned by several parties who have excess funds (surplus spending units) then these funds can be channeled to people who need funds (deficit spending units) through financing or lending that will improve the welfare of the people at large. Currently the world is being hit by the COVID-19 pandemic, which has an impact on various essential sectors, including the economic sector, especially the banking industry.

The impact of the Covid-19 pandemic caused significant problems in the banking industry's profit and loss report which showed a decline of 18.565 billion which occurred in 2020. At the beginning of 2019 the profit and loss statement of banking companies was 34.478 billion but now at the end of 2020 the profit and loss statement of banking companies of 15.913 billion field(Indonesian Banking Statistics - July 2021, 2021). The decline in profit and loss in banking companies will result in a decrease in public confidence in banking because the industry is a type of business whose activities rely on trust so that they are always required to maintain their health. [3]. The existence of problems related to the state of financial performance, public confidence in the banking industry will also experience a decline which will result in the public taking back funds that have been deposited in the bank which will worsen the bank’s financial condition. Therefore, banking companies must manage their finances to avoid a decline in financial performance because banks are required to have good performance and are not affected by the COVID-19 pandemic.

Performance is defined as the overall condition of the company related to the achievement of company goals and targets based on the company’s work plan and sourced from the existence of operational and non-operational activities (Herlina, 2016) in research (SNI Sari, 2020). To be able to measure the performance of a company can use financial aspects and non-financial aspects. We can see the financial aspects based on an overview of the company's financial statements. As for the non-financial aspects, we can see based on human resources, quality of services or products, work environment situation, company development (Pradnyaswari and Putri, 2016) in research (SNI Sari, 2020). Financial performance can be defined as a brief summary that describes the overall financial condition of a company that describes the company's success. to be able to measure financial performance can use financial ratios consisting of liquidity, solvency, and profitability ratios. The company's financial performance will be considered better if the company is able to generate high profitability or net income [5]. In this study to measure financial performance using the Ratio of Return on Assets (ROA). ROA ratio is the company's ability to generate net income by using the company's assets in full.
Based on the graph above, it can be seen that the development of financial performance at Conventional Commercial Banks tends to fluctuate and tends to decrease.

In 2016 the ROA of conventional commercial banks was 2.23%, then in 2017 there is an increase in ROA at conventional commercial banks by 0.22% so that from 2.23% to 2.45%. Furthermore, in 2018 there was an increase in ROA at conventional commercial banks from 2.24% to 2.55%. However, in 2019 there was a decrease in ROA at conventional commercial banks by 0.08% from 2.55% to 2.47%. The decline was also repeated in 2020 by 0.88% from 2.47% to 1.59%, this decrease was quite significant compared to the previous year. (Indonesian Banking Statistics - July 2021, 2021). The decline was due to the Covid-19 pandemic which had spread across the country, resulting in a weakening of the economy and affecting the company's financial performance. According to the Head of Research at PT Samuel Sekuritas Indonesia, Cash that the decline in ROA was due to the many restructurings carried out by banks in Indonesia.

The restructuring was carried out by banks because debtors were unable to pay loan installments due to uncertain income, layoffs, and several government policies that limited people's mobility. So banks must monitor loans affected by Covid-19 which are being restructured to keep credit quality under control. The Covid-19 pandemic has resulted in higher credit risk field [6].

In addition to increasing credit risk, the COVID-19 pandemic has also impacted the performance of banking fundamentals such as capital. This can be seen from the OJK (2021) which recorded a decrease in the Capital Adequacy Ratio (CAR) from 24.37% in August to 24.18% as of September 2021. The increase in credit risk during the pandemic was accompanied by a decrease in the Capital Adequacy Ratio. (CAR) will create potential liquidity risk for the banking sector whose main business is lending, such as credit banks[7]. According to Sukendri (2021) and Sumadi (2020) in their research field [7], This shows that the COVID-19 pandemic has had an impact on national banking liquidity.
Previous research was conducted by Byfield [8], [9], (RA Sari, 2017), (NA Ramadan, 2018), [12], [13], [14] and field [15] proves that risk management proxied by liquidity risk affects financial performance. Meanwhile, in the research conducted by Byfield [5], [16], [17], [18], [19], [20], (NA Ramadan, 2018) and field [9] shows that liquidity risk has no significant effect on financial performance.

The Indonesian banking industry is currently faced with increasingly complicated risks due to the weakening economy as a result of the COVID-19 pandemic, so risk management is required to be able to manage needs related to banking activities (Djohanputro, 2004) in research (Phase, 2016). Banks will face many risks due to their dynamic structure and the complex nature of the economic environment in which they operate field [22].


![Figure 2: Leverage ratio (DER) at Bank Negara Indonesia Tbk. Source: Bank BNI Tbk Annual Report 2016-2020.](image)

Based on graph 1.2 it can be seen that the ratio leverage DER) at Bank Negara Indonesia Tbk experienced fluctuations that tend to increase. In 2016 the leverage ratio (DER) was 5.70% with a ROA of 1.90%, in 2017 the leverage ratio (DER) decreased by 5.70% to 5.59% with a ROA of 0.88%, then in 2018 the leverage ratio (DER) increased by 5.59% to 5.89% with a ROA of 0.92%, in the following year 2019 the leverage ratio (DER) decreased by 5.89% to 5.67% with a ROA of 1.04%, then in 2020, the leverage ratio (DER) increased by 5.67% to 6.39% with a ROA of 0.80%.

If the banking leverage ratio (DER) is high, the bank will bear a high risk of loss. In addition, banks also have the opportunity for high profits as well [23]. A high leverage
ratio (DER) will have an impact on banking profits which will increase profits or profits for banks. However, this did not happen to Bank BNI Tbk in 2019 and 2020. In 2019 the leverage ratio (DER) decreased by 5.89% to 5.67% with ROA increasing by 0.92% to 1.04% and in 2020 the leverage ratio (DER) increased by 5.67% to 6.39% with ROA decreased by 1.04% to 0.80%. This condition is contrary to the trade-off theory which says that the greater the use of leverage, the greater the profit or bank profit due to bank debt.

According to field [24], (Aiman & Rahayu, 2019), [26], [27], [28], (Princess & Goddess, 2019), [30] and field [31] who conducted the research showed that leverage, as measured by DER, had a negative and significant effect on financial performance. However, the research conducted on field [32] and field [14] shows that leverage, as measured by DER, has no effect on financial performance.

Financial performance is also influenced by the implementation of Good Corporate Governance (GCG) in the company. In 2018 it was revealed that there was corruption in the distribution of people’s business loans (KUR) in 2011-2012 at Bank Jatim sub-branch (Cape) Wolter Monginsidi Jakarta. The corruption act was carried out by the head of the sub-branch of Bank Jatim sub-branch (Pincapem) Wolter Monginsidi Jakarta so that Bank Jatim suffered a loss of Rp. 41 billion due to this corruption act.

The occurrence of corruption is due to non-compliance with good governance practices. Failure to implement good corporate governance practices can lead to the weakening of company effectiveness due to bad decisions, reduced access to funds in the form of capital or donations, and damage to goodwill and trust (BBVA microfinance foundation, 2011a, 2011b) in research field [33]. With the implementation of risk management and Good Corporate Governance (GCG) in a company, it is expected to be able to complement each other to minimize risks that occur within the company. To realize the company's goals, it is necessary to implement Good Corporate Governance (GCG). Because a good company is a company that has good GCG and supports sustainable activities in the company. Good Corporate Governance (GCG) can be measured through institutional ownership, management ownership, the existence of an audit committee, and independent commissioners filed [34].

Companies can apply the principles of good corporate governance to realize the achievement of company activities both internally and externally filed (SNI Sari, 2020). To ensure that the company has implemented the principles of Good Corporate Governance, OJK issued Circular Letter Number 13/SEOJK.03/2017 concerning the Implementation of Governance for Commercial Banks. The circular letter requires banks to apply a self-assessment (self-assessment) on banking governance. Implementation of
self-assessment of banking governance individually or in consolidation, which is usually carried out periodically, must meet the assessment aspects of governance structure, governance process, and governance outcome. If a bank experiences an increase in its self-assessment good corporate governance composite rating, it indicates that banking governance is considered to be poor. On the other hand, if a bank has a low composite rating, it shows that banking governance can be said to be very good. Self-assessment of corporate governance is expected to be able to control problems that exist in banking that have an impact on banking financial performance field (SNI Sari, 2020).

In research field (Aiman & Rahayu, 2019), (26), (17), (27), (SNI Sari, 2020), (35), (24) and field [36] proves that Good Corporate Governance (GCG) affects financial performance. Different things are shown by field (RR Ramadhan, 2017), (Aiman & Rahayu, 2019), (38) and field (Princess & Goddess, 2019) shows that Good Corporate Governance (GCG) does not affect Financial Performance.

There are differences in the empirical tests of credit risk, liquidity risk, leverage, and Self-Assessment of Good Corporate Governance conducted by several previous researchers. So this is what underlies the researcher to review of the “Role of Self Assessment as a Moderating Variable in the Effect of Risk Management and Leverage on Financial Performance”.

2. Method

In this research, the place that will be used for research is Conventional Commercial Banks listed on the Indonesia Stock Exchange (IDX). The population in this study are Conventional Commercial Banks listed on the IDX. The population in this study was 45. The sample used for this study was Conventional Commercial Banks for the 2016-2020 period. The sampling technique used was purposive sampling. Based on the criteria for the sample of conventional commercial bank companies for the 2016-2020 period, a sample of 38 banking companies was obtained. The data collection technique is carried out by downloading the banking annual report starting from 2016-2020 through the official website of the Indonesia Stock Exchange (IDX) or the official website of each bank. Credit risk can be measured using a Net Performing Loan (NPL).

\[
\text{NPL} = \times 100\% \frac{\text{Total NPL}}{\text{Total Kredit}}
\]

Liquidity risk can be measured by Loan to Deposit Ratio (LDR).

\[
\text{LDR} = \times 100\% \frac{\text{Total volume kredit}}{\text{Total penerimaan dana}}
\]

Leverage can be measured using the Debt Equity Ratio (DER).
Self-assessment can be measured by a composite rating according to the Financial Services Authority Regulation (POJK) No. 4/POJK.03/2016 Article 9 paragraph (2).

Financial Performance can be measured using Return On Assets (ROA)

\[
\text{ROA} = \frac{\text{Laba sebelum pajak}}{\text{Total asset}} \times 100\%
\]

The data analysis method used in this study is a quantitative method using statistical calculation techniques. In this research, the data analysis technique used is multiple linear regression.

3. Result and Discussion

3.1. The Results

Classic Assumption Test Results

1. Normality test

To detect the residual value, this study uses 2 methods of normality testing, namely:

2. Graph Analysis

![Normal P-P Plot of Regression Standardized Residual](image)

Dependent Variable: ROA

**Figure 3**: Probability Plot Test Results.

The results of the probability plot test in Figure 4.1 show that the points are spread out and follow the direction of the diagonal line. So it can be concluded that
the results of the probability plot test prove that the research data is normally distributed.

3. **Statistic analysis**

   **TABLE 1: Test Results One-Sample Kolmogorov-Smirnov Test.**

<table>
<thead>
<tr>
<th>One-Sample Kolmogorov-Smirnov Test</th>
<th>Unstandardized Residual</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>151</td>
</tr>
<tr>
<td>Normal Parameters, b</td>
<td>mean</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>1.00870702</td>
</tr>
<tr>
<td>Most Extreme Differences</td>
<td>Absolute</td>
</tr>
<tr>
<td></td>
<td>0.063</td>
</tr>
<tr>
<td>Positive</td>
<td>0.049</td>
</tr>
<tr>
<td>negative</td>
<td>-0.063</td>
</tr>
<tr>
<td>Test Statistics</td>
<td></td>
</tr>
<tr>
<td>asymp. Sig. (2-tailed)</td>
<td>0.200c,d</td>
</tr>
</tbody>
</table>

   Source: SPSS V.25 Processed Data, 2021

   The results of the one-sample Kolmogorov-Smirnov test table 4.3 above show the value of Asymp Sig. (2-tailed) is 0.200. This value indicates a significance level above 0.05, which means that the residual data in this study are normally distributed.

4. **Multicollinearity Test**

   **TABLE 2: Multicollinearity Test Results.**

<table>
<thead>
<tr>
<th>Coefficientsa</th>
<th>Model Unstandardized B</th>
<th>Coefficients Std. Error</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tolerance</td>
<td>VIF</td>
<td></td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>4.101</td>
<td>.771</td>
<td></td>
</tr>
<tr>
<td>Credit Risk</td>
<td>-0.463</td>
<td>.076</td>
<td>.854</td>
</tr>
<tr>
<td>Liquidity Risk</td>
<td>0.008</td>
<td>.007</td>
<td>.991</td>
</tr>
<tr>
<td>Leverage</td>
<td>-0.053</td>
<td>.042</td>
<td>.983</td>
</tr>
<tr>
<td>Self-Assessment</td>
<td>-1.093</td>
<td>.202</td>
<td>.860</td>
</tr>
</tbody>
</table>

   a. Dependent Variable: ROA

   Source: SPSS V.25 Processed Data, 2021

   The results of the multicollinearity test above can be seen that what is shown in table 4.4 can be concluded that the independent variables, namely Credit Risk, Liquidity Risk, Leverage, and Self Assessment, each have a tolerance value of 0.10 and a VIF value of 10. So it can be concluded that there is no multicollinearity between the independent variables in this study.
5. Autocorrelation Test

Table 3: Autocorrelation Test Results.

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted Square</th>
<th>Std. Error of the Estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.603</td>
<td>.363</td>
<td>.346</td>
<td>.94190</td>
<td>1.868</td>
</tr>
</tbody>
</table>

Source: SPSS V.25 Processed Data, 2021

The results of the autocorrelation test in table 4.5 show that Durbin-Watson test of 1.868. For samples totaling 151 and k=4, then the value of \( d_L = 1.6800 \) and the value of \( d_U = 1.7886 \)

\[ d_U < DW < 4-d_U \]

\[ 1.6800 < 1.868 < 2.3200 \]

From the above calculation, it can be seen that the Durbin Watson value is greater than the \( d_U \) value and the Durbin Watson value is less than the \( 4-d_U \) value. So it can be concluded that the results of the autocorrelation test indicate that in the regression model no autocorrelation is detected.

6. Heteroscedasticity Test

![Figure 4: Heteroscedasticity Test Results with a Scatterplot graph.](image)

The results of the Heteroscedasticity Test with the graph in Figure 4.2 above show that the scatterplot graph does not have a certain pattern, the points representing the research sample are seen to spread to the right and left of 0 and spread above and below 0 on the Y axis. So it can be stated that in this regression model occurs homoscedasticity.
7. Multiple Regression Analysis

Table 4: Multiple Linear Regression Test Results.

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>1.184</td>
</tr>
<tr>
<td></td>
<td>NPL</td>
<td>-.521</td>
</tr>
<tr>
<td></td>
<td>LDR</td>
<td>.011</td>
</tr>
<tr>
<td></td>
<td>DER</td>
<td>-.102</td>
</tr>
</tbody>
</table>

*a. Dependent Variable: ROA*

Source: SPSS V.25 Processed Data, 2021

Based on the results of multiple linear regression in table 4.6 above, the following regression equation is obtained:

\[ Y = 1.184 - 0.521 \text{ Credit Risk} + 0.011 \text{ Liquidity Risk} - 0.102 \text{ Leverage} + 0.444 \]

From the above regression equation can be interpreted as follows:

(a) The constant of the regression equation is 1.184, meaning that if the three independent variables, namely credit risk, liquidity risk and leverage, are 0, then financial performance is 1.184.

(b) The credit risk variable (X1) has a coefficient of -0.521, meaning that every 1% increase in credit risk and other independent variables the value is fixed, the financial performance will decrease by 0.521. A negative coefficient indicates an inverse relationship between credit risk and financial performance, the lower the credit risk value, the higher the banking financial performance (ROA).

(c) The liquidity risk variable (X2) has a coefficient of 0.011, which means that each increase in liquidity risk is 1% and the other independent variables are fixed, the financial performance will be directly proportional to the increase in the amount of 0.011. The positive coefficient shows a directly proportional relationship between liquidity risk and financial performance, the higher the liquidity risk, the higher the bank's financial performance (ROA).

(d) The leverage variable (X3) has a coefficient of -0.102, meaning that for every 1% increase in leverage and other independent variables the value is fixed, the firm value will decrease by 0.102. A negative coefficient indicates an inverse relationship between leverage and financial performance, the lower the leverage value, the higher the banking financial performance (ROA).

(e) Hypothesis testing
(f) **Statistical Test (t Test)**

The t-statistical test provides an illustration of the extent to which the independent variables are affected by variations in the dependent variable individually. The results of the t-statistical test can be seen in the table below.

**Table 5: t test results.**

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>1.184</td>
<td>.444</td>
<td>2.664</td>
<td>.009</td>
</tr>
<tr>
<td>Credit Risk</td>
<td>-.521</td>
<td>-.467</td>
<td>-6.569</td>
<td>.000</td>
</tr>
<tr>
<td>Liquidity Risk</td>
<td>.011</td>
<td>.111</td>
<td>1.564</td>
<td>.120</td>
</tr>
<tr>
<td>Leverage</td>
<td>-.102</td>
<td>-.153</td>
<td>-2.136</td>
<td>.034</td>
</tr>
</tbody>
</table>

Source: SPSS V.25 Processed Data, 2021

The results of the t-statistical test in table 4.8 above can be seen as follows:

(a) The credit risk variable has a t-count value of -6.569 and a t-table of 1.97612 so that t-count > t-table is in a negative direction. A negative coefficient indicates an inverse relationship between credit risk and financial performance. If the credit risk value decreases, the banking financial performance will increase. The significance value of the credit risk variable is 0.000 < 0.05. This shows that credit risk has a significant effect on financial performance, thus H0 is rejected and H1 is accepted.

(b) The liquidity risk variable has a t-count value of 1.564 and a t-table of 1.97612 so that the t-count > t-table is in a positive direction. The positive coefficient indicates a unidirectional relationship between liquidity risk and financial performance. If the credit risk value increases, the banking financial performance will also increase. The significance value of the variable is 0.120 < 0.05. This shows that liquidity risk has no significant effect on financial performance, thus H0 is accepted and H2 is rejected.

(c) The leverage variable has a t-count value of -2.136 and a t-table of 1.97612 so that t-count < t-table with a negative direction. A negative coefficient indicates an inverse relationship between leverage and financial performance, the lower the leverage value, the higher the banking financial performance (ROA). The significance value of the leverage variable is 0.034 < 0.05. This shows that leverage has a significant effect on financial performance, thus H0 is rejected and H3 is accepted.
8. **Coefficient of Determination (adjusted R2)**

The coefficient of determination is used to test how far the regression model can explain the variation of the dependent variable. A high R2 value indicates the ability of the independent variable to explain the greater influence of the dependent variable. The adjusted R2 value which is close to one indicates the ability to provide information by independent variables to detect variations in the dependent variable is almost completely fulfilled. The results of testing the coefficient of determination (Adjusted R square) can be seen in the table below.

<table>
<thead>
<tr>
<th>Model Summary</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted Square</th>
<th>Std. Error of Estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.526*</td>
<td>0.277</td>
<td>0.262</td>
<td>1.00046</td>
<td>1.788</td>
</tr>
</tbody>
</table>

Source: SPSS V.25 Processed Data, 2021

The results of the Coefficient of Determination Test (Adjusted R Square) in table 4.9 show that the value of the Adjusted R Square is 0.262. This value means that 26.2% of the dependent variable, namely financial performance, can be explained by independent variables (credit risk, liquidity risk, leverage, and self-assessment), while the remaining 73.8% is explained by variables outside of this study.

9. **Moderated Regression Analysis (MRA)**

Moderate Regression analysis (MRA) testing method to identify the presence or absence of a moderator who uses an analytical approach that maintains sample integrity and provides a basis for controlling the influence of moderator variables [39]. Statistically Moderated Regression Analysis (MRA) can be measured from the coefficient of determination, the value of the f statistic, and the value of the t statistic. Test results on moderating variables using Moderated Regression Analysis (MRA) can be seen in the table below.

The results of the Moderated Regression Analysis (MRA) table 4.10 above can be seen:

The t-count value of the interaction variable between credit risk and self-assessment is -3.181 while the t-table value is 1.97612 so t-count > t-table with a negative direction. While the significance value is 0.002 < 0.05. So it can be stated that self-assessment can moderate the influence of credit risk on financial performance. Then H0 is rejected and H4 is accepted.
The results of the Moderated Regression Analysis (MRA) table 4.11 above can be seen:

The t-count value of the interaction variable between liquidity risk and self-assessment is -5.367 while the t-table value is 1.97612 so t-count > t-table is in a negative direction. While the significance value is 0.000 < 0.05. So it can be stated that self-assessment can moderate the influence of liquidity risk on financial performance. Then H0 is rejected and H5 is accepted.

The results of the Moderated Regression Analysis (MRA) table 4.12 above can be seen that:

The t-count value of the interaction variable between liquidity risk and self-assessment is -5.367 while the t-table value is 1.97612 so t-count > t-table is in a negative direction. While the significance value is 0.000 < 0.05. So it can be stated that self-assessment can moderate the influence of liquidity risk on financial performance. Then H0 is rejected and H5 is accepted.

The results of the Moderated Regression Analysis (MRA) table 4.12 above can be seen that:
The t value of the interaction variable between leverage and self-assessment is -3.980 while the value of t table is 1.97612 so the t-count > t table with a negative direction. While the significance value is 0.000 < 0.05. So it can be stated that self-assessment can moderate the influence of leverage on financial performance. Thus H0 is rejected and H6 is accepted.

4. Discussion

1. The effect of credit risk on financial performance

Based on the results of the t-statistical test in table 4.8, the significance value of the credit risk variable is 0.000 <0.05. This shows that credit risk has a significant effect on financial performance, thus H0 is rejected and H1 is accepted. The results show that credit risk can affect financial performance. This means that banks can overcome problems stemming from credit risk. Constraints in credit payments by customers increased bad loans and banks did not benefit from these credit payments.

If the credit risk (NPL) increases, the banking sector will not benefit and the bank's financial performance (ROA) will decrease. Banks are also considered capable of minimizing the risk of bad credit caused by customers who fail to pay at maturity. This statement is supported by [40] which who explains that the higher the NPL, it will increase costs which will disrupt performance. So it can be concluded that if the NPL value of a bank is getting smaller, the financial performance of the bank will be even greater. This study provides results that support previous research, namely: [41], [36], [40], [42], [43], [44], [45], [46], and field [22].

2. Effect of liquidity risk on financial performance

Based on the results of the t-statistical test in table 4.8, it was obtained that the significance value of the variable was 0.120 <0.05. This shows that liquidity risk has no significant effect on financial performance, thus H0 is accepted and H2 is rejected. Judging from the results of the study indicates that liquidity risk influences financial performance. This contradicts the statement field [47] which explains that the higher the LDR value, the lower the financial performance (ROA).

If the research results contradict the theory, it may be caused by several factors and financial ratios such as operating efficiency (BOPO), credit risk (NPL), market risk (NIM), and capital (CAR) which have a greater influence on banking financial
Besides that, Banking is also considered not optimal in carrying out its intermediation function (collecting funds and channeling funds). So that the liquidity risk as measured by the LDR ratio can be said to not affect financial performance. This is reinforced by Novelina, Djamahir, and Ratnawati (2011) in their research field [16] which states that a low LDR ratio indicates that the use of funds has not been maximized and credit disbursement is very careful. The results of this study are in line with previous research conducted by field [5], [16], [18], [19], [20] and [9].

3. The effect of leverage on financial performance

Based on the results of the t-statistical test in table 4.8, the significance value of the leverage variable is 0.034 < 0.05. This shows that leverage has a significant effect on financial performance, thus H0 is rejected and H3 is accepted. The results of the study state that leverage has an effect on financial performance. Leverage is the company’s ability to fulfill its obligations with its own capital.

Based on the research results, banks have been able to fulfill their obligations/debts with their own capital. The increase in leverage means the greater the risk faced by banks. This risk is due to the use of bank funds originating from debt channeled to the public by banks in the form of credit. Then this condition will have an impact on increasing credit risk caused by bad loans from customers and will have an impact on declining bank profitability. So that the statement is in line with the Trade-Off Theory which explains that managers will determine how much leverage is used because the greater the use of debt or leverage, the greater the company’s profits, but the company will bear greater financial distress and agency costs as a result of the use of debt (ROA).

Companies that have high leverage will tend to carry out earnings management in order to avoid violating debt contract agreements. Debt contracts usually include provisions that the company must maintain a certain level of leverage, interest coverage, working capital and shareholder equity [27]. If the company implements earnings management, it will result in a decrease in company performance. Because to report high profits, managers must reduce costs so that leverage affects financial performance. The results of this study support previous research conducted by [27], [24], [31], [28], [30], (Aiman & Rahayu, 2019), [26], [48], [49], [50], [51] and [52].

4. The effect of self-assessment in moderating credit risk on financial performance
Based on the results of the t statistical test in table 4.10 it is obtained that the significance value is 0.002 < 0.05. So it can be stated that self-assessment is able to moderate the influence of credit risk on financial performance. Then H0 is rejected and H4 is accepted.

The results of the study stated that self-assessment was able to moderate the effect of credit risk on financial performance. This means that the implementation of good corporate governance can affect credit risk management on financial performance. The implementation of good corporate governance in banking has minimized credit risk and has indirectly affected the increase in financial performance (ROA). This is because the GCG assessment includes an assessment of the application of risk management as an internal control system and the transparency of financial and non-financial conditions is more supervised or monitored by company owners and shareholders.

In addition, in the good corporate governance data from the sample used in this study, where banks have implemented good corporate governance well, the average self-assessment rating of good corporate governance assessed by the company’s internal parties shows a rating of 1-3 which is included in the category good. Based on the sample data of this study, companies that have self-assessment (GCG) with a rating of 1, the value of NPL (credit risk) is also getting smaller. On the other hand, companies that have self-assessment (GCG) with a rating of 3, the value of NPL (credit risk) is also getting bigger. So it can be concluded that the implementation of good corporate governance indirectly affects the increasing financial performance (ROA) of banks. [53], [26], [17], [27], [24].

5. Effect of self assessment in moderating liquidity risk on financial performance

Based on the results of the t-statistical test in table 4.10, the significance value is 0.000 < 0.05. So it can be stated that self-assessment is able to moderate the influence of liquidity risk on financial performance. Then H0 is rejected and H5 is accepted.

The results of the study stated that self-assessment was able to moderate the effect of liquidity risk on financial performance. The results of the multiple regression analysis test that liquidity risk has no effect on financial performance (ROA) but after the self-assessment variable is included in the liquidity risk moderation test
(MRA) on financial performance (ROA), it shows that liquidity risk affects financial performance (ROA). This means that the implementation of Good Corporate Governance in the company has a very large influence on liquidity risk.

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6. The effect of self-assessment in moderating leverage on financial performance

Based on the results of the t-statistical test in table 4.10, the significance value is 0.000 <0.05. So it can be stated that self-assessment is able to moderate the influence of leverage on financial performance. Thus H0 is rejected and H6 is accepted.

The results of the study state that self-assessment has not been able to moderate the effect of leverage on financial performance. This indicates that the implementation of good corporate governance is able to encourage management in making decisions and implementing actions in accordance with the laws and regulations carried out by shareholders, members of the board of commissioners and members of the board of directors. In addition, the GCG assessment on the transparency aspect of good financial and non-financial conditions also plays a role in influencing creditors in obtaining accurate, reliable and accurate information. High leverage will trigger companies to report good financial condition and company performance to give credit to creditors in the company’s ability to pay their obligations (Sumarson, 2013) in research field (RR Ramadhan, 2017). The implementation of good corporate governance is able to strengthen the influence of leverage on banking financial performance (ROA). So it can be concluded indirectly that good corporate governance can reduce leverage and increase banking financial performance (ROA). This research is supported by previous research, namely: [54], (Princess & Goddess, 2019), [30], [31], (Aiman & Rahayu, 2019), [26] and [17].

5. Conclusion

Financial performance is a description of the financial condition of the entity in an annual period which includes the collection of funds and the distribution of funds as well as other financial aspects that can be measured by financial ratios. According to the results of the study and analysis above, the following conclusions can be drawn:

1. Credit risk (NPL) has a significant effect on financial performance.
2. Liquidity risk (LDR) has no significant effect on financial performance (ROA).

3. Leverage (DER) has a significant effect on financial performance (ROA).

4. **Self-assessment** (GCG) is able to moderate the influence of credit risk on financial performance (ROA).

5. **Self-assessment** (GCG) is able to moderate the influence of liquidity risk on financial performance (ROA).

6. **Self-assessment** (GCG) is able to moderate the effect of leverage on financial performance (ROA).

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