ANALYSIS OF FACTORS AFFECTING THE FINANCIAL PERFORMANCE OF BANKING COMPANIES LISTED ON THE INDONESIA STOCK EXCHANGE

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ABSTRACT
The purpose of this study is to provide empirical evidence of the impact of Good Corporate Governance (GCG), Capital Adequacy Ratio (CAR), Non-Performing Loan (NPL), and firm size on financial performance. The population used in this study is banking companies listed on the Indonesia Stock Exchange (IDX) during 2018 to 2020. The sample selection method used is purposive sampling. The companies used as research objects are as many as 31 companies. The research method used in this research is multiple linear regression analysis. The results obtained from this study are Good Corporate Governance (GCG) has insignificant and positive effect on financial performance, Capital Adequacy Ratio (CAR) has insignificant and negative effect on financial performance, Non-Performing Loan (NPL) has significant and negative effect on financial performance, and firm size has significant and negative effect on financial performance.

Keywords: Good Corporate Governance, Capital Adequacy Ratio, Non-Performing Loan, firm size, financial performance

1. INTRODUCTION

The economic health of a country can be judged by the financial performance of the banking institution. Banking and the financial industry are becoming a reality in today's economy. It is growing very well in terms of the number of institutions, the amount of assets under management, or the variety of products offered. However, despite the progress and achievements of the banking and financial industry, there are challenges to overcome, and more intensive efforts for these industries are needed, such as returning to the essentials for managements and policy makers finding the answers to the question, "What drives performance?".

Financial performance is a picture of the good and bad financial conditions of the company as measured by financial measuring instruments that reflect work performance in a certain period [1]. To get the most out of company's resources, it's important to evaluate its financial performance. In recent years, financial institutions (especially commercial banks) have been paying attention to the analysis of financial performance. As a result, much of the research focus has shifted from characterization of performance at simple ratios such as ROA and ROE to the perspective of multidimensional systems; evaluating the relationships between many factors related to a bank's performance, such as assets, income, profits, market value, corporate governance, equity ratios, non-performing loans, and firm size can help in improving the bank's financial performance.

Banks, as intermediaries between those who have funds and those who need them, use the principles of trust in their transactions to be vulnerable to negative issues such as poor performance and potential fraud. In August 2020, the Association of Certified Fraud...
Examiners (ACFE) Global released statistical data on fraud cases in many countries. Indonesia was the largest contributor to fraud cases, with 36 out of a total of 198 cases in the Asia-Pacific region [2]. Therefore, banking institutions need to be able to maintain customer confidence, as these negative aspects can affect customer confidence in deposit and lending decisions. In this case, the banking institution is supported by the government with several regulations, one of which is the implementation of Good Corporate Governance (GCG). Apart from good corporate governance, another way to build customer trust in banking institutions and influence deposit and lending decisions is to implement good risk management, such as meeting the recommended minimum capital adequacy ratio and managing non-performing loans. Another important factor in assessing a bank's financial performance is its size. The size of an institution or business is a major factor in determining its profitability.

Although there are many studies on the principle of financial performance, the results are inconsistent. In [3] and [4], Good Corporate Governance (GCG) has significant and positive impact on financial performance, otherwise in [3], [4], [5], and [6] GCG has insignificant and positive impact on financial performance. Capital Adequacy Ratio (CAR) has significant and positive impact on financial performance in [3], but has significant and negative impact on financial performance in [6]. Furthermore, Non-Performing Loan has significant and negative impact on financial performance in [4], [6], and [7], but has insignificant and negative impact on financial performance in [4]. Lastly, firm size has significant and positive impact on financial performance in [3] and [8], but has significant and negative impact on financial performance in [9]. Based on the phenomena and background above, knowing the financial performance of banks is very important for all parties, both internal and external, as a basis for making decisions. Then, it can be seen that previous studies have inconsistent results which can be caused by various factors such as the study population, period, and research method. Furthermore, on the basis of the phenomena and background that have been described, the purpose of this research is to empirically prove: (1) The effect of good corporate governance on financial performance; (2) The effect of capital adequacy ratio on financial performance; (3) the effect of non-performing loans on financial performance, and; (4) The effect of firm size on financial performance.

2. BACKGROUND

Spence's signal theory focuses on communication between actors in information asymmetry [10]. In this state, the decision maker relies on a signal that is perceived to match basic attributes that are often unobservable. Signals are activities or individual attributes of the market and are intentionally or unintentionally designed to change beliefs or convey information to others in the market [10]. Signals help reduce the information gap or asymmetry between the two parties (that is, who receives the signal and who sends the signal). For example, in the labor market, education certificates initially serve as a signal of an individual's basic potential as an applicant, separating high-quality applicants from their inferior peers. Since signalling theory was applied to the field of organization, perspectives have provided a wealth of insights and have emerged as the mainstream theory of organizational studies. This approach has proven effective because outsiders utilize a variety of signals to draw inferences about the underlying, hard-to-observe attributes of the organization and its offerings. As a result, the application of signalling theory provides “a better understanding of where organizational signals come from, which specific signals come from those sources, and how those signals affect decision makers outside the organization”.

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Good Corporate Governance

Good Corporate Governance (GCG) is a procedure that administers and governs a company with the aim of creating added value for all stakeholders [11]. Furthermore, Good Corporate Governance (GCG) as “a pattern of relationships, systems, and methods used by corporate organizations at providing added value to shareholders that is sustainable in the long term, while taking into account the interests of other stakeholders based on the prevailing laws and norms” [12].

Capital Adequacy Ratio

Capital Adequacy Ratio (CAR) is the ratio of capital to risk-weighted assets according to government regulations [13]. Furthermore, Capital Adequacy Ratio (CAR) is also defined as a bank capital adequacy ratio required by the central bank with the intention that when faced with various risks, banks are still able to maintain their operational activities and protect depositors from unexpected possibilities [14].

Non-Performing Loan

Non-Performing Loans (NPLs) are troubled loans or loans ceasing to perform caused by two elements, namely from the banking side in analyzing errors and from the customer who intentionally or unintentionally does not make payments [13]. NPL management is important because it reflects the credit performance of a bank loan portfolio and the overall credit performance of a country's banking sector loan portfolio. Risk management and decision makers must critical consideration about elements that influence the level of non-performing loans [15].

Firm Size

Firm size is “the identification and classification of companies into three different sizes, that namely large, medium, and small. Furthermore, there are several other indicators used to determine company size, such as the number of employees in the company, market value, sales volume, book value, and total assets” [16]. In addition, firm size is the size of the company which can be measured by various indicators, one of which is total assets [17].

Financial Performance

A company's financial performance is a description of the company's performance as it appears in the financial statements and is usually based on the company's ability to generate profits [18]. Return on Equity (ROE) is used to effectively measure how much profit a company can generate from the stocks invested in by an investor and to assess changes in a company's financial condition over time [19].

Research Hypothesis

The Effect of Good Corporate Governance on Financial Performance

Corporate governance refers to the structures and processes for the direction and control of a business and the relationships between management, the board of directors, controlling
shareholders, minority shareholders and other stakeholders. Companies that demand the highest standards of corporate governance and integrity from management naturally mitigate much of their investment risk. As a result, these companies tend to outperform their peers who do not have good long-term corporate governance because they have access to lower cost and more reliable capital. This and the climate of mutual trust between fund owners and company managers, as regulated by good corporate governance (GCG) mechanisms, should further improve the company's financial performance. It certainly benefits both parties; company owner and CEO. In this study, GCG will be proxied by an independent commissioner. A research found that the implementation of Good Corporate Governance (GCG) has a positive and significant effect on financial performance [3]. The research shows that the more managers feel they own the company, they tend not to take company resources from value maximization. If the company has more resources to use, then an increase in company performance can be expected. Based on the opinions that have been expressed, it can be concluded that the better the Good Corporate Governance (GCG) is carried out, the better the financial performance of the company. This conclusion is supported by the research of [20].

H1: Good corporate governance has a positive and significant effect on financial performance.

The Effect of Capital Adequacy Ratio on Financial Performance

The higher the capital adequacy, the more secure it is for the bank when faced with its financial obligations, which in turn will positively affect financial performance [21]. Good bank capital, besides being able to affect the company's performance, can also give a signal to outsiders (investors and creditors) about the quality of the company. Information about the ability of this bank, which is presented in the financial statements, certainly promises investors a sense of security for their investment. It can be concluded that the higher the value of the Capital Adequacy Ratio (CAR), the better the financial performance of the company.

H2: Capital adequacy ratio has a positive and significant effect on financial performance.

The Effect of Non-Performing Loan on Financial Performance

A research states that the negative effects of non-performing loans indicate that the more non-performing loans there are, the lower the bank's income and profits, and therefore the lower its financial performance (ROE) [8]. As shown in the financial statements, if the value of non-performing loans is too high, outsiders of the company, such as investors and creditors, will think thousands of times before investing or lending. This is in line with signal theory, which states that the audience's point of view is affected by the signal received. Based on the opinions expressed, it can be concluded that the lower the value of non-performing loans (NPL), the better the company's financial performance. This conclusion is supported by the research of [6], [7], and [22].

H3: Non-performing loan has a negative and significant effect on financial performance.

The Effect of Firm Size on Financial Performance

The strengths and weaknesses of each business scale certainly affect the performance of the business. For example, business operation that is more efficient means more profits. Thus, more profits mean improving the financial performance of a business in making profits. A research found that the size of a company that has a positive impact on its financial performance suggests that growing the size of the company will improve the profitability of
the company [3]. The larger the company, the more capital it has to face the competition, giving the company a competitive advantage over the competition. Based on the opinions expressed, it can be concluded that the larger the company, the better the financial performance of the company.

H4: Firm size has a positive and significant effect on financial performance.

**Research Model**

Based on the theory, interrelationships, and hypotheses between the variables described above, the research model in this research can be formed as follows:

![Research Model Diagram](image)

**Figure 1** Research Model

### 3. METHODS

The population of this study is all banking companies listed on the Indonesia Stock Exchange for the 2018-2020 period. The selected research sample is 31 companies. The sample selection used purposive sampling with the following sample criteria: (1) banking companies that are consistently listed on the IDX for the 2018-2020, (2) banking companies that earn net profits during the 2018-2020, (3) banking companies that use Rupiah as their currency, and (4) banking companies that publish financial statements ending on December 31st. A total of 93 panel data (31 samples times 3 periods) were analyzed using multiple regression analysis. Multiple regression analysis is an analytical method to find out whether there is an influence of the independent variable on the dependent variable [23]. Data processing in this study using EViews software. Following are the operationalization of research variables as presented in the table below.

**Table 1** Operationalization of Research Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Description</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial Performance</td>
<td>ROE = ( \frac{\text{Net Income}}{\text{Total Equity}} )</td>
<td>Ratio</td>
</tr>
<tr>
<td>Good Corporate Governance</td>
<td>GCG = The number of independent commissioners.</td>
<td>Nominal</td>
</tr>
<tr>
<td>Capital Adequacy Ratio</td>
<td>CAR = ( \frac{\text{Tier1 Capital} + \text{Tier2 Capital}}{\text{Risk Weighted Assets}} )</td>
<td>Ratio</td>
</tr>
</tbody>
</table>
Based on the hypothesis above, the multiple linear regression equations formed:

\[ \text{ROE} = \alpha + \beta_1 \text{GCG} + \beta_2 \text{CAR} + \beta_3 \text{NPL} + \beta_4 \text{Size} + \varepsilon \]

Description:

- **ROE**: Return on Equity
- **\( \alpha \)**: Constant
- **\( \beta_1 - \beta_4 \)**: Multiple Linear Regression
- **GCG**: Good Corporate Governance
- **CAR**: Capital Adequacy Ratio
- **NPL**: Non-Performing Loan
- **Size**: Firm Size
- **\( \varepsilon \)**: Error

### 4. FINDINGS AND DISCUSSIONS

Based on descriptive statistical testing, it can be seen that return on equity variable has a maximum value of 31.20 and a minimum value of 0.01. The mean value is 8.40 with a standard deviation of 6.79 and the median value is 7.20. The good corporate governance variable has a maximum value of 6.00 and a minimum value of 1.00. The mean value is 2.87 with a standard deviation of 1.13 and the median value is 3.00. The capital adequacy ratio variable has a maximum value of 55.03 and a minimum value of 12.67. The mean value is 23.95 with a standard deviation of 8.08 and the median value is 21.92. The non-performing loan variable has a maximum value of 7.83 and a minimum value of 0.00. The mean value is 2.95 with a standard deviation of 1.56 and the median value is 2.77. The firm size variable has a maximum value of 34.95 and a minimum value of 28.98. The mean value is 31.79 with a standard deviation of 1.66 and the median value is 31.97.

<table>
<thead>
<tr>
<th></th>
<th>GCG</th>
<th>CAR</th>
<th>NPL</th>
<th>Size</th>
<th>ROE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>2.87</td>
<td>23.95</td>
<td>2.95</td>
<td>31.79</td>
<td>8.40</td>
</tr>
<tr>
<td>Median</td>
<td>3.00</td>
<td>21.92</td>
<td>2.77</td>
<td>31.97</td>
<td>7.20</td>
</tr>
<tr>
<td>Maximum</td>
<td>6.00</td>
<td>55.03</td>
<td>7.83</td>
<td>34.95</td>
<td>31.20</td>
</tr>
<tr>
<td>Minimum</td>
<td>1.00</td>
<td>12.67</td>
<td>0.00</td>
<td>28.98</td>
<td>0.01</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>1.13</td>
<td>8.08</td>
<td>1.56</td>
<td>1.66</td>
<td>6.79</td>
</tr>
</tbody>
</table>

Source: Data Processed Using EViews version 12.0

The data used in this study is a combination of time-series and cross-sectional data, namely panel data. This research used the multiple linear equations which were tested by fixed effect model (FEM). Due to the use of panel data, the classical assumption test used is the multicollinearity test and the heteroscedasticity test. Based on the results of the multicollinearity test, the correlation value of each independent variable was < 0.80, which means that the correlation between each independent variable is free from multicollinearity problems. Furthermore, based on the results of heteroscedasticity test, the probability value is...
0.1332 > 0.05, it means the data is free from heteroscedasticity problems. The results of the simultaneous significance test (F-test), the Prob(F-Statistic) value is 0.000000 < 0.05 which means that the independent variables in this study simultaneously affect the dependent variable.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. ε</th>
<th>t-Stat</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>214.1602</td>
<td>83.63238</td>
<td>2.560733</td>
<td>0.0131</td>
</tr>
<tr>
<td>GCG</td>
<td>0.439451</td>
<td>0.955279</td>
<td>0.460024</td>
<td>0.6472</td>
</tr>
<tr>
<td>CAR</td>
<td>-0.088836</td>
<td>0.090600</td>
<td>-0.980539</td>
<td>0.3309</td>
</tr>
<tr>
<td>NPL</td>
<td>-1.401381</td>
<td>0.388977</td>
<td>-3.602730</td>
<td>0.0007</td>
</tr>
<tr>
<td>Size</td>
<td>-6.315476</td>
<td>2.617004</td>
<td>-2.413246</td>
<td>0.0190</td>
</tr>
</tbody>
</table>

Table 3 The Results of t-Test

Source: Data Processed Using EViews version 12.0

Good Corporate Governance (GCG) has a probability value of 0.6472 and a variable coefficient of 0.439451. This probability value is greater than 0.05 and the variable coefficient shows a positive number. Therefore, Good Corporate Governance (GCG) has a positive and insignificant effect on financial performance. The hypothesis is rejected. Secondly, Capital Adequacy Ratio (CAR) has a probability value of 0.3309 and a variable coefficient of -0.088836. This probability value is greater than 0.05 and the variable coefficient shows a negative number. Therefore, the Capital Adequacy Ratio (CAR) has a negative and insignificant effect on Financial Performance. The hypothesis is rejected as well. Next, Non-Performing Loan (NPL) has a probability value of 0.0007 and a variable coefficient of -1.401381. This probability value is less than 0.05 and the variable coefficient shows a negative number. Thus, Non-Performing Loans (NPL) have a negative and significant effect on Financial Performance. The hypothesis is accepted. Finally, firm size has a probability value of 0.0190 and a variable coefficient of -6.315476. This probability value is less than 0.05 and the variable coefficient shows a negative number. As a result, firm size has a negative and significant effect on financial performance. The hypothesis is rejected.

Table 4 The Results of Determination-Coefficient Test

<table>
<thead>
<tr>
<th>R-Squared</th>
<th>Adjusted R-squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.879851</td>
<td>0.809418</td>
</tr>
</tbody>
</table>

Source: Data Processed Using EViews version 12.0

Based on the table above, it could be seen that the result of the determination coefficient test on R-Squared is 0.879851 and the Adjusted R-Squared is 0.809418. The coefficient of determination of 0.809418 or equal to 80.9418% means that the independent variables, namely GCG, CAR, NPL, and Firm Size can explain variations in the dependent variable, namely Financial Performance of 80.9418%. While the remaining 19.0582% is explained by other variables outside this regression equation or variables that are not examined.

Table 5 The Results of Hypothesis Test

<table>
<thead>
<tr>
<th>No</th>
<th>Hypothesis</th>
<th>t-Test</th>
<th>Sig</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>H1</td>
<td>0.439451</td>
<td>0.6472</td>
<td>Rejected</td>
</tr>
<tr>
<td>2</td>
<td>H2</td>
<td>-0.088836</td>
<td>0.3309</td>
<td>Rejected</td>
</tr>
</tbody>
</table>

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Based on the results of the research that has been carried out, the influence of Good Corporate Governance (GCG) on financial performance is positive and insignificant. This contradicts the previous hypothesis. There are several factors that allow this to happen, one of which is that the independent commissioner is not aware of his duties and responsibilities in managing the company so that the company does not operate and generate profits as expected. The results of this study are in line with the research of [3] and the research of [6]. However, the results of this study are not in line with the research conducted by [26] which concludes that the board of commissioners has a significant effect on financial performance. Next, the effect of Capital Adequacy Ratio (CAR) on financial performance is negative and insignificant. This is contrary to the previous hypothesis and means that the higher the CAR value, the lower the ROE. It was later discovered that the higher the ability of bank capital to absorb the risk of loss in business activities, it does not necessarily have a significant effect on increasing ROE. This is because a high CAR can reduce the bank's ability to expand its business due to the larger capital reserves used to cover the risk of loss. The delay in business expansion due to high CAR will ultimately affect the financial performance of banks. The results of this study are in line with the research of [6], but not in line with the research conducted by [3]. Then, the influence of Non-Performing Loans (NPL) on financial performance is negative and significant. This is in line with the hypothesis that has been made and means that the higher the NPL value, the lower the ROE. This is because bad loans or non-performing loans that are not evaluated immediately will continue to swell, reduce operating income, and ultimately erode banking working capital, resulting in ineffective financial performance. The results of this study are in line with the research of [26], but are not in line with the research conducted by [21]. Lastly, the influence of company size on financial performance is negative and significant. This is not in line with the hypothesis that has been made. There are several factors that allow this to happen, one of which is the larger the size of a company, the company will require greater costs to carry out its operational activities such as labor costs, general and administrative costs, and maintenance costs. These costs in the financial statements reduce the company's profit, which in turn affects the financial performance negatively. The results of this study are in line with the research conducted by [27], but not in line with the research conducted by [26].

5. CONCLUSION

The following are some conclusions that can be drawn from the results of research that has been carried out: (1) Good Corporate Governance (GCG) has a positive and insignificant effect on financial performance, which means that the more independent commissioners the company has, the greater the financial performance; (2) Capital Adequacy Ratio (CAR) has a negative and insignificant effect on financial performance, which means that the greater the company's CAR value, the smaller the financial performance; (3) Non-Performing Loans (NPL) have a negative and significant effect on financial performance, which means that the greater the NPL value, the smaller the financial performance; (4) firm size has a negative and significant effect on financial performance, which means that the larger the company size, the smaller the banking financial performance.

This study has several limitations, including using only four variables, namely Good Corporate Governance (GCG), Capital Adequacy Ratio (CAR), Non-Performing Loans
(NPL), and firm size to analyze the effect on financial performance so that it cannot include the following factors: other factors that can affect financial performance. The companies used as the research population are banking companies listed on the IDX so that the research results can only be interpreted in banking and cannot be used in other sectors. The research period is for three years, namely 2018 to 2020, so it is only limited to three periods.

As a closing statement, it is highly recommended for management to always maintain the company's financial performance including elements that affect performance as a preventive measure against possible fraud as well as to achieve the expected level of profitability so as to influence customer deposit and lending decisions. It is also hoped that investors and potential investors will be able to read the signals given by the company through the company's financial performance in order to determine which is the right decision for each situation. It is also suggested that further researchers who wish to examine the factors that affect banking financial performance can add other independent variables such as BOPO, NIM, LDR, DER and so on. In addition, the research population can be increased or even include all companies listed on the IDX so that research results can cover companies in various sectors. Finally, it is hoped that future researchers can use a longer research period than the last three years.

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